

**Project Development & Environment (PD&E) Study for
Replacement of the Northbound Howard Frankland Bridge
(I-275/SR 93)**

Draft

Wetland Evaluation and Biological Assessment Report

**Work Program Item Segment No. 422799 1
ETDM Project No. 12539
Hillsborough & Pinellas Counties**

Prepared for:

**Florida Department of Transportation
District Seven**



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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate alternatives for the replacement of the northbound Howard Frankland Bridge (Bridge No. 150107) on Interstate 275 (I-275/SR 93) over Old Tampa Bay, in Pinellas and Hillsborough Counties. The limits of the PD&E Study extend approximately one mile beyond either end of the three-mile bridge to include portions of the existing causeway. The study is designed to assist the FDOT and the Federal Highway Administration (FHWA) in reaching a decision on the type, location, and conceptual design of the necessary improvements for the replacement of the northbound bridge. A simultaneous Regional Transit Corridor Evaluation is underway to evaluate premium transit alternatives within the bridge corridor to link the Gateway area in Pinellas County to the Westshore area in Hillsborough County. This PD&E Study also evaluates options for inclusion of a future exclusive transit envelope within the Howard Frankland Bridge corridor in addition to accommodations for future express lanes.

Location alternatives for constructing the new bridge included the west side of the southbound bridge, between the two existing bridges, or east of the existing northbound bridge. The Recommended Alternative includes constructing the new bridge between the two existing bridges, utilizing stage construction and a temporary bridge near the bridge ends. Demolition of the existing northbound bridge is included as part of the Recommended Alternative. The future transit envelope could either be a separate structure or included as part of the new bridge. In addition to the bridge replacement options, the Department is presently considering longer-range improvements to add additional lanes as tolled express lanes, which could also be used by express bus and Bus Rapid Transit (BRT) vehicles. In addition to the Build Alternative, the No-Build or Rehabilitation option is also considered as part of the study process. Based on a life-cycle cost analysis conducted by FDOT in September 2011, it was determined that over an 80-year analysis period, replacing the existing bridge rather than rehabilitating and maintaining it would cost approximately 25 percent less, based on a present-worth analysis, with a present-worth savings of approximately \$65 million in today's dollars.

This Wetland Evaluation and Biological Assessment Report (WEBAR) has been prepared as part of this PD&E Study. This report summarizes potential impacts to wetlands, federally and state listed species and their habitats, and essential fish habitat. Identification of measures to avoid, minimize and mitigate for any potential impacts is also discussed. This WEBAR documents the results of geographic information system (GIS) data, field reviews, coordination with regulatory agencies including comments received through the Efficient Transportation Decision Making (ETDM) process, and aerial interpretation for potential impacts to the resources listed above. The majority of the project corridor consists of spoil material from the construction of the Causeway and waters of Old Tampa Bay for the proposed bridge. No natural upland habitat and minimal, if any, wetland habitat exists within the project study area.

Coordination is being conducted with federal and state agencies throughout the study process.

Wetlands

Pursuant to Executive Order 11990 entitled Protection of Wetlands, (May 1977) the U.S. Department of Transportation (USDOT) has developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978, which requires all federally-funded highway projects to protect wetlands to the fullest extent possible.

No wetland impacts are anticipated to occur when the replacement of the northbound Howard Frankland Bridge is constructed. Surface water impacts will result to waters of Old Tampa Bay; however, since this is a bridge replacement project with no capacity improvements, no adverse impacts are anticipated. Since there are no wetland impacts anticipated, no mitigation is proposed for the bridge replacement.

Protected Species and Habitat

The project corridor was also assessed for the presence of suitable habitat for federal- and state-listed protected species and USFWS Critical Habitat in accordance with 50 Code of Federal Regulations (CFR) Part 402 of the Endangered Species Act (ESA) of 1973, as amended, Chapters 5B-40: Preservation of Native Flora of Florida and 68A-27 Florida Administrative Code (F.A.C.) Rules Relating to Endangered or Threatened Species, and Part 2, Chapter 27 - Wildlife and Habitat Impacts of the FDOT PD&E Manual.

Species assessed for this project include, but were not limited to, the following: Gulf sturgeon, smalltooth sawfish, West Indian manatee, swimming sea turtles, piping plover, wood stork, snowy plover, American oystercatcher, black skimmer, brown pelican, least tern, little blue heron, reddish egret, roseate spoonbill, smalltooth sawfish, snowy egret, tricolored heron, white ibis, and osprey. Additionally, review for the de-listed bald eagle was also conducted.

Field reviews for protected species and their suitable habitat were conducted within the project corridor. Based on the findings obtained during corridor field survey efforts, four protected faunal species and no protected floral species were observed within the project corridor. Twenty-two protected species have potential habitat within or adjacent to the project corridor based on database and literature research, and field observations of available habitat.

A finding of no effect is anticipated for the wood stork, piping plover, Gulf sturgeon, smalltooth sawfish, the bald eagle and USFWS Critical Habitat. A finding of may affect, but not likely to adversely affect is anticipated for the American oystercatcher, black skimmer, brown pelican, least tern, West Indian manatee, little blue heron, snowy egret, reddish egret, tricolored heron, white ibis, roseate spoonbill, American oystercatcher, black skimmer, brown pelican, least tern, snowy plover, osprey, and sea turtles.

Essential Fish Habitat

Estuarine and marine habitats of Old Tampa Bay exist within and adjacent to the project corridor on the east and west side of the Causeway and below the existing bridges. These habitats include seagrasses located at various areas on the east and west side of the Causeway on both the south and north end of the Howard Frankland Bridge. The Gulf Coast Fisheries Management Council (FMC) recognizes seagrasses as essential fish habitat (EFH). No impacts to seagrasses are anticipated by the construction

of the Recommended Alternative (Option A). According to GIS data from SWFWMD and field reviews conducted in June 2011 and July 2013, seagrasses exist at the locations of two of the three Build Alternatives (Option B – a new bridge on the west side of the existing southbound bridge and Option C – a new bridge on the east side of the existing northbound bridge). Option B would result in approximately 3.7 acres of seagrass impacts and Option C would result in approximately 3.1 acres of seagrass impacts.

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SECTION 1 INTRODUCTION

1.1 PD&E STUDY PURPOSE

The objective of this Project Development and Environment (PD&E) study is to assist the Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA) in reaching a decision on the type, location, and conceptual design of the necessary improvements for the replacement of the northbound Howard Frankland Bridge on Interstate 275 (I-275/SR 93). This bridge opened to traffic in 1959 and is nearing the end of its serviceable life. The PD&E Study satisfies all applicable requirements, including the National Environmental Policy Act (NEPA), in order for this project to qualify for federal-aid funding of subsequent development phases (design and construction). A simultaneous Regional Transit Corridor Evaluation is underway to evaluate premium transit alternatives within the bridge corridor to link the Gateway area in Pinellas County to the Westshore area in Hillsborough County. This PD&E Study is evaluating options for accommodating a future multimodal premium transit envelope within the Howard Frankland Bridge corridor.

This project was evaluated through the FDOT's Efficient Transportation Decision Making (ETDM) system. Based on the Environmental Technical Advisory Team's (ETAT) review comments, the FHWA has determined that this project qualifies as a Type 2 Categorical Exclusion (CE).

1.2 PROJECT DESCRIPTION

The proposed project involves the replacement of the four-lane northbound I-275 Howard Frankland Bridge (Bridge No. 150107) over Old Tampa Bay, in Pinellas and Hillsborough Counties. The limits of the PD&E Study extend approximately one mile beyond either end of the three-mile bridge to include portions of the existing causeway. In addition to the proposed bridge replacement, this study also considers reserving space for a future transit envelope within the existing bridge corridor. The proposed transit improvements will be consistent with the Tampa Bay Area Regional Transportation Authority (TBARTA) Master Plan, adopted in May 2009, and are being evaluated in conjunction with local premium transit initiatives, namely the Pinellas Alternatives Analysis which has evaluated premium transit service between Clearwater and St. Petersburg with an extension across Tampa Bay to Tampa across the I-275 corridor. A project location map is shown in **Figure 1-1**. The project limits fall within Township 29S, Range 17E, Sections 24-28 and 32-34. The replacement bridge could also include consideration for future express lanes.

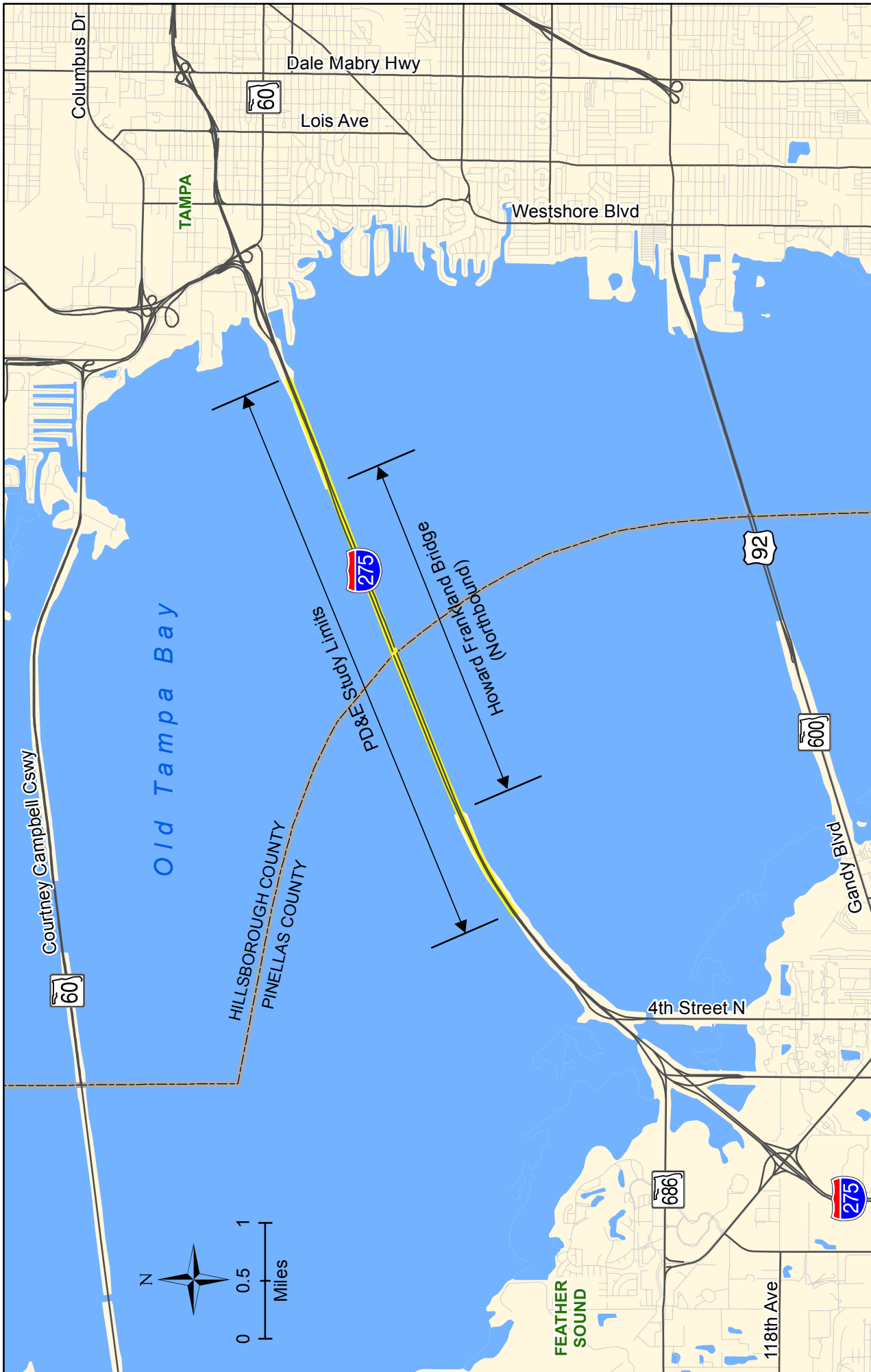



Figure 1-1

Project Study Area Map

Northbound Howard Frankland Bridge (I-275/SR 93) Replacement PD&E Study
 WPI Segment No. 422799 1
 Pinellas & Hillsborough Counties



Source:FGDL

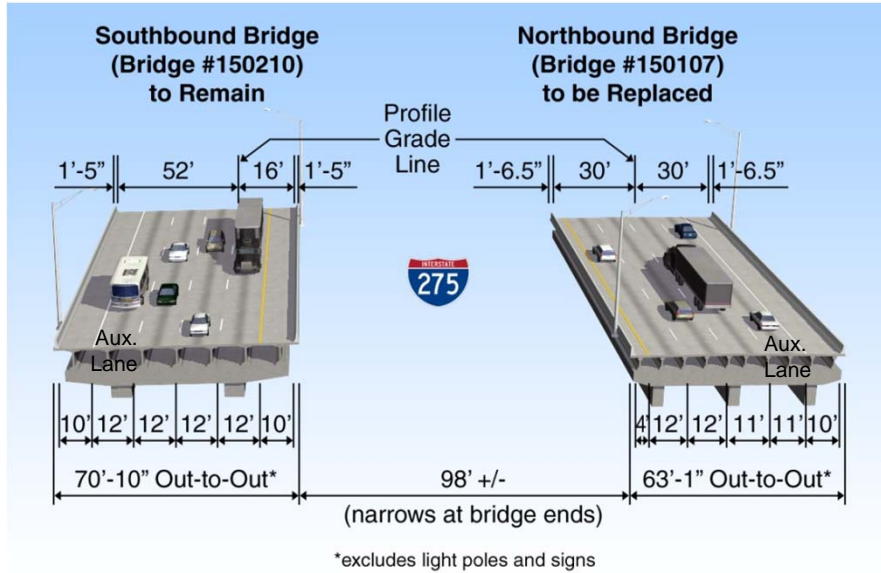
Existing Structure - The existing northbound span of the Howard Frankland Bridge (Bridge No. 150107) is a mostly low-level, pre-stressed concrete stringer/girder structure. The bridge is 3.01 miles long and 62.3 feet wide, with a maximum (center) span of 98.1 feet. The existing bridge typical section (**Figure 1-2**) is four lanes with the older (1959) structure serving northbound traffic and the newer (1991) bridge serving southbound traffic. The existing northbound bridge carried two-way traffic until the southbound bridge was built and the northbound bridge was retrofitted to carry only one-way traffic. The navigational clearances for the northbound bridge are 42.9 feet vertical and 72.1 feet horizontal. The existing limited access (LA) right-of-way (ROW) is 800 feet wide in most areas. The northbound bridge includes both 11 and 12-foot lane widths (as shown in the figure) in addition to a 4-foot inside shoulder and a 10-foot outside shoulder.

Roadway Approaches – The roadway approaches include four 12-foot lanes, 10-foot paved inside and outside shoulders, and concrete barrier walls within the 22-foot median. One of the travel lanes serves as an auxiliary lane that begins at the I-275 interchange with SR 686 (Roosevelt Boulevard) in Pinellas County and exits at the SR 60 interchange in Hillsborough County. The causeways near the bridge ends include seawalls/barrier walls located approximately 40 feet from the outside edge of pavement. The existing roadway approach typical sections are illustrated in **Figure 1-2**. Both causeway ends include emergency access roadways which run underneath the bridge ends.

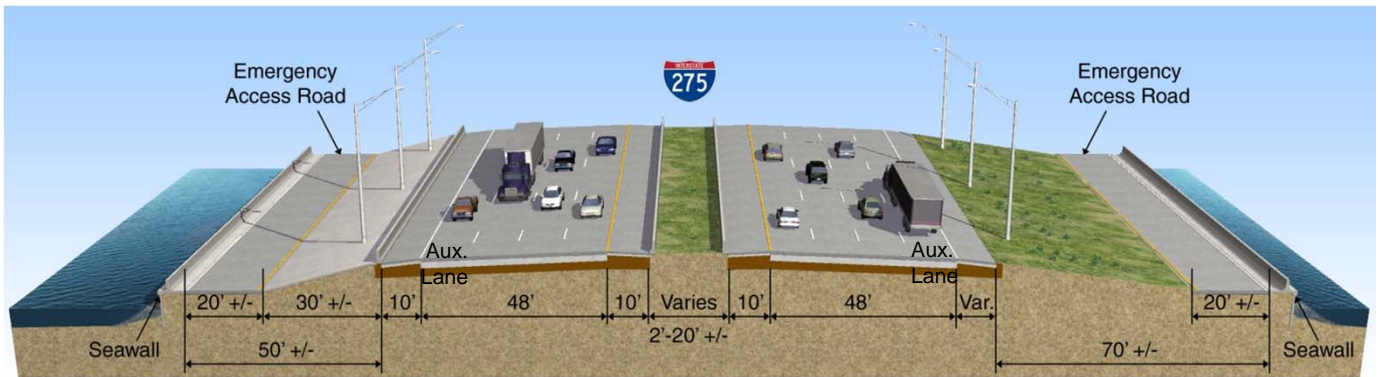
Proposed Improvements –The Recommended Alternative for the proposed northbound Howard Frankland Bridge replacement would be located between the two existing bridges, as shown in **Figure 1-3**. Demolition of the existing northbound bridge is included as part of the proposed bridge construction. Envelopes for potential future transit are also included on each side as part of the new Howard Frankland Bridge. The proposed northbound replacement bridge includes an additional 4 feet of width which could provide buffer space should the Department decide to operate the new bridge as one express lane and three general use lanes at some point in the future without having to expand the bridge width or reduce lanes or shoulders to substandard widths. In addition to the Build Alternative, the No-Build or Rehabilitation option is also considered as part of the study process.

1.3 PROJECT PURPOSE AND NEED

I-275 is a vital link in the local and regional transportation network as well as a critical emergency evacuation route for portions of Pinellas County. In addition to being an Interstate highway and part of the National Highway System, I-275 is part of the Florida Intrastate Highway System (FIHS) that provides for the high-speed movement of people and goods at high traffic volumes. The FIHS is the highway component of the Strategic Intermodal System (SIS), a statewide network of highways, railways, waterways and transportation hubs that handle the bulk of Florida's passenger and freight traffic.

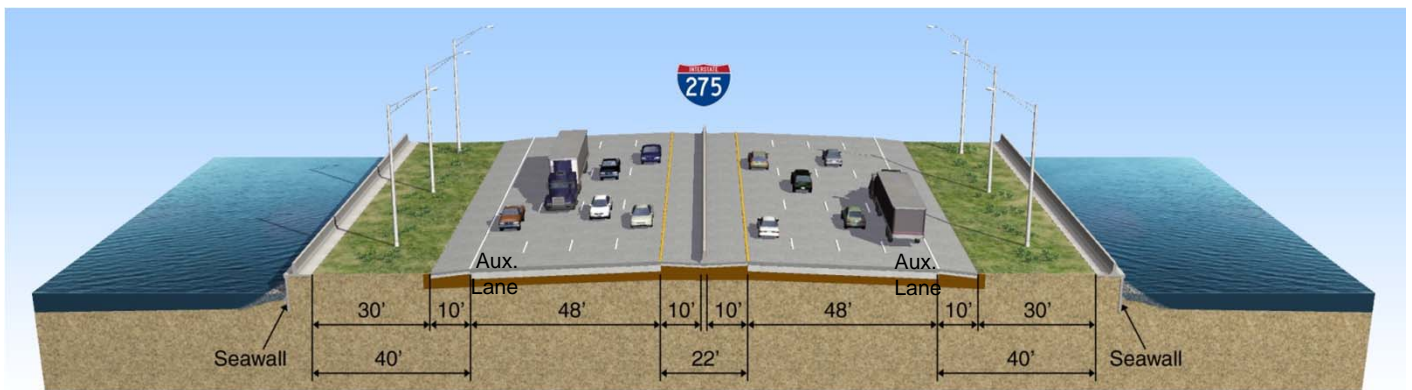


Existing Howard Frankland Bridges over Old Tampa Bay



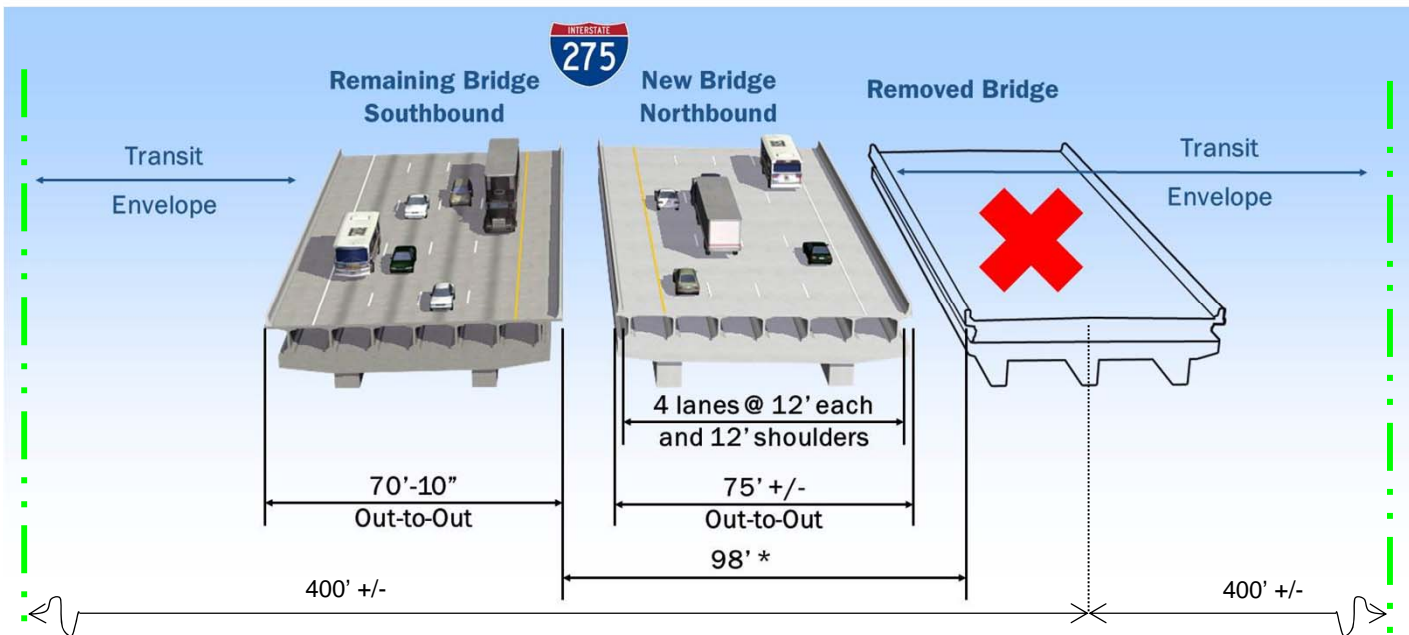
Roadway Approaches Near Bridge Ends (Looking North)

(Applies for about 1400 ft near the south bridge end and a maximum of 1500 ft +/- near the north bridge end)



Roadway Approaches on the Causeway (Looking North)

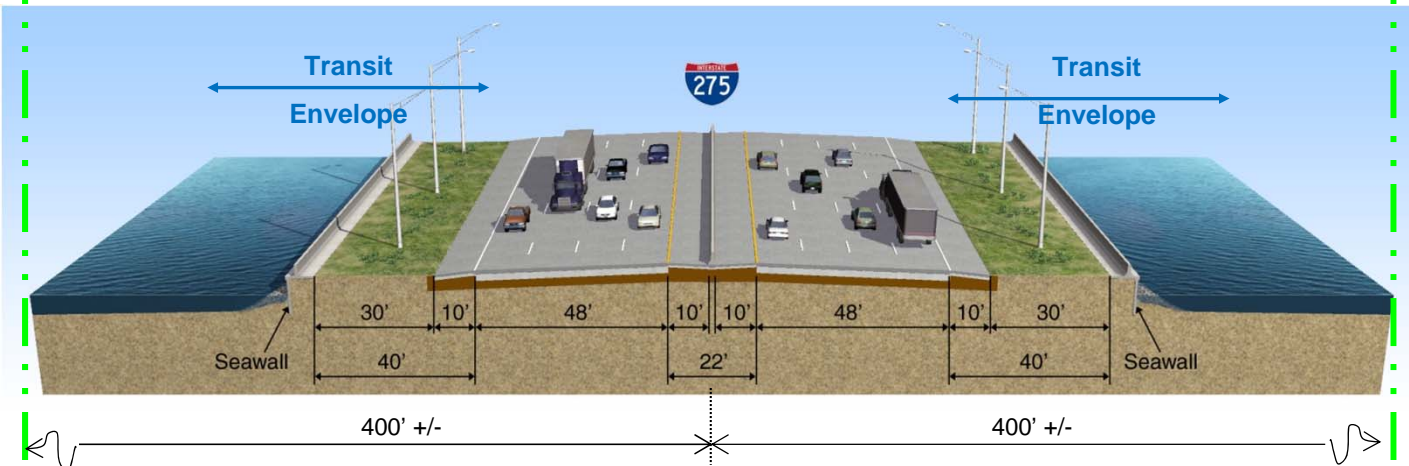




Recommended Alternative

Howard Frankland Bridge Northbound Replacement Bridge

*Distance between existing bridges narrows at bridge ends



Recommended Alternative

Causeway Approaches to/from Howard Frankland Bridge Northbound Replacement

Configurations shown include four lanes in each direction (three general through lanes and one auxiliary lane). Should an express lane system be implemented for I-275, the auxiliary lane would be converted to an express lane and presumed to be situated as the inside lane. The 12' shoulder widths on the bridge would be reduced to the standard 10' widths and a 4' buffer area added separating the express lane and general lanes.

Rev. 8/8/13



The replacement of the 4-lane northbound Howard Frankland Bridge is consistent with the Pinellas County MPO's Cost Feasible Long Range Transportation Plan (LRTP), since it is primarily related to preservation of the facility rather than expansion. The transit envelope along I-275 is consistent with the Hillsborough County MPO's Cost Affordable LRTP and the Pinellas County MPO's Cost Feasible (2015-2035) LRTP. The transit envelope is also consistent with the Tampa Bay Area Regional Transportation Authority's (TBARTA) Mid-Term Regional Network (2035) and Long-Term Regional Network (2050) which shows "short distance rail" in the bridge corridor.

The Howard Frankland Bridge is one of only three crossings between Pinellas and Hillsborough Counties over Old Tampa Bay and the crossing which carries the most traffic. In 2012, the Annual Average Daily Traffic (AADT) was 142,500 vehicles per day (VPD) total for both directions. The Tampa Bay Regional Planning Model (TBRPM) Version 7.0 indicates that the AADT in 2035 is expected to increase to 123,400 VPD on the northbound bridge. The existing peak-hour level of service (LOS) is estimated to be "D/C" (AM/PM). Based on the latest traffic projections, the design year 2035 LOS is projected to be LOS "F" if the new bridge remains four lanes. Because of this projected future LOS, the Department is studying the feasibility of adding express lanes and accommodating a future premium transit envelope within this bridge corridor.

The existing northbound bridge is no longer classified as *structurally deficient*; the latest sufficiency rating is 81.3 based on a September 2012 inspection. An earlier inspection conducted in September 2010 resulted in a sufficiency rating of 61.8. The FDOT performed repairs that improved the rating for the 2012 inspection. Based on a life-cycle cost analysis conducted by FDOT in September 2011, it was determined that over an 80-year analysis period, replacing the existing bridge rather than rehabilitating and maintaining it would cost approximately 25 percent less, based on a present-worth analysis, with a present-worth savings of approximately \$65 million in today's dollars.

1.4 PREMIUM TRANSIT ENVELOPE AND FUTURE EXPRESS LANE ACCOMMODATION

The provision for additional transportation capacity along I-275 within the Howard Frankland Bridge corridor is being considered by two different, but related means. One is by setting aside an envelope for future premium transit, and the other is the establishment of tolled express lanes. Decisions on actual implementation of these two means will be made outside the realm of this PD&E study by the FDOT in association with other local, state and federal agencies.

In the case of future express lanes, or a future structure with an integrated fixed Light Rail Transit (LRT) guideway, the new northbound bridge should be designed with consideration of future widening to the east in terms of how the superstructure and substructure elements are designed and constructed. However, this PD&E study is only evaluating the replacement of the existing northbound bridge to carry four-lanes of highway traffic. Outside of considering an extra 4 feet of bridge width and provision to allow the structure to be widened in the future, this study is not considering the environmental impacts of a wider structure or of a separate fixed-guideway structure across Tampa Bay. A future PD&E study or reevaluation of this study would be needed to determine the impacts of those potential longer-range improvements.

1.5 REPORT PURPOSE

This Wetland Evaluation and Biological Assessment Report (WEBAR) is one of several documents being prepared as part of this PD&E Study. This report documents the proposed project's wetlands and protected species involvement. Pursuant to Presidential Executive Order 11990 entitled Protection of Wetlands, (May 1977) the U.S. Department of Transportation (USDOT) has developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978, which requires all federally-funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as Part 2, Chapter 18 - Wetlands of the FDOT PD&E Manual (04/22/13), four (4) project alternatives (3 Build and 1 No-Build) were assessed to determine potential impacts to wetland and other surface waters associated with construction of each alternative.

This report also documents existing wildlife resources and habitat types found within the project area for potential occurrences of federal- and state-listed protected plant and animal species and their suitable habitat in accordance with Part 2, Chapter 27 - Wildlife and Habitat Impacts of the FDOT PD&E Manual (10/01/91). Potential impacts to protected species and habitats that may support these species are also addressed in this report.

An Essential Fish Habitat (EFH) Assessment is also included as part of this report in accordance with Part 2, Chapter 11 – Essential Fish Habitat of the FDOT PD&E Manual (11/26/07) and the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996. This assesses waters and substrate necessary to fish for spawning, breeding, feeding, and development to maturity.

SECTION 2 EXISTING ENVIRONMENTAL CONDITIONS

2.1 EXISTING LAND USE

Existing land use along the project corridor was determined utilizing a variety of resources including the National Wetlands Inventory (NWI), the Natural Resources Conservation Service's (NRCS) Soil Surveys for Pinellas and Hillsborough Counties, U.S. Geological Survey (USGS) topographical maps, aerial photographs (2008-2010), land use mapping from the Southwest Florida Water Management District (SWFWMD, 2006), and field verification during habitat and species reviews. **Figure 2-1** provides a map of existing land use for the project corridor. The land uses discussed below are identified by the *Florida Land Use, Cover and Forms Classification System* (FLUCCS) classification followed by the FLUCCS Code identified in parentheses.

According to FLUCCS data from SWFWMD (2011), the entire causeway area on either end of the bridge is identified as transportation (8100) with the exception of a small area on the north end identified as beaches other than swimming beaches (7100). The areas beneath the bridge and adjacent to the causeway are classified as bays and estuaries (5400) – Old Tampa Bay. Within portions of Old Tampa Bay adjacent to the project corridor, there are also areas classified as seagrasses (9110). The seagrass areas are separated into two classifications, seagrass – discontinuous (9113) and seagrass – continuous (9116).

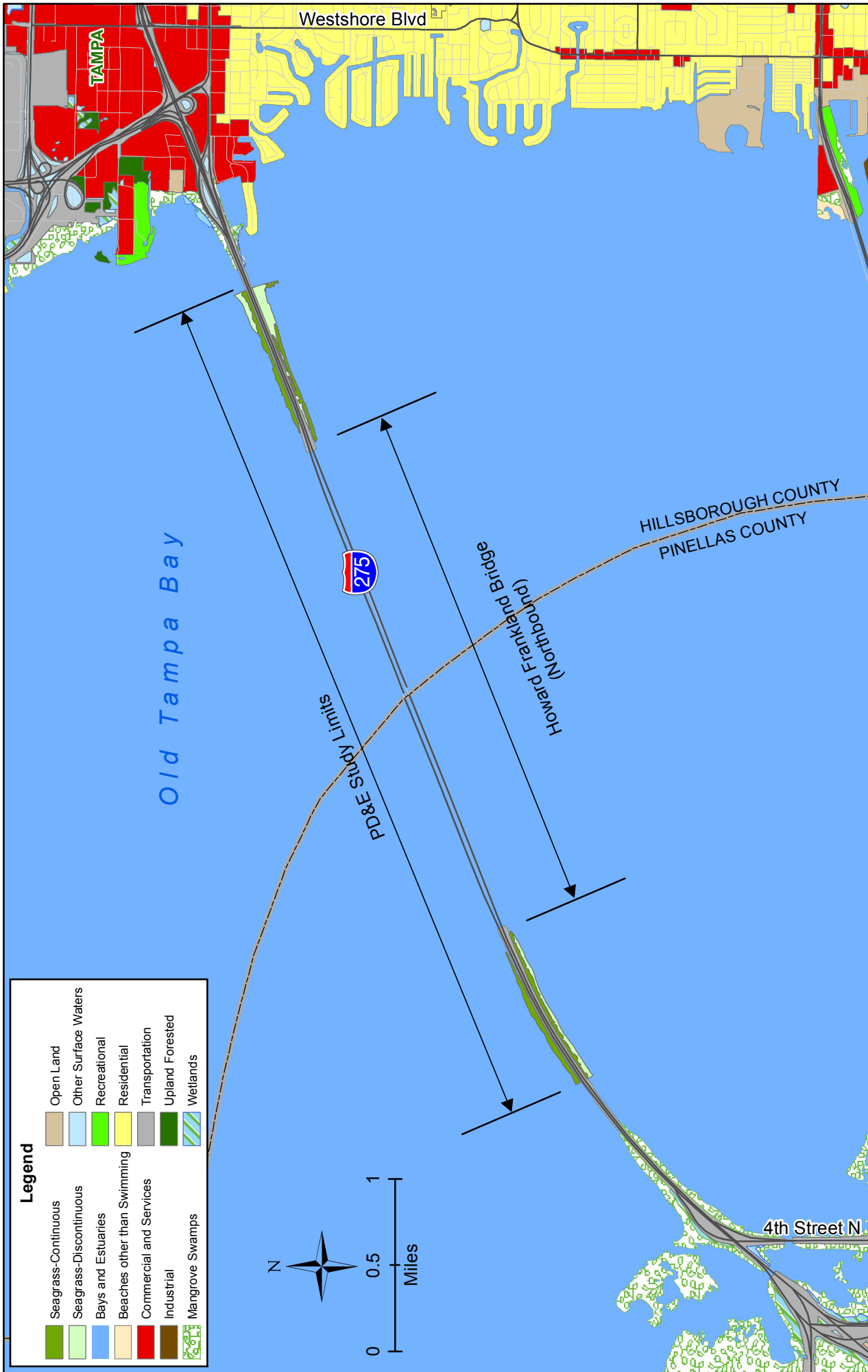
To the south and north of the project limits there are mangrove swamps (6120) and saltwater marshes (6420). Also located near the northern end of the project limits are land uses identified as open land (1900), residential high density (1300) and commercial and services (1400). These areas are not directly within the study limits but are noted due to close proximity to the project study area.

2.2 NATURAL AND BIOLOGICAL FEATURES

The project is located along manmade causeway and over open waters of Old Tampa Bay adjacent to the existing Howard Frankland bridges. The proposed bridge will traverse open waters of Old Tampa Bay and will include a new independent structure to replace the existing northbound bridge. No wetlands or mangroves were identified with the project limits. Seagrass beds are identified adjacent to the causeway on the east and west sides of I-275. No seagrasses were identified in the open waters between the existing causeway sections or under the existing bridges.

2.3 METHODOLOGY

A variety of resources including the NWI maps, Soil Surveys for Pinellas and Hillsborough Counties, USGS topographical maps, and aerial photographs were utilized to identify the wetland communities that occur within the study area. Field reviews were also conducted to verify information from these resources as well as make any necessary adjustments. Seagrass surveys were conducted on June 21, 2011, and July 16 & 24, 2013.



Legend

Seagrass-Continuous	Open Land
Seagrass-Discontinuous	Other Surface Waters
Bays and Estuaries	Recreational
Beaches other than Swimming	Residential
Commercial and Services	Transportation
Industrial	Upland Forested
Mangrove Swamps	Wetlands

**Northbound Howard Frankland Bridge
(I-275/SR 93) Replacement PD&E Study**
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Existing Land Use Map

Figure 2-1

Source: SWFWMD, Seagrass (field surveys)

2.4 UPLAND COMMUNITIES

Transportation (FLUCFCS 8100)

Transportation facilities are utilized for the movement of people and goods and as a result are major influences on land and define many land use boundaries. The transportation corridor for I-275 consists of mainly spoil material that was brought in to construct the causeway. The portion of the causeway within the project limits (approximately one mile in each direction of the bridge) includes only field grasses with a seawall and barrier wall on both sides. No natural vegetation or quality upland habitat is located within the project limits. Riprap is located waterward of the seawall.

Beaches other than Swimming Beaches (7100)

This land use is typically identified by strands of open, non-vegetated sandy areas along coastal regions. These areas are typically on islands or fringes that are not accessible. The beaches within the project area are located at the far north end of the project on the east side of the causeway. The beach is located adjacent to the limited access ROW and is not accessible other than by boat. Based on aerial and field reviews, this land use will not be impacted by the proposed bridge replacement.

2.5 WETLANDS AND SURFACE WATER COMMUNITIES

The project involves open waters of Old Tampa Bay in Pinellas and Hillsborough Counties. No wetlands or mangroves were identified within the project limits. Seagrasses were identified in shallow water adjacent to the existing causeway. No seagrasses or submerged aquatic vegetation (SAV) was identified in the deep water habitat under or between the existing Howard Frankland Bridges.

Bays and Estuaries (FLUCCS 5400)

According to the *Classification of Wetland and Deepwater Habitats of the United States*, this land use is identified as Estuarine Subtidal Open Water (E1OW). The FLUCCS manual describes this community as inlets or arms of the sea that extend into the land and are included within the land mass of Florida. Bays and estuaries for this project include Old Tampa Bay. The Causeway traverses Old Tampa Bay from Pinellas County to Hillsborough County with one bridge structure located within the project limits. Seagrass beds were identified in portions of the Bay located to the east and west of the Causeway.

Seagrass – discontinuous (FLUCCS 9113) and Seagrass – continuous (FLUCCS 9116)

Seagrasses were observed east and west of the existing causeway and were documented as both “continuous” and “discontinuous”. The seagrass species observed include shoal grass (*Halodule wrightii*) primarily, but also turtle grass (*Thalassia testudinum*) and manatee grass (*Syringodium filiforme*).

2.6 SPECIAL DESIGNATIONS

The project is located within waters of Old Tampa Bay within Pinellas and Hillsborough Counties. Portions of Old Tampa Bay within Pinellas County are part of the Pinellas County Aquatic Preserve and are designated as Outstanding Florida Waters (OFWs).

2.7 FUTURE LAND USE

The City of Tampa Adopted 2025 Future Land Use Map, effective December 2, 2012, and the Pinellas Planning Council Countywide Future Land Use Plan Map, amended October 16, 2012, identify the causeway areas adjacent to the proposed bridge as Transportation/ROW. Other areas within the project limits are identified as Water. The project is located within open waters of Old Tampa Bay and FDOT transportation ROW. No changes in land use are planned within or near the project corridor.

SECTION 3 WETLAND AND SURFACE WATER IMPACTS

3.1 EVALUATED ALTERNATIVES

Build Alternatives considered for replacement of the northbound bridge structure with a structure similar to the existing southbound bridge structure, were evaluated on one of three alternative alignments:

- A centered alignment between the two existing bridges (“Option A”),
- A new bridge on the west side of the existing southbound bridge (“Option B”), and
- A new bridge on the east side of the existing northbound bridge (“Option C”).

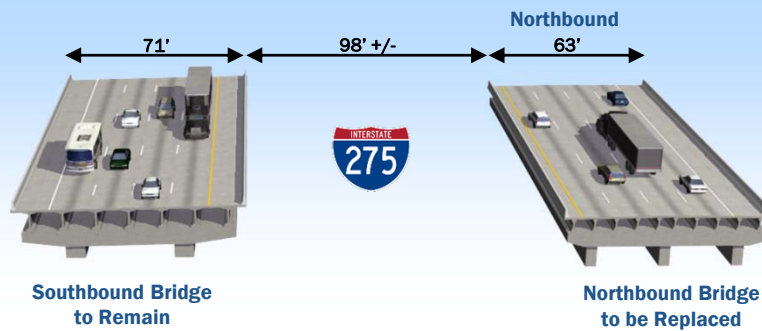
The above-mentioned alternative and bridge replacement concepts are shown in **Figure 3-1**, and the alternative concept plans are shown in **Appendix C**. The proposed replacement of the Howard Frankland Bridge will be constructed within the existing FDOT ROW. The bridge will be slightly wider due to current design standards and potential to convert the inside lane to a managed lane in the future.

3.2 IMPACT EVALUATION

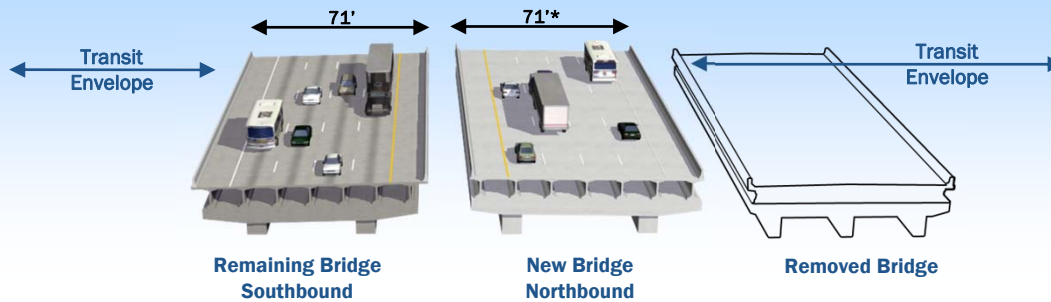
As part of the PD&E study, Option A (centered alignment between the two existing bridges) was selected as the Recommended Alternative. The construction of the bridge is anticipated to result in no impacts to wetlands or mangroves. No seagrass impacts are anticipated with the construction of the Recommended Alternative (Option A); however, seagrass impacts would occur for Option B and Option C. Seagrass impacts are discussed below in **Section 5**. Since there are no impacts to wetlands anticipated with the Recommended Alternative for the replacement of the Howard Frankland Bridge, no wetland mitigation is anticipated for this project. If any changes are made to the design prior to construction, the impact evaluation would need to be reevaluated and appropriate mitigation provided.

The Recommended Alternative, Option A, is expected to result in no fill impacts within Old Tampa Bay and the Pinellas County Aquatic Preserve. Surface water impacts from construction may occur to waters of Old Tampa Bay; however, since this is a bridge replacement project with no capacity improvements, best management practices (BMPs) will be utilized during construction and the existing bridge will be removed, no adverse impacts are anticipated. Option B would result in approximately 4.0 acres and Option C would result in approximately 3.4 acres of fill within Old Tampa Bay.

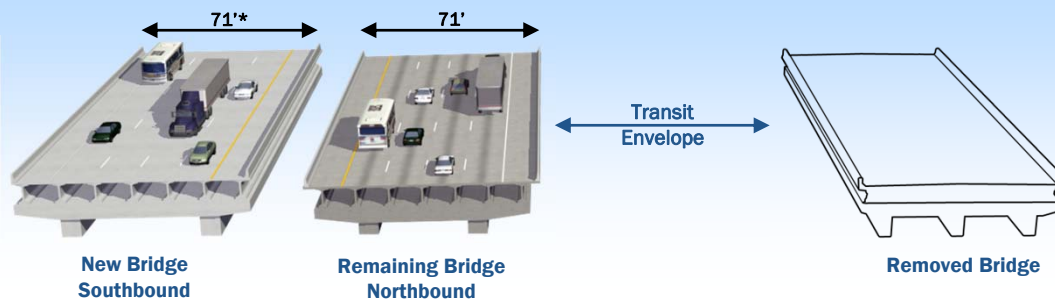
Current Bridges



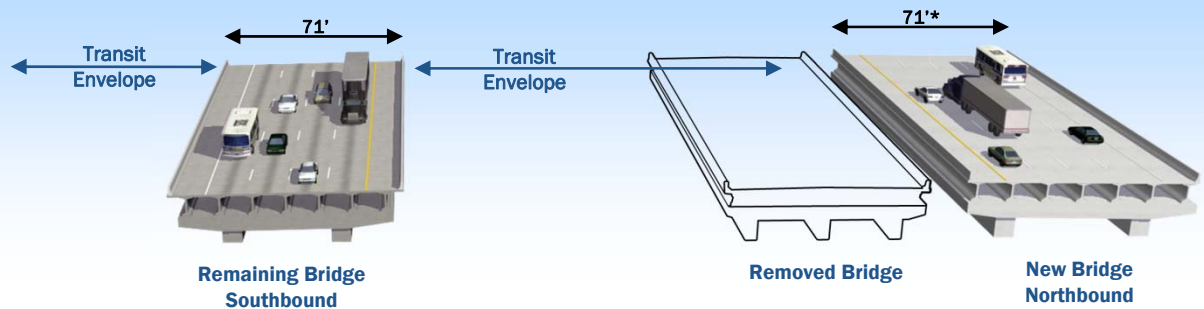
Option A - New bridge in middle



Option B - New bridge on west side



Option C - New bridge on east side



Notes: All dimensions are rounded to the nearest foot. *If two managed lanes in each direction were added to the new bridge, the new bridge would be approximately 139 to 140 feet wide, out-to-out.

Rev. 7/24/12



3.3 COORDINATION WITH PERMITTING AGENCIES

Environmental permits and authorizations will likely be required for this project from the following agencies:

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NMFS)
- U.S. Coast Guard (USCG)
- Southwest Florida Water Management District (SWFWMD)
- Florida Department of Environmental Protection (FDEP)
- Florida Fish and Wildlife Conservation Commission (FFWCC)
- Tampa Port Authority (TPA)
- Hillsborough County Environmental Protection Commission (HCEPC)

Coordination was conducted with many of these agencies as part of the Efficient Transportation Decision Making (ETDM) screening process for this project. An excerpt from the ETDM Programming Screen Summary Report (PSSR) has been attached in **Appendix A**. Agency comments were provided during the ETDM screening and have been addressed as part of this report. Further coordination will be conducted during design and prior to construction of the proposed bridge replacement.

SECTION 4 PROTECTED SPECIES AND HABITAT

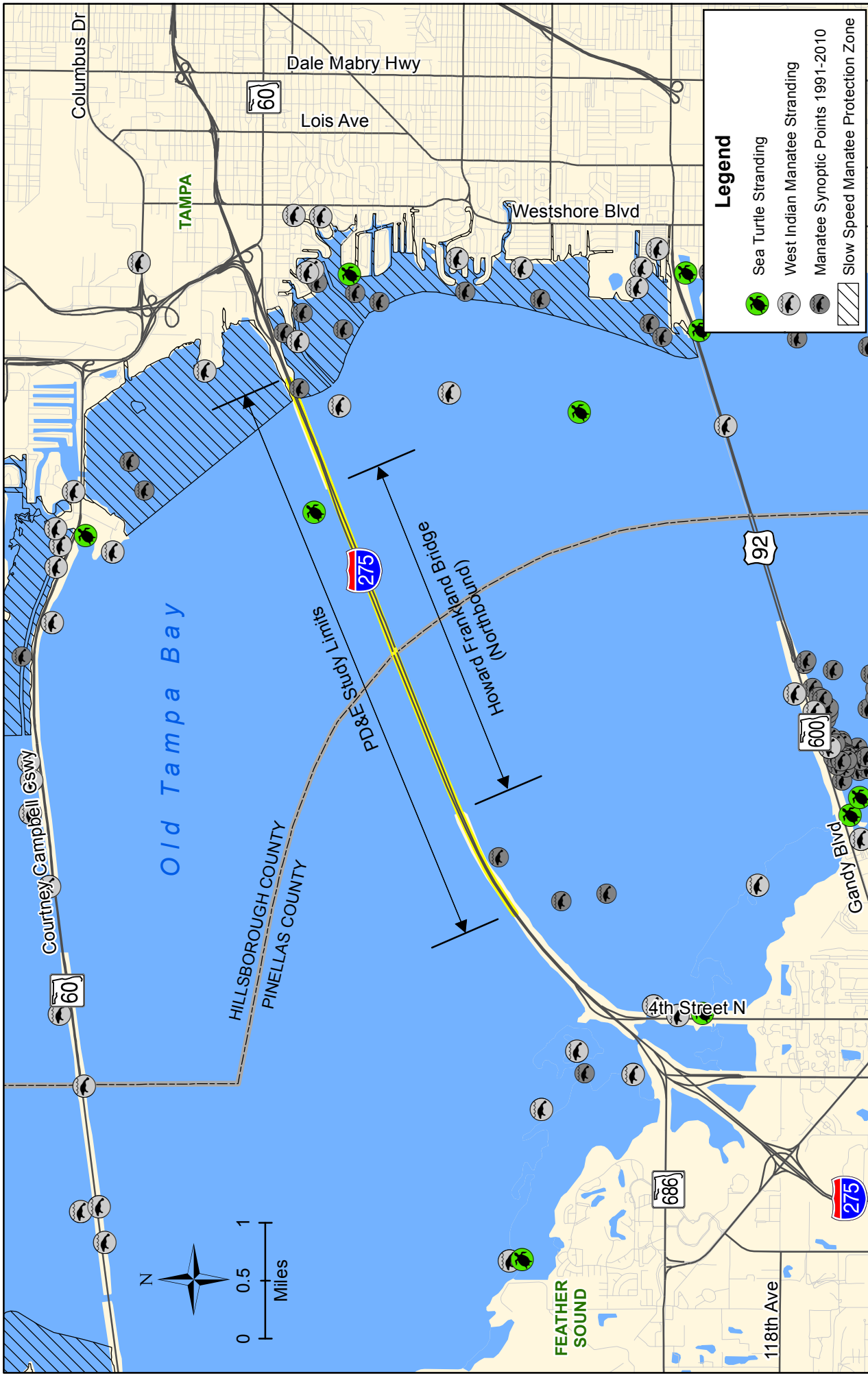
The project corridor was assessed for the presence of suitable habitat for federal- and/or state-listed protected species and USFWS Critical Habitat in accordance with 50 Code of Federal Regulation (CFR) Part 402 of the Endangered Species Act (ESA) of 1973, as amended, Chapters 5B-40 and 68A-27 F.A.C., and Part 2, Chapter 27 - Wildlife and Habitat Impacts of the FDOT PD&E Manual.

4.1 METHODOLOGY





Literature reviews, agency database searches and coordination, analysis of geographic information system (GIS) data, and preliminary field reviews were conducted in order to determine protected species and potential critical habitat that exists within the project corridor. The SWFWMD land use data and recent aerial photographs were reviewed to assist in determining habitat types occurring within and adjacent to the project corridor. Information sources and databases utilized include the following:

- FDOT Efficient Transportation Decision Making (ETDM) Programming Screen Summary Report (Project #12539),
- Florida Fish and Wildlife Conservation Commission (FFWCC) data, including the Eagle Nest Locator,
- U.S. Fish and Wildlife Service (USFWS) data,
- National Marine Fisheries Service (NMFS) data,
- Florida Geographic Data Library (FGDL),
- Florida Natural Areas Inventory (FNAI) data,
- Southwest Florida Water Management District (SWFWMD) data,
- National Wetlands Inventory (NWI) data,
- SWFWMD 2010 seagrass data, and
- Land Boundary Information System (LABINS).

Figures 4-1 and **4-2** provide documented species occurrences and protected habitat results from the database searches. Project scientists conducted general wildlife and seagrass field reviews during the months of June 2011 and July 2013. Additional field inspections were conducted as-needed throughout the project timeframe as new data suggested a need for additional surveys. Appropriate habitat in and immediately adjacent to the project ROW was visually scanned for evidence of protected species and general wildlife. Given the particular project landscape of the waters of Old Tampa Bay, the entire project limits were considered potential habitat. Bay waters were examined for the presence/absence of listed and protected avian species, sea turtles, and marine mammals, as well as aquatic plant species.



Legend

-  Sea Turtle Stranding
-  West Indian Manatee Stranding
-  Manatee Synoptic Points 1991-2010
-  Slow Speed Manatee Protection Zone

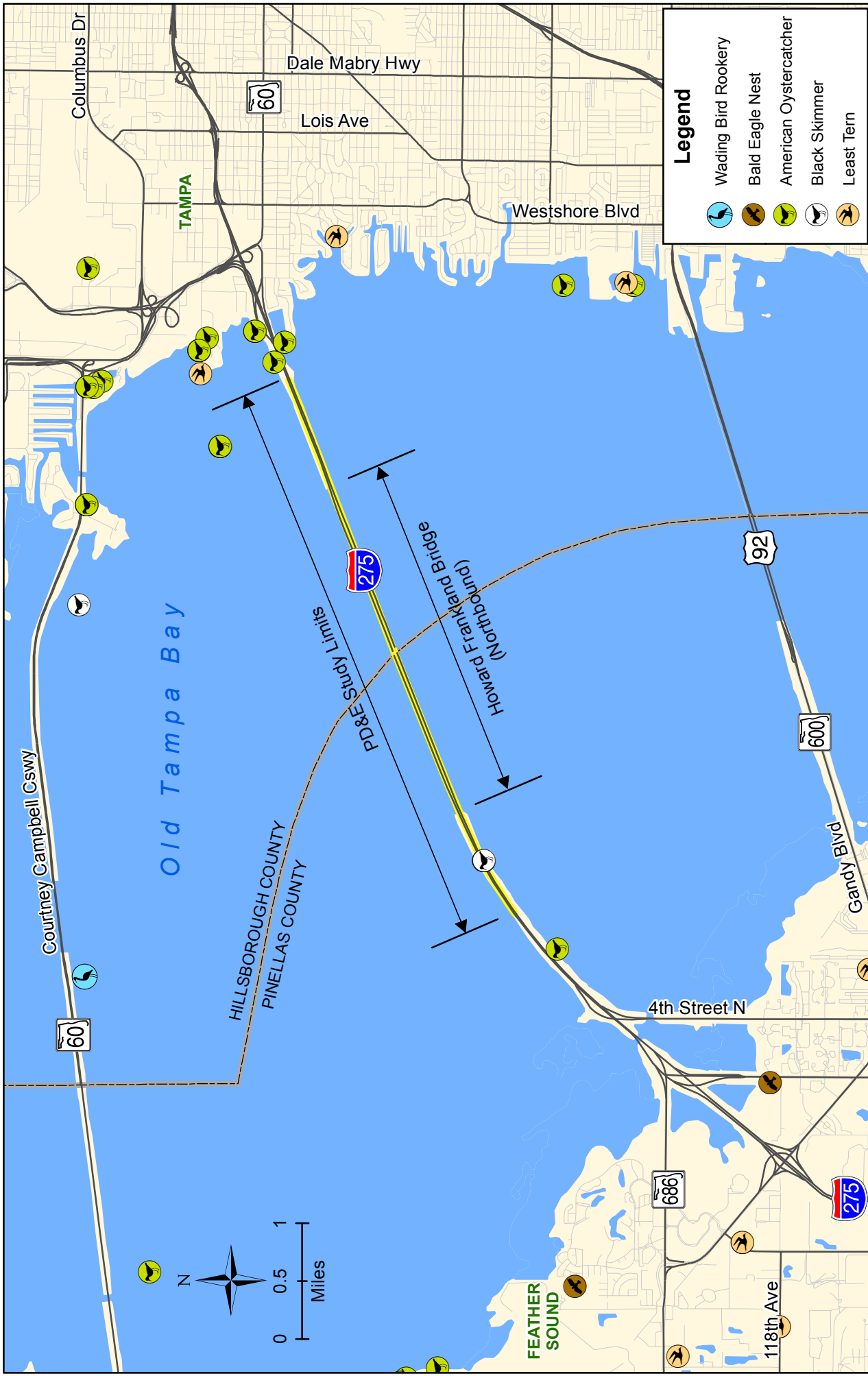
Documented Species Occurrence Non-Avian Species

**Northbound Howard Frankland Bridge
(I-275/SR 93) Replacement PD&E Study**
WPI Segment No. 422799 1
Pinellas & Hillsborough Counties








Figure 4-1

Source: NOAA, FWRI



Legend

-  Wading Bird Rookery
-  Bald Eagle Nest
-  American Oystercatcher
-  Black Skimmer
-  Least Tern

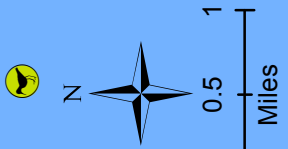
**Documented Species Occurrence
Avian Species**

Figure 4-2

**Northbound Howard Frankland Bridge
(I-275/SR 93) Replacement PD&E Study**
 WPI Segment No. 422799 1
 Pinellas & Hillsborough Counties



Source: FWC



The ETDM Programming Screen Summary Report (PSSR) was used as a reference to review agency comments provided during the process and also provide focal species identified by the reviewing agencies. The ETDM PSSR was used to address reviewing agencies' comments. The ETDM PSSR, published March 1, 2013, is located in **Appendix A**. A list of potentially occurring protected species was developed, and each species was assigned a low, moderate or high likelihood for occurrence within habitats found on the project corridor. **Table 4-1** lists the federal- and state-listed wildlife species with the potential to occur within the project corridor, based on potential availability of suitable habitat and known ranges. Definitions for likelihood of occurrence are provided below:

Low - Species with a low likelihood of occurrence within the project corridor are defined as those species that are known to occur in Pinellas and Hillsborough Counties or within the region, but preferred habitat is limited on the project corridor and no species were observed during field observations or documented in agency databases.

Moderate - Species with a moderate likelihood for occurrence are those species known to occur in Pinellas and Hillsborough Counties or nearby counties, and for which suitable habitat is well represented on the project corridor, but no observations or positive indications exist to verify their presence.

High - Species with a high likelihood for occurrence are suspected within the project corridor based on known ranges and existence of sufficient preferred habitat on the corridor, are known to occur adjacent to the corridor, or have been previously observed or documented in the vicinity.

Table 4-1 Potentially Occurring Listed Wildlife Species

SPECIES	COMMON NAME	State Listing (FFWCC)	Federal Listing (USFWS)	HABITAT	PROBABILITY OF PRESENCE OR OCCURRENCE
FISH					
<i>Acipenser oxyrinchus desotoi</i>	Gulf sturgeon	T	T	Marine/Estuarine primarily Spawn in freshwater rivers	Low
<i>Pristis pectinata</i>	Smalltooth sawfish		E	Marine/Estuarine	Low
REPTILES					
<i>Caretta caretta</i>	Loggerhead	T	T	Marine Nesting on beaches	Moderate
<i>Chelonia mydas</i>	Green turtle	E	E	Marine Nesting on beaches	Low
<i>Dermochelys coriacea</i>	Leatherback	E	E	Marine Nesting on beaches	Low
<i>Lepidochelys kempii</i>	Kemp's Ridley	E	E	Marine Nesting on beaches	Moderate
BIRDS					
<i>Ajaja ajaja</i>	Roseate spoonbill	SSC		Marine, estuarine, palustrine, mangroves	Moderate
<i>Charadrius alexandrinus</i>	Snowy plover	T		Dry, sandy beaches or salt/mudflats	Moderate
<i>Charadrius melodus</i>	Piping plover	T	T	Open, sandy beaches and tidal mudflats and sandflats	Moderate
<i>Egretta caerulea</i>	Little blue heron	SSC		Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate
<i>Egretta rufescens</i>	Reddish egret	SSC		Tidal Marsh, unconsolidated substrate, mangrove island, barren sands, mudflats, estuarine	Moderate
<i>Egretta thula</i>	Snowy egret	SSC		Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate
<i>Egretta tricolor</i>	Tricolored heron	SSC		Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate

Table 4-1 Potentially Occurring Listed Wildlife Species (Continued)

SPECIES	COMMON NAME	State Listing (FFWCC)	Federal Listing (USFWS)	HABITAT	PROBABILITY OF PRESENCE OR OCCURRENCE
<i>Eudocimus albus</i>	White ibis	SSC		Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate
<i>Haematopus palliatus</i>	American oystercatcher	SSC		Beach dune, exposed marine and estuarine substrate, mudflat, beach, sandbar	Moderate
<i>Haliaeetus leucocephalus</i>	Bald eagle		**	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate
<i>Mycteria americana</i>	Wood stork	E	E	Estuarine tidal swamps/marshes, lacustrine, seepage stream, ditches, ruderal	Moderate
<i>Pandion haliaetus</i>	Osprey	SSC		Estuarine, lacustrine, riverine	Moderate
<i>Pelecanus occidentalis</i>	Brown pelican	SSC		Marine, estuarine, mangroves	High
<i>Rynchops niger</i>	Black skimmer	SSC		Beach dune, tidal marsh, beaches, sand dunes, large lakes in Central & South FL	Low/Moderate
<i>Sterna antillarum</i>	Least tern	T		Beach dune, coastal grassland, tidal marsh, lacustrine, sandy beaches	Moderate
MAMMALS					
<i>Rhynchocyon manatus</i> (<i>Trichechus manatus latirostris</i>)	West Indian Manatee	E	E	Alluvial stream, blackwater stream, spring fed stream, estuarine, marine	High

SSC = Species of Special Concern, T = Threatened, E = Endangered

** No longer listed but protected under Migratory Birds Program per the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA)

4.2 AGENCY COORDINATION

Agency coordination was conducted as part of the ETDM screening and Advanced Notification review process. The ETDM screening process was used to become aware of any issues noted by the commenting agencies. ETDM coordination was conducted with USFWS, NMFS, FFWCC, and SWFWMD. Much of the coordination for potential species occurrence was conducted electronically utilizing databases from USFWS, FFWCC, SWFWMD and FNAI. The agency comments can be found in the ETDM PSSR in **Appendix A**, and a summary of the agency findings during the ETDM screening is provided below:

USFWS

The USFWS identified 3 potential species within the project area: West Indian (Florida) manatee (*Trichechus manatus latirostris*), wood stork (*Mycteria americana*), and piping plover (*Charadrius melodus*). In-water construction will follow the standard in-water construction conditions and at least two dedicated, experienced, manatee observers will be present at all times. No nighttime work should be done in areas with high manatee use. A current sea grass survey, conducted during the growing season (June-August), and estimate of impacts to submerged aquatic vegetation should be submitted within two years before the construction start date. If blasting is required, formal consultation will be required with USFWS for the manatee. The project is located within the Core Foraging Area (CFA) of several active nesting colonies of the endangered wood stork. To minimize adverse effects to the wood stork and other wetland dependent species, USFWS recommended that impacts to suitable foraging habitat be avoided. The USFWS did not anticipate impacts to suitable foraging habitat at the time of the ETDM screening. The piping plover can be seen foraging in Florida almost ten months out of the year. No Critical Habitat has been designated for this species within the footprint of the project but critical habitat has been identified in Tampa Bay. Unless onshore foraging habitat is modified in some way, this project is not likely to adversely affect piping plovers.

NMFS

The NMFS staff identified that the project could impact seagrasses and/or mangroves. It is recommended that FDOT staff conduct a seagrass/benthic resource survey during the prime growing season (June-August). Mangroves do occur along the shorelines of the bridge's causeways. Certain estuarine habitats within the project area are designated as EFH as identified in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico. Seagrasses have been identified as EFH for juvenile and subadult penaeid shrimp, juvenile and adult stone crab (*Menippe mercenaria*), postlarval, juvenile, and subadult and adult red drum (*Sciaenops ocellatus*), juvenile and adult schoolmaster and mutton snapper (*Lutjanus apodus and analis*), juvenile gag (*Mycteroperca microlepis*), goliath grouper (*Epinephelus itajara*), red grouper (*Epinephelus morio*), black grouper (*Mycteroperca bonaci*), yellowfin grouper (*Mycteroperca venenosa*), Nassau grouper (*Epinephelus striatus*), lane snapper (*Lutjanus synagris*), dog snapper (*Lutjanus jocu*), yellowtail snapper (*Ocyurus chrysurus*), cubera snapper (*Lutjanus cyanopterus*), and hogfish (*Lachnolaimus*

maximus). Mangroves have been identified as EFH for postlarval/juvenile, subadult, and adult red drum and gray snapper (*Lutjanus griseus*), juvenile schoolmaster, cubera snapper, mutton snapper, lane snapper, yellowtail snapper, dog snapper, and goliath grouper by the Gulf of Mexico Fishery Management Council under provisions of the Magnuson-Stevens Act. The NMFS recommended that an Endangered Species Action section 7 consultation be conducted for Gulf sturgeon (*Acipenser oxyrinchus desotoi*), smalltooth sawfish (*Pristis pectinata*), and swimming sea turtles even though the project does not lie within designated critical habitat of these species.

FFWCC

The FFWCC identified two land cover types within the project area: High Impact Urban for the bridge and the adjacent narrow causeway, and the open water of Tampa Bay. They identified numerous federal- and state-endangered and threatened species as well as species of special concern that may exist within the project corridor. FFWCC noted the project site is within USFWS Consultation Areas for the West Indian manatee and piping plover, and within the CFA for three wood stork colonies. The greatest potential for adverse impacts is associated with in-water work required for bridge demolition and reconstruction. It will be important to avoid and minimize effects on the Florida manatee and sea turtles during removal of the old bridge structure and construction of the new bridge. Possible manatee protection measures that may be required by the FFWCC include *Standard Manatee Conditions for In-Water Work*, restrictions on blasting, monitoring of turbidity barriers, exclusionary grating on culverts, presence of manatee observers during in-water work, a defined or limited construction window, and no nighttime work. If blasting is to be considered as a method used in construction, be aware that in the area of the project, it is important to perform the blasting during specific times of the year, if possible and an extensive blast plan and marine species watch plan would need to be developed and submitted to the FFWCC for approval as early as possible.

SWFWMD

The SWFWMD identified the following potential species that may be located within the project area: smalltooth sawfish, Gulf sturgeon, bald eagle (*Haliaeetus leucocephalus*) and the West Indian manatee. They also stated that there are seagrass beds within Old Tampa Bay along the causeways associated with the east and west boundaries of the bridge. These seagrass beds are particularly vulnerable to increased turbidity and sedimentation. Impacts to seagrasses will need to be mitigated in a manner which would offset the habitat loss. The West Indian Manatee is a listed threatened species and will require additional measures to be in place in order to protect this mammal during the construction process for this site. A Specific Condition will be used in the Environmental Resource Permit (ERP) outlining the standard operating procedure during the demolition of the old bridge and construction of the replacement bridge. SWFWMD advised that stormwater outfall pipes and structures extending below the Mean High Water Line (MHWL), exceeding 8 inches in diameter, will require manatee grating to be installed over the waterward end to ensure no manatees can become entrapped.

All letters, correspondence, and information from the agency databases can be found in **Appendix A**.

4.3 GENERAL CORRIDOR SURVEY RESULTS

The project corridor traverses mainly open waters of Old Tampa Bay. Habitat communities consist of mostly subtidal, but also some intertidal areas. The subtidal area includes the bridge span region while the intertidal areas are located adjacent to the existing bridge embankments and seawalls. Seagrasses are present adjacent to portions of the existing causeway; seagrasses are discussed in detail in **Section 5** below.

Based on the findings obtained during corridor field survey efforts, four protected faunal species and no protected floral species were observed within the project corridor. Twenty-two protected species have potential habitat within or adjacent to the project corridor based on database and literature research, and field observations of available habitat. **Figure 4-1** above shows the approximate location of protected species observations or previously documented occurrences. **Section 4.4** provide a discussion of the protected species that are either known to occur in the project area or for which there is a special concern identified in the project area.

As well as the potential for protected listed species within the corridor, the following non-listed species were observed during field reviews: common bottlenose dolphin (*Tursiops truncatus*), mullet (*Liza spp.*), laughing gull (*Leucophaeus atricilla*), cormorant (*Phalacrocorax auritus*), great egret (*Butorides virescens*), green heron (*Ardea alba*), common grackle (*Butorides virescens*), sting ray (*Dasyatis spp.*), cow-nosed ray (*Rhinoptera bonasus*), and jelly fish (*Chrysaora spp.*). Associated commensal fish (species unknown) were also observed during the field review. Barnacles and oysters were observed on the bridge piles and on the rip-rap.

4.4 FEDERALLY-LISTED SPECIES

Federally-listed faunal species which have been identified in the vicinity of the corridor or that may have potential to occur are the wood stork, West Indian manatee, piping plover, gulf sturgeon, smalltooth sawfish, and several species of sea turtles.

4.4.1 Wood Stork

Wood storks are listed as endangered by both the USFWS and FFWCC. They are large white wading birds with black on the underside of the wings and the tail. Wood storks utilize freshwater and estuarine habitats for nesting, foraging, and roosting. Wood storks are typically colonial nesters and construct their nests in medium to tall trees located within inundated forested wetlands including cypress swamps, mixed hardwood swamps, mangroves, and sloughs.

No rookeries were observed during field surveys. There are three wood stork rookeries (Sheldon Rd, East Lake/Bellows Lake, & 615333) documented within 15.0 miles of the project corridor. Fifteen miles is the core foraging area (CFA) radius for wood stork colonies in central Florida. As defined by the USFWS, suitable foraging habitat (SFH) includes wetlands and surface waters which have areas

of water that are relatively calm, uncluttered by dense thickets of aquatic vegetation, and have permanent or seasonal water depth between 2 and 15 inches. Wetlands and surface waters that meet the criteria of SFH generally include herbaceous and saltwater marshes, herbaceous ditches/swales, ponds, and riverine systems. Minimal SFH exists within the project area, specifically because water depths in the project area exceed 15 inches during normal tidal conditions. No impact to potential SFH for wood storks is therefore anticipated for the Recommended Alternative. If unavoidable wetland impacts occur, they will be mitigated as appropriate during design. Due to no impacts to wetlands with water depths between 2-15 inches and the bridge largely spanning deeper areas of open water, the project is expected to have no effect on the wood stork.

4.4.2 West Indian Manatee

The West Indian manatee is listed as endangered by both USFWS and FFWCC. West Indian manatees utilize coastal waters, bays, estuaries, rivers and occasionally lakes. The project is located within the USFWS Consultation Area for the West Indian manatee. While the project is not located within USFWS Critical Habitat for the species, waters just east of the project are located within a manatee protection area, categorized as a “slow speed” zone as per 68C-22.013(2)(d)3.b; this area is depicted in **Figure 4-1**. Mortality locations and synoptic points from 1991-2010 were obtained from the FFWCC Fish and Wildlife Research Institute and are also provided in **Figure 4-1**. The USFWS Consultation Area is extensive and covers the entire Pinellas and Hillsborough coastlines and waters of Old Tampa Bay within the project area, as well as along the bridge embankments and causeways so that data is therefore not included in the figure.

The *Standard Manatee Conditions for In-Water Work* will be implemented and these guidelines will be a part of the final project design. Current provisions (2011) are provided in **Appendix B**. However, the most current provisions will be obtained during design and followed during construction. Movement and foraging within Old Tampa Bay will not be limited by construction or by the new structure. No impacts to seagrasses will occur with the construction of the Recommended Alternative (potential seagrass impacts are described in more detail in **Section 5**). If seagrass impacts are determined during the design phase, any potential seagrass impacts will be adequately mitigated. Since the *Standard Manatee Conditions for In-Water Work* will be incorporated during construction, no seagrass impacts are anticipated, and construction impacts will be temporary in nature, this project may affect, but not likely to adversely affect the West Indian manatee.

4.4.3 Piping Plover

The piping plover is listed as threatened by both the USFWS and FFWCC. This species is found on open, sandy beaches as well as tidalflats and mudflats. They are found on both the Atlantic and Gulf coasts, but are more common on the Gulf coast. This project is located within the USFWS Consultation Area for the piping plover, but no USFWS Critical Habitat is identified within the project corridor. Since there are no proposed impacts to sandy beaches or tidalflats for the recommended alternative, this project is anticipated to have no effect on the piping plover.

4.4.4 Gulf Sturgeon

The gulf sturgeon is listed as threatened by both the USFWS and FFWCC. The sturgeon forages in the Gulf of Mexico and spawns in most coastal rivers. This species is more common in Gulf waters and rivers near the Panhandle over to Mississippi, but has been seen as far south as Florida Bay. No USFWS Critical Habitat is documented within the proposed project area. The FDOT will commit to watching for this species during construction of the proposed bridge and adhere to the *Construction Special Conditions for the protection of the Gulf Sturgeon (Appendix B)*. It is therefore anticipated that this project will have no effect on the gulf sturgeon.

4.4.5 Smalltooth Sawfish

Smalltooth sawfish normally inhabit shallow, tropical coastal waters and estuarine habitats such as seagrass beds, mangroves, and inshore bars. They can be found in sheltered bays, estuaries, and mouths of rivers; some sawfish are even known to go upstream into fresh water in larger riverine systems. This species was historically found throughout most of the Gulf of Mexico and the Atlantic Ocean, but is now confined to peninsular Florida and only relatively common in areas of south Florida near the Everglades. The NMFS has designated coastal waters near Fort Myers and the Everglades as Critical Habitat for the smalltooth sawfish. Sandy bottom with seagrasses exists in the project area, which provides potential habitat for the smalltooth sawfish. The Recommended Alternative will not impact any of this potential habitat. Given the unlikelihood of species presence in the project area, and that the FDOT will adhere to the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions (Appendix B)* during construction of the project, it is anticipated the project will have no effect on the smalltooth sawfish.

4.4.6 Sea Turtles

Sea turtles that have the potential to exist within the project corridor include the loggerhead (*Caretta caretta*), green turtle (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), and Kemp's Ridley (*Lepidochelys kempii*). These marine turtles are often found in the Gulf of Mexico and the coastal waters of Florida, although leatherbacks are rarely seen in coastal waters except when hatchlings are dispersing from nesting beaches. Sea turtles generally nest on sandy beaches near the dune lines, away from areas that are disturbed by tidal influences. These four sea turtles are known to nest more commonly on the east coast of Florida, with Kemp's Ridley rarely nesting in Florida. No nesting habitat exists with the project corridor for these sea turtles.

Juvenile green turtles, Kemp's Ridley and loggerheads are known to frequent bays or inlets. Juvenile sea turtles have the potential to exist within the project area, where they may seek calmer waters and forage in seagrass beds. Movement and foraging within Old Tampa Bay will not be limited by construction or by the new bridge structure. The FDOT will implement BMPs and will adhere to the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions (Appendix B)* during construction. The Recommended Alternative will not result in any seagrass impacts. Given the prevalence of seagrasses elsewhere in the project vicinity, no seagrass impacts anticipated by the

Recommended Alternative, and the implementation of the construction precautions, it is anticipated that this project may affect, but not likely to adversely affect sea turtles.

4.4.7 Non-Listed, Federally Protected Species

Although the bald eagle is no longer afforded protection by the ESA of 1973, protection for the species is provided through the Migratory Birds Program per the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA). Bald eagles are also no longer listed by the FFWCC. Bald eagles most commonly inhabit areas near the coast, bays, rivers, lakes or other open bodies of water. They nest in tall trees, typically live pines, which usually have open views to their surroundings. Eagles are also known to utilize artificial structures and other types of tall trees for nesting. There are no documented nests within 660 feet of the project area according to the FFWCC Eagle Nest Locator. No nests were identified within the project corridor during field reviews.

The USFWS determined that construction activities greater than 660 feet away from bald eagle nests have no documented negative effects that would halt construction activities during the nesting season. Monitoring of construction and nesting activities is therefore no longer warranted for projects involving construction beyond 660 feet of an active bald eagle nest during nesting season. Nesting season in Florida is from October 1 through May 15, although nesting may occur earlier or later than this period, especially in areas of south Florida. The USFWS Monitoring Guidelines shall be followed if any nests are observed within the project corridor during design; however, no nesting trees or other potential nesting sites have been located within 660 feet of the project area. The project is anticipated to have no effect on the bald eagle.

4.5 STATE-LISTED SPECIES

State-listed species which were identified in the vicinity of the corridor or which have high potential to occur are a variety of wetland dependent avian species including the little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), reddish egret (*Egretta refescens*), tricolored heron (*Egretta tricolor*), white ibis (*Eudocimus albus*), roseate spoonbill (*Ajaia ajaja*), American oystercatcher (*Haematopus palliatus*), black skimmer (*Rynchops niger*), brown pelican (*Pelecanus occidentalis*), least tern (*Sterna antillarum*), snowy plover (*Charadrius alexandrinus*), and osprey (*Pandion haliaetus*). Of these species, the least tern and snowy plover are state-listed as threatened, while the remaining species are all listed as species of special concern. These species utilize a combination of freshwater, brackish and saltwater habitats for feeding, mainly in shallow waters. Nesting occurs in a variety of habitats from freshwater forested wetlands to mangrove islands, with the majority of the listed species utilizing larger trees.

Four wetland-dependent, protected bird species were observed during field reviews and include the brown pelican, American oystercatcher, snowy egret and the least tern. FFWCC data indicates that there is one wading bird rookery (Atlas #615010) located approximately 3.5 miles north of the project and another rookery (Atlas #615335) is located approximately 6.6 miles north of the project. There are no species records for Atlas #615010, and this rookery is listed as inactive by FFWCC. Documented species for Atlas #615335 include snowy egret, little blue heron, tricolored heron, and

reddish egret, among others. The locations of rookery #615010 as well as species occurrence of other avian species can be seen in **Figure 4-2**. The Atlas was last updated in 1999. Documented Atlas #615010 was last active in the 1970's and Atlas #615335 was active in the 1990's. No rookeries were identified during field surveys, including Atlas #615010.

Wetlands and surface waters that provide foraging potential for these species include freshwater marshes, saltwater marshes, herbaceous ditches/swales, tidal flats, shallow estuarine waters, ponds, and riverine systems. There should be no impacts to wetlands used for foraging based on implementing the Recommended Alternative. For this alternative, the only impacts would be temporary surface water impacts from the construction of the bridge. If any wetland impacts occur as a result of the final design, they will be mitigated as appropriate. The project may affect, but not likely to adversely affect these wetland-dependent avian species.

4.6 CRITICAL HABITAT

The project corridor was assessed for Critical Habitat designated by Congress in 17 CFR 35.1532. Review of the USFWS's available GIS data indicates there is no Critical Habitat within the project limits or surrounding areas; therefore, it is anticipated the proposed bridge replacement will have no involvement with Critical Habitat.

SECTION 5 ESSENTIAL FISH HABITAT

This EFH Assessment is included as part of this report in accordance with Part 2, Chapter 11 – Essential Fish Habitat of the FDOT PD&E Manual and the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996. EFH includes all types of aquatic habitat, such as open waters, wetlands, seagrasses and substrate, necessary to fish for spawning, breeding, feeding, and development to maturity.

Fishery Biologist Dr. David Rydene of the National Oceanic and Atmospheric Administration (NOAA) NMFS (Habitat Conservation Division) Gulf Coast commented on this project as part of the ETDM screening process for the EFH assessment needs for this project. All agency correspondence, including a copy of the ETDM PSSR, is located in **Appendix A**.

5.1 MAGNUSON-STEVENS ACT

Under the requirements of the MSFCMA of 1996, an EFH Assessment is required for the proposed project. EFH is defined as those waters and substrate necessary to fish for spawning, breeding, feeding, and development to maturity. The MSFCMA created conservation and management standards established through Fishery Management Councils (FMCs) to implement the national standards in the Fishery Management Plans (FMP).

The 1996 amendments to the Magnuson-Stevens Act set forth a number of mandates for the NMFS, eight regional FMCs, and other federal agencies to identify and protect important marine and anadromous fish habitat. The FMCs, with assistance from NMFS, are required to identify and delineate EFH for all managed species. Federal action agencies that fund, permit, or carry out activities that may adversely impact EFH are required to consult with NMFS regarding the potential effects of their actions on EFH and to respond in writing to the NMFS's recommendations.

5.2 EFH INVOLVEMENT

The objective of the EFH Assessment is to describe how the actions associated with the proposed northbound Howard Frankland Bridge replacement may affect EFH designated by the NMFS and Gulf Coast FMC within Old Tampa Bay estuarine systems. Land development activities may adversely affect EFH either directly or indirectly (i.e. loss of prey items), and this activity, either site-specific or habitat-wide, is to be identified and evaluated individually and cumulatively. In response to the EFH assessment, NMFS and the FMC may provide recommendations and/or comments to the responsible federal permitting agency. The information provided by NMFS is considered by the permitting agency, and may be included in the recommendations as part of the Section 404 permit conditions.

According to NOAA guidelines for EFH (1998), EFH assessments must include:

- A description of the proposed action;
- An analysis of the effects, including cumulative effects, of the action on EFH, the managed species, and associated species by life history stage;

- The federal agency's reviews regarding the effects of the action on EFH; and
- Proposed mitigation, if applicable.

The sections below include the description of the proposed activity, EFH existing conditions, analysis of effects, and the federal agency's reviews regarding those effects on the EFH.

5.3 EXISTING CONDITIONS

Estuarine and marine habitats within Old Tampa Bay exist in the project corridor along the Howard Frankland Bridge. Field surveys were conducted to confirm the presence/absence of mangroves within the project corridor, and to refine, where needed, the 2010 seagrass data obtained from the SWFWMD.

5.4 FIELD SURVEYS

Qualitative seagrass surveys were conducted on June 21, 2011, and July 16 & 24, 2013, to field verify the presence/absence of previously mapped seagrass beds as provided by the SWFWMD's 2010 seagrass data. According to SWFWMD's data, previously mapped seagrass beds located in the project area were categorized as FLUCFCS 9116 (Seagrass – Continuous) and FLUCFCS 9113 (Seagrass - Discontinuous). Survey activities were conducted by boat throughout the project area. A map of the seagrasses within the project is included in **Appendix C**.

Seagrass beds are typically characterized as expansive stands of vascular plants. This community occurs in subtidal zones in clear, coastal waters. Attached to seagrass leaf blades are numerous species of epiphytic algae and invertebrates. Together, seagrasses and its epiphytes serve as important food sources for manatees, marine turtles, and many fish. Dense seagrasses can also serve as shelter or nursery grounds for many invertebrates and fish.

5.5 RESULTS

No mangrove communities exist in the project construction limits. Seagrasses and marine algae (*Caulerpa spp.*), interspersed with bare sand patches, were identified in the vicinity of the project site. The seagrass species observed include shoal grass primarily, but also included turtle grass and manatee grass. Overall, survey results concurred with the existing 2010 SWFWMD mapped seagrass data, with some minor exceptions of identifying small areas where seagrass coverage was more continuous than previously documented as part of the June 21, 2011, surveys. During the July 16 & 24, 2013, seagrass surveys, it was documented that some recession of seagrasses had occurred within the project study area over the approximate two-year period from June 2011 to July 2013.

In general, surface waters immediately adjacent to the bridge embankments are a few feet deep. This plateau, or shelf, continues outward from the embankment approximately 100-150 feet. Where the plateau drops off and surface waters are deeper, seagrasses are not present. However, on the plateaus adjacent to both the south and north bridge embankments, there are adequate substrate and water depths for seagrasses. Immediately adjacent to the bridge embankments, there is typically a 5-10 foot gap of bare sand; it is anticipated that the wave action excludes

seagrasses from growing here. The following briefly describes the cover of seagrasses in the project area. **Appendix C** depicts an aerial map with seagrass coverage.

- Southeast quadrant (east side of the southern bridge embankment and causeway): seagrasses were observed to be continuous on the northern portion of the plateau, with the exception of immediately adjacent to the bridge embankment and causeway (and rip-rap, where present) due to wave action. Seagrasses are sparse further to the south, where the plateau eventually drops down and deeper water is present.
- Southwest quadrant (west side of the southern bridge embankment and causeway): seagrasses were observed to be continuous on the plateau, but sparse immediately adjacent to the bridge embankment and causeway (and rip-rap, where present).
- Northwest quadrant (west side of northern bridge embankment and causeway): Seagrasses were observed to be continuous on the plateau, but sparse immediately adjacent to the bridge embankment and causeway (and rip-rap, where present). Waters are deep at the end of the embankment so seagrasses are not present there, but occurs further to the east.
- Northeast quadrant (east side of northern bridge embankment and causeway): Seagrasses were observed to be continuous on the plateau with an interruption of a linear, bare patch, and was sparse immediately adjacent to the bridge embankment and causeway (and rip-rap, where present). Unlike other quadrants where the seagrasses were not observed in deeper waters off the plateau, seagrasses were seen on the slope of the plateau in this area.

There are FMP's for the following species, known to exist in Tampa Bay:

Red Drum (*Sciaenops ocellatus*) is found throughout Florida estuaries within the Gulf of Mexico in primarily euryhaline waters. Adults are common in Tampa Bay and juveniles are common to abundant. Red drum is estuarine dependent. After hatching, larvae are carried into the shallow water of bays and estuaries with the tide. Once in an estuarine area they seek the shelter of grassy covers, tidal flats and lagoons for protection. Juveniles prefer shallow, protected, open waters of estuary covers and secondary bays with depths up to 3.0 meters. Adults are found in littoral and shallow nearshore waters off beaches and off shore in depths from 40 to 70 meters (130 to 230 feet).

Pink Shrimp (*Farfantepenaeus duorarum*) distribution is associated with seagrasses in general, and shoal grass in particular. They are distributed throughout the west coast of Florida and are common as juveniles in the Tampa Bay area. The juveniles occur in oligohaline to euhalhaline estuaries and bays. They seek the shelter of dense seagrasses with smaller juveniles preferring shoal grass and the adults preferring the refuge of turtle grass. Adults inhabit deep offshore marine waters commonly nine to 44 meters (145 feet) deep and inhabit substrates including shell-sand, sand, coral-mud and mud.

Stone Crab (*Minippe mercenaria*) is listed as common in Tampa Bay at all life stages. All life stages are marine to estuarine. Adults are usually found in deeper waters of estuaries or in inshore waters of the Gulf of Mexico. They burrow under rock ledges, coral heads or grass clumps, and at times in grass flats. Adults have been found to inhabit waters ranging in depth from five to 54 meters (16 to

177 feet). Juveniles are found in estuaries near pilings, rocks, and grass beds utilizing available cover and burrows. Migration tends to be short-ranged and along shore from 1.6 to 8.0 kilometers (1 to 5 miles). Females migrate from grass flats to deeper waters to avoid especially high or low temperatures.

Spiny Lobster (*Panulirus argus*) occurs throughout the Caribbean Sea, along the shelf waters of the southeastern United States north to North Carolina, in Bermuda, and south to Brazil and the Gulf of Mexico. They are found from just below the water surface to depths of 500 meters (1,650 feet). The spawning season occurs from April through September in the southeastern U.S. and throughout the year in the Caribbean and the Florida Keys on offshore reefs. Adults move along shore and offshore seasonally. Caribbean spiny lobsters migrate to deeper water in order to evade the stresses of the cold and turbid waters.

Coastal Migratory Pelagics EFH consists of Gulf of Mexico waters and substrates extending from the U.S./Mexico border to the boundary between the areas covered by the Gulf of Mexico FMC and the South Atlantic FMC from estuarine waters out to depths of 100 fathoms (600 feet). Cero (*Scomberomorus regalis*), cobia (*Rachycentron canadum*), king mackerel (*Scomberomorus cavalla*), little tunny (*Euthynnus alletteratus*), and Spanish mackerel (*Scomberomorus maculatus*) are species managed by the South Atlantic FMC. Spanish mackerel is known to occur within or near the project area. Spanish mackerel are prevalent throughout Florida waters inshore, offshore and nearshore. The species is frequently found over grass beds and reefs. Spanish mackerel are migratory fish that swim to the north in the spring and return to southern waters when the temperatures drop below 70 degrees Fahrenheit.

Reef Fish EFH consists of Gulf of Mexico waters and substrates extending from the U.S./Mexico border to the boundary between the areas covered by the Gulf of Mexico FMC and the South Atlantic FMC from estuarine waters out to depths of 100 fathoms (600 feet). The Gulf of Mexico reef fish primarily consists of grouper and snapper species. Gray Snapper (*Lutjanus griseus*) is a tropical, marine reef fish that occur from the U.S. mid-Atlantic south to Rio de Janeiro, Brazil. Juveniles are common to inshore waters throughout Florida, and adults are found in areas of moderate to high relief on the continental shelf. Spawning occurs during summer (June–September) in offshore waters around reefs, wrecks, and other bottom structures. Adult gray snapper are nocturnal predators that forage away from their reef habitats. Juveniles feed diurnally among seagrass beds and feed primarily on penaeid shrimp and crabs. Adult gray snappers feed on fish (largely grunts), shrimp, and crabs.

5.6 ANALYSIS OF EFFECTS ON EFH

During past consultation with NMFS for projects in Old Tampa Bay as well as comments received during the ETDM process, the project area wetlands are identified as EFH. These wetlands include the open waters of Old Tampa Bay, the estuarine water column and submerged aquatic vegetation (SAV), including seagrasses. While impacts to the water column would result from the new bridge

pilings, this displacement of the water column would be offset by the demolition of the existing northbound bridge. No net loss of the water column is therefore anticipated.

According to 2010 SWFWMD seagrass data and field surveys, no impacts to seagrasses are anticipated by the Recommended Alternative (Option A). Potential impacts to seagrasses are anticipated for two of the build alternatives, west of the existing southbound bridge and east of the existing northbound bridge (Option B and Option C, respectively). Option B would result in approximately 3.7 acres of seagrass impacts and Option C would result in approximately 3.1 acres of seagrass impacts. Seagrass coverage may change prior to the design and permitting phase of this project as seagrass coverage is known to change over time in Tampa Bay, sometimes dramatically. Final seagrass impacts will be determined during design. Temporary impacts may also result depending on how the project is constructed. In addition, secondary impacts could be assessed by the permitting agencies and will be handled during design and permitting.

Degradation of water quality resulting from construction of the project or excess pollutant loading of stormwater runoff from the project has the potential to adversely affect project waters. Impacts to water quality from construction activities will be avoided and minimized through the use of BMPs. BMPs generally include phased construction, turbidity screens, silt fences, hay bales, cofferdams, and other construction techniques approved by the regulatory agencies. Seagrasses will be delineated on the final construction plans, and buoys, turbidity barriers or other methods may be used during construction to delineate locations of seagrasses in the field.

5.7 PROPOSED MITIGATION

It is anticipated the Recommended Alternative will have no impacts to seagrasses; therefore, no mitigation is proposed at this time. If any changes are made during design that may result in seagrass impacts, mitigation measures will be developed with further consultation with the NMFS, USFWS and other appropriate agencies.

SECTION 6 CONCLUSIONS AND COMMITMENTS

6.1 WETLANDS

The Recommended Alternative for the replacement of the northbound Howard Frankland Bridge will occur within the existing FDOT ROW and within the limits of the existing Causeway fill material. The new bridge will be constructed between the existing southbound and northbound bridges over open waters of Old Tampa Bay.

No wetland impacts are anticipated by the Recommended Alternative for the proposed replacement of the northbound Howard Frankland Bridge. Surface water impacts will result to waters of Old Tampa Bay; however, since this is a bridge replacement project with no capacity improvements, no adverse impacts are anticipated. Since there are no wetland impacts anticipated, no mitigation is proposed for the bridge replacement.

6.2 PROTECTED SPECIES & HABITAT

Species assessed for this project include, but were not limited to, the following: Gulf sturgeon, smalltooth sawfish, West Indian manatee, swimming sea turtles, piping plover, wood stork, snowy plover, American oystercatcher, black skimmer, brown pelican, least tern, little blue heron, reddish egret, roseate spoonbill, smalltooth sawfish, snowy egret, tricolored heron, white ibis, and osprey. Additionally, review for the de-listed bald eagle was also conducted.

Field reviews for protected species and their suitable habitat were conducted within the project corridor. Based on the findings obtained during corridor field survey efforts, four protected faunal species and no protected floral species were observed within the project corridor. Twenty-two protected species have potential habitat within or adjacent to the project corridor based on database and literature research, and field observations of available habitat.

A finding of no effect was assigned for the wood stork, piping plover, Gulf sturgeon, smalltooth sawfish, the bald eagle and USFWS Critical Habitat. A finding of may affect, but not likely to adversely affect was assigned for the American oystercatcher, black skimmer, brown pelican, least tern, West Indian manatee, little blue heron, snowy egret, reddish egret, tricolored heron, white ibis, roseate spoonbill, American oystercatcher, black skimmer, brown pelican, least tern, snowy plover, and osprey.

6.3 ESSENTIAL FISH HABITAT

Estuarine and marine habitats of Old Tampa Bay exist within and adjacent to the project corridor on the east and west side of the Causeway and below the existing bridges. These habitats include seagrasses located at various areas on the east and west side of the Causeway on both the south and north end of the Howard Frankland Bridge. No impacts to seagrasses are anticipated by the construction of the Recommended Alternative (Option A).

6.4 COMMITMENTS

In order to assure that adverse impacts to listed species and suitable habitat within the vicinity of the project corridor will not occur, the FDOT will abide by standard protection measures in addition to the following commitments:

- The FDOT will conduct a seagrass survey during the growing season (June-August), and estimate impacts to seagrasses and SAV within no more than two years of the construction start date.
- Informal Endangered Species Action Section 7 consultation will be conducted with NMFS for Gulf sturgeon, smalltooth sawfish, and swimming sea turtles during design of the project and prior to construction.
- To assure the protection of wildlife during construction, the FDOT will implement a Marine Wildlife Watch Plan (MWWP), which includes the FFWCC *Standard Manatee Conditions for In-Water Work*. The FDOT will require the construction contractor to abide by these guidelines during construction. **Appendix B** provides an example of the most current *Standard Manatee Conditions for In-Water Work* (2011).
- Per direction from USFWS, special conditions for manatees will need to be addressed during construction and include the following: no nighttime work in areas with high manatee use, dedicated manatee observers, fenders between work barges to prevent crushing, and proper siltation or exclusion barriers that will not entrap manatees in the work site.
- The FDOT will adhere to the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (**Appendix B**) during construction of the project.
- The FDOT will commit to watching for Gulf Sturgeon during construction of the proposed bridge. FDOT will incorporate the *Construction Special Conditions for the protection of the Gulf Sturgeon* (**Appendix B**).
- The FDOT will coordinate with the appropriate regulatory and permitting agencies during the design phase of the project. Permits will be obtained prior to commencement of construction and the contractor will adhere to all conditions set forth in the permits.
- If blasting is required, informal consultation will be undertaken with USFWS for the manatee. Blasting should be performed during specific times of the year, if possible. An extensive blast plan and MWWP would need to be developed and submitted to the USFWS and FFWCC for approval as early as possible prior to construction.

SECTION 7 REFERENCES

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Appendix A

Agency Coordination

ETDM Summary Report

Project #12539 - Howard Frankland Bridge

Final Programming Screen - Published on 03/01/2013

Generated by Theresa Farmer (on behalf of FDOT District 7)

Printed on: 3/01/2013

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Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project commitments resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.

#12539 Howard Frankland Bridge

District: District 7

County: Pinellas, Hillsborough

Planning Organization: FDOT District 7

Plan ID: Not Available

Federal Involvement: Federal Permit Federal Action Federal Funding

Phase: Programming Screen

From: 1 Mile South of Bridge

To: 1 Mile North of Bridge

Financial Management No.: 42279911210

Contact Information: Theresa Farmer (813) 975-6445 theresa.farmer@dot.state.fl.us

Snapshot Data From: Programming Screen Summary Report Re-published on 03/01/2013 by Theresa Farmer

Issues and Categories are reflective of what was in place at the time of the screening event.

	Natural										Cultural			Community					Secondary and Cumulative Effects		
	Air Quality	Coastal and Marine	Contaminated Sites	Farmlands	Floodplains	Infrastructure	Navigation	Special Designations	Water Quality and Quantity	Wetlands	Wildlife and Habitat	Historic and Archaeological Sites	Recreation Areas	Section 4(f) Potential	Aesthetics	Economic	Land Use	Mobility		Relocation	Social
Alternative #1 - I-275 From: 1 Mile South of Bridge To: 1 Mile North of Bridge Re-Published: 03/01/2013 Reviewed from 02/20/2012 to 04/05/2012	2	4	2	0	2	2	3	3	3	4	3	3	3	3	0	0	N/A	0	N/A	3	3

Purpose and Need

Purpose and Need

Purpose and Need

The purpose of this project is to replace the existing northbound Howard Frankland Bridge due to its structural condition and its relatively short remaining service life. A secondary need that will be addressed by the study is the opportunity to consider various options for the planned project to accommodate premium transit service as identified in the various transportation plans adopted in the Tampa Bay area.

Structural Condition

The last structural inspection was conducted in September 2010. The northbound Howard Frankland Bridge has a Sufficiency Rating of 61.8, a Health Index of 85.03, and a National Bridge Inventory (NBI) Rating of Structurally Deficient (SD). The replacement of the bridge is needed in order to maintain existing and future transportation service on I-275.

Regional Connectivity

I-275 is a north-south interstate highway that is a major trade and tourism corridor. The Howard Frankland Bridge is one of only three crossings between Pinellas and Hillsborough Counties over Old Tampa Bay and the crossing which carries the most traffic. I-275 is part of the Florida Intrastate Highway System (FIHS), which is comprised of interconnected limited and controlled access roadways including interstate highways, Floridas Turnpike, selected urban expressways and major arterial highways. The FIHS is part of a statewide transportation network that provides for movement of goods and people at high speeds and high traffic volumes. The FIHS is the Highway Component of the Strategic Intermodal System (SIS), which is a statewide network of highways, railways, waterways and transportation hubs that handle the bulk of Floridas passenger and freight traffic. As an SIS/FIHS facility and part of the regional roadway network, I-275 is included in the 2025 Regional Long Range Transportation Plan developed by the West Central Florida MPOs Chairs Coordinating Committee (CCC). Preserving the operational integrity and regional functionality of I-275 is critical to mobility, as it is a vital link in the transportation network that connects the Tampa Bay region to the remainder of the state and the nation. The Cross-Bay travel market extends from the northeast neighborhoods of St. Petersburg and the northern Gulf beaches of Pinellas County east across Old Tampa Bay to central Hillsborough County , and includes the Gateway area in Pinellas County and the Westshore Business District in Hillsborough County .

Plan Consistency

The proposed PD&E study is included in the Florida Department of Transportations (FDOTs) *FY 2009/2010 to FY 2013/2014 Adopted SIS 5-Year Plan, Capacity Improvement Projects Highway (July 2009)*. The study is programmed in the FDOTs Five Year Work Program (Item No. 422904-1) in 2012/2013. The replacement of the 4-lane northbound Howard Frankland Bridge is consistent with the Pinellas County MPOs Cost Feasible Long Range Transportation Plan (LRTP). The transit envelope along I-275 is consistent with the Hillsborough County MPOs Cost Affordable LRTP and the Pinellas County MPOs Cost Feasible (2015-2035) LRTP. The transit envelope is also consistent with the Tampa Bay Area Regional Transportation Authoritys (TBARTA) Mid-Term Regional Network (2035) and Long-Term Regional Network (2050).

Emergency Evacuation

The Howard Frankland Bridge (I - 275/SR 93) is a critical evacuation route and is shown on the Florida Division of Emergency Managements evacuation route network. I-275 is also an emergency evacuation route designated by the Hillsborough County Emergency Management Office and the Pinellas County Emergency Management Office.

Future Population and Employment in the Corridor

The Howard Frankland Bridge (I-275/SR 93) serves as a regional roadway and one of only three bay crossings between Hillsborough County and Pinellas County; therefore, it is important to consider the changes in population and employment in both counties and determine if the current bridge reconstruction project adequately supports future growth. The population and employment growth in both counties is illustrated in the attached **Table A**. The table clearly indicates that the growth in population and employment in Hillsborough County is greater than Pinellas County. This is largely due to the fact that Pinellas County is so densely populated and there are very few large tracts of developable land remaining. Large scale development projects cannot easily be accommodated; therefore, most of the future growth in Pinellas will be

redevelopment and infill projects. The Tampa Bay region includes two major cities Tampa and St. Petersburg and the regions economy continues to be both healthy and diverse. This limited access facility provides regional connectivity across the bay and will continue to be heavily used by commuters and freight providers in the area. It also provides regional mobility and accessibility for area tourist and recreational destinations, as well as major employment and activity centers, on both sides of the bay.

Future Traffic

In 2010, the Howard Frankland Bridge carried 139,000 Average Annual Daily Traffic (AADT) with 5.76% of the traffic being trucks. The northbound and the southbound sections each carried 69,500 vehicles. The new Tampa Bay Regional Planning Model (TBRPM) - Version 7.0 indicates that the AADT in 2035 is projected to total 246,000, with 123,400 and 122,600 projected northbound and southbound respectively. Based on the generalized AADT volumes for an eight-lane freeway for Urbanized Areas from the FDOT 2009 Quality/Level of Service Handbook, the existing peak hour level of service (LOS) is E. Based on the proposed reconstruction, assuming the same number of lanes for northbound traffic, the operating condition for the Howard Frankland Bridge is expected to operate at LOS F by design year 2035.

Transit

Existing transit service is operated along the Howard Frankland Bridge (I-275) by the Hillsborough Area Regional Transit (HART) and Pinellas Suncoast Transit Authority (PSTA). Express Commuter Service, Route 300X, operates Monday-Friday, with no Saturday, Sunday or Holiday service. This route departs 15 times per day from each county, departing every thirty minutes during peak hours and limited service during mid-day hours.

Access to Intermodal Facilities and Freight Activity Centers

I-275 is part of the highway network that provides access to regional intermodal facilities such as the Tampa International Airport, the St. Petersburg-Clearwater International Airport, several general aviation airports, MacDill Air Force Base, the Port of Tampa, the Port of St. Petersburg, transit stations, cruise ship terminals and major CSX intermodal rail facilities. It also provides access on the west to the Gateway Triangle and on the east to the Hookers Point freight activity centers. As such, I-275 has been designated as part of the FIHS/SIS and is considered a regional freight mobility corridor.

Improvements to I-275 within the project limits will maintain access to activity centers in the area, and movement of goods and freight in the greater Tampa Bay region.

Project Description

Project Description Summary

The Florida Department of Transportation (FDOT) District 7 is conducting a Project Development and Environment (PD&E) study to evaluate replacement of the northbound Howard Frankland Bridge (Bridge No. 150107) over Old Tampa Bay. The project is located in Pinellas and Hillsborough Counties. This bridge carries northbound Interstate 275 (I-275)/State Road (SR) 93 traffic and was originally constructed in 1959. The Annual Average Daily Traffic (AADT) in 2010 on the northbound Howard Frankland Bridge was 69,500 vehicles. The total 2010 AADT for both directions was 139,000 vehicles. The northbound bridge will remain open while the new bridge is constructed. The new bridge is intended to be constructed parallel to the existing bridge. The limits of the PD&E study are the west and east ends of the Howard Frankland Bridge as well as approximately one-mile beyond the bridge on each end along the existing causeway that will be evaluated to connect the proposed bridge locations to the existing alignment.

In addition to the replacement of the northbound bridge, this study will evaluate the reservation of a future transit envelope within the study limits. The FDOT will analyze the design year traffic to determine the improvements needed to provide an acceptable level of service (LOS). The PD&E study will evaluate alternative(s) which include managed lanes that will address the capacity needs along I-275. The project to the south (I-275 from south of 54th Ave S. to north of 4th St. N., ETDM #12556) will involve managed lanes for consistency with managed lanes on the Howard Frankland Bridge, if that is the alternative selected. The project to the north (TIS) constrains the number of lanes possible for the Bridge because its laneage is constrained by cost and availability of ROW.

Background

The original Howard Frankland Bridge was opened to traffic in 1959. The original bridge carried only four lanes of traffic, two lanes in each direction. By 1978, planning for a increasing the capacity of this section of I-275 had begun. As traffic

projections increased on the Howard Frankland Bridge and the Sunshine Skyway Bridge was severely damaged by a disaster that occurred in 1980, it was evident that a total of at least eight lanes (four in each direction) of capacity would be required. In 1987, it was determined that a parallel, four-lane span would be built, and construction commenced in 1988. Plans to rehabilitate the older bridge were carried forward after the opening of the new bridge. The new southbound span was opened to traffic in 1990, and the older bridge was closed to traffic, rehabilitated and reopened in 1992 as the northbound span.

The existing northbound span of the Howard Frankland Bridge (Bridge No. 150107) is a pre-stressed concrete stringer/girder structure, which is 15,872 feet long and 62.3 feet wide, with a maximum span of 98.1 feet. The existing bridge typical section is four lanes with the older structure serving the northbound traffic and the newer bridge serving the southbound traffic. The navigational clearances for the existing northbound bridge are 42.9 feet vertical and 72.1 feet horizontal. The date of the last inspection was September 2010, at which time the bridge was deemed structurally deficient. Based on the deficiencies that were noted, corrective actions are required. Specifically, bearings are to be inspected on a 12 month cycle and spalls and delaminations are to be repaired.

A simultaneous Regional Transit Corridor Evaluation will evaluate premium transit enhancements across the bridge for linkage between the Gateway and Westshore areas via the Howard Frankland Bridge which would support implementation of the Tampa Bay Area Regional Transportation Authority (TBARTA) Master Plan adopted in May 2009. The focus of the Programming Screen is the PD&E Study for the replacement of the northbound bridge. Two separate projects were run in the ETDM Environmental Screening Tool (EST) Planning Screen under project numbers 12256 (Gateway to Hillsborough County Line) and 12736 (Westshore to Pinellas Rail Corridor) for the transit evaluation. The PD&E study will evaluate various design and operational concepts for replacing the bridge, as well as assess the environmental impact of the bridge replacement and the provision of the necessary causeway section improvements. The PD&E study will also present an opportunity to explore various design options to accommodate transit. The type of premium transit service to be accommodated will be determined by the transit evaluation. The cost of the bridge replacement is approximately \$446,000,000 according to the Pinellas County Long Range Transportation Plan (LRTP). The funding source is listed as bridge revenue (BR) including federal and state funds.

Summary of Public Comments

Summary of Public Comments are not available at this time.

Federal Consistency Determination

Date: 04/06/2012

Determination: CONSISTENT, WITH COMMENTS with Coastal Zone Management Program.

Comment: Based on the information contained in the AN and associated state agency comments, the state has no objections to allocation of federal funds for the subject project and, therefore, the funding award is consistent with the Florida Coastal Management Program (FCMP). To ensure the project's continued consistency with the FCMP, the concerns identified by our reviewing agencies must be addressed prior to project implementation. The state's continued concurrence will be based on the activity's compliance with FCMP authorities, including federal and state monitoring of the activity to ensure its continued conformance, and the adequate resolution of any issues identified during subsequent regulatory reviews. 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.

Additional Consistency Information

- Consistent with Air Quality Conformity.
- Consistent with Local Government Comp Plan.
- Consistent with MPO Goals and Objectives.

Lead Agency

Federal Highway Administration

Exempted Agencies

Agency Name	Justification	Date
US Forest Service	Project located within Tampa Bay. No US Forest lands within project area.	01/03/2012

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

Communities Within 500 Feet

- 3505 St. Petersburg
- 3524 Tampa

Purpose and Need Reviews

FL Department of Economic Opportunity

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/21/2012	Chris Wiglesworth (chris.wiglesworth@deo.myflorida.com)	No Purpose and Need comments found.

FL Department of Environmental Protection

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	04/02/2012	Lauren Milligan (lauren.milligan@dep.state.fl.us)	No Purpose and Need comments found.

FL Department of State

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/05/2012	Alyssa McManus (ammcmanus@dos.state.fl.us)	No Purpose and Need comments found.

FL Fish and Wildlife Conservation Commission

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	04/04/2012	Scott Sanders (scott.sanders@myfwc.com)	No Purpose and Need comments found.

Federal Highway Administration

Acknowledgement	Date Reviewed	Reviewer	Comments
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Accepted	02/06/2013	Linda Anderson (linda.anderson@dot.gov)	<p>2-6-2013: FHWA has reviewed FDOT District 7's responses to FHWA's comments of 4-4-2012 (below). FDOT District 7 has incorporated those responses into the ETDM project Purpose and Need, and the ETDM Project Description. FHWA is satisfied with these responses and so is approving the project Purpose and Need.</p> <p>4-4-2012: FHWA has reviewed the Purpose and Need Statement for ETDM # 12539, Howard Frankland Bridge, and has the following comments:</p> <ol style="list-style-type: none"> 1. FHWA finds that a LOS of F in the 2035 Design Year is unacceptable. Please add the following to the Purpose and Need Section (first paragraph): "In addition, the FDOT will analyze the design year traffic to determine the improvements needed to provide an acceptable level of service (LOS). The PD&E study will evaluate alternatives which include managed lanes that will address the capacity needs along I-275." 2. Please provide the cost of the bridge replacement and the funding source. 3. Please indicate how traffic will be handled during construction. Will all traffic be routed over the south bound section or will a temporary bridge be built? 4. Will the bridge be built within the same footprint as the existing structure? 5. In order to meet Federal planning consistency requirements, the project must be included in the Cost Affordable LRTP, as well as the TIP/STIP for both Pinellas and Hillsborough Counties. The project is located in the Cost Affordable portion of the Hillsborough County MPO's 2035 LRTP, however clarification for the following statement regarding the project's consistency with the Pinellas County 2035 LRTP is requested: "The replacement of the 4-lane northbound Howard Frankland Bridge is consistent with the Pinellas County MPO's Cost Feasible Long Range Transportation Plan (the LRTP), since it is primarily related to preservation of the facility rather than expansion."
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Hillsborough County MPO

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	04/05/2012	Wally Blain (blainw@plancom.org)	No Purpose and Need comments found.

National Marine Fisheries Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	02/28/2012	David Rydene (David.Rydene@noaa.gov)	No Purpose and Need comments found.

National Park Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/07/2012	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Natural Resources Conservation Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/16/2012	Rick Robbins (rick.a.robbins@fl.usda.gov)	No Purpose and Need comments found.

Southwest Florida Water Management District

Acknowledgement	Date Reviewed	Reviewer	Comments
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Understood	04/03/2012	Hank Higginbotham (Hank.Higginbotham@swfwmd.state.fl.us)	No Purpose and Need comments found.
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US Army Corps of Engineers

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	04/04/2012	Garett Lips (Garett.G.Lips@usace.army.mil)	No Purpose and Need comments found.

US Environmental Protection Agency

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	04/05/2012	Madolyn Dominy (dominy.madolyn@epa.gov)	The project description states that, based on the proposed reconstruction, assuming the same number of lanes for northbound traffic, the operating condition for the Howard Frankland Bridge is expected to operate at LOS "F" by design year 2035. EPA questions whether a project of this magnitude is acceptable when the anticipated LOS is "F". This should be evaluated and alternatives which present a more acceptable LOS should be considered.

US Fish and Wildlife Service

Acknowledgement	Date Reviewed	Reviewer	Comments
Understood	03/06/2012	Jane Monaghan (Jane_Monaghan@fws.gov)	No Purpose and Need comments found.

The following organizations were notified but did not submit a review of the Purpose and Need:

- FL Department of Agriculture and Consumer Services
- Federal Transit Administration
- Seminole Tribe of Florida
- US Coast Guard

Alternative #1 - I-275

Alternative Description

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
I-275	1 Mile South of Bridge	1 Mile North of Bridge	Bridge	ETAT Review Complete	5.0 mi.	\$400,000,000.00	Roadway Transit	Y

Segment Description(s)

Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
Unnamed Segment	Unnamed Segment	1 Mile South of Bridge	1 Mile North of Bridge	5			

Jurisdiction and Class

Segment No.	Jurisdiction	Urban Service Area	Functional Class
Unnamed Segment	FDOT	In	URBAN: Principal Arterial - Interstate

Base Conditions

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment	2010	69500	4	Lanes Freeway

Interim Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment				

Needs Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment	2035	123400	4	Lanes Freeway

Cost Feasible Plan

Segment No.	Year	AADT	Lanes	Config
Unnamed Segment	2035			

Funding Sources

Segment No.	FEDERAL	Unknown
Unnamed Segment	\$400,000,000.00	

Project Effects Overview for Alternative #1 - I-275

Issue	Degree of Effect	Organization	Date Reviewed
Natural			
Air Quality	2 Minimal	US Environmental Protection Agency	04/05/2012
Coastal and Marine	2 Minimal	Southwest Florida Water Management District	04/03/2012
Coastal and Marine	4 Substantial	National Marine Fisheries Service	02/28/2012
Contaminated Sites	0 None	US Environmental Protection Agency	04/05/2012
Contaminated Sites	2 Minimal	Southwest Florida Water Management District	04/03/2012
Contaminated Sites	0 None	FL Department of Environmental Protection	04/02/2012
Farmlands	0 None	Natural Resources Conservation Service	03/16/2012
Floodplains	2 Minimal	US Environmental Protection Agency	04/05/2012
Floodplains	0 None	Southwest Florida Water Management District	04/03/2012
Infrastructure	2 Minimal	Southwest Florida Water Management District	04/03/2012

Navigation	3	Moderate	Federal Highway Administration	04/04/2012
Navigation	3	Moderate	US Army Corps of Engineers	04/04/2012
Special Designations	3	Moderate	US Environmental Protection Agency	04/05/2012
Special Designations	4	Substantial	Federal Highway Administration	04/04/2012
Special Designations	4	Substantial	Southwest Florida Water Management District	04/03/2012
Special Designations	3	Moderate	FL Department of Environmental Protection	04/02/2012
Water Quality and Quantity	4	Substantial	Southwest Florida Water Management District	04/03/2012
Water Quality and Quantity	3	Moderate	FL Department of Environmental Protection	04/02/2012
Wetlands	4	Substantial	US Environmental Protection Agency	04/05/2012
Wetlands	4	Substantial	US Army Corps of Engineers	04/04/2012
Wetlands	4	Substantial	Southwest Florida Water Management District	04/03/2012
Wetlands	4	Substantial	FL Department of Environmental Protection	04/02/2012
Wetlands	3	Moderate	US Fish and Wildlife Service	03/14/2012
Wetlands	4	Substantial	National Marine Fisheries Service	02/28/2012
Wildlife and Habitat	3	Moderate	FL Fish and Wildlife Conservation Commission	04/04/2012
Wildlife and Habitat	3	Moderate	Southwest Florida Water Management District	04/03/2012
Wildlife and Habitat	3	Moderate	US Fish and Wildlife Service	03/14/2012
Cultural				
Historic and Archaeological Sites	3	Moderate	Federal Highway Administration	04/05/2012
Historic and Archaeological Sites	2	Minimal	FL Department of State	04/04/2012
Historic and Archaeological Sites	N/A	N/A / No Involvement	Southwest Florida Water Management District	04/03/2012
Recreation Areas	0	None	US Environmental Protection Agency	04/05/2012
Recreation Areas	3	Moderate	Federal Highway Administration	04/04/2012
Recreation Areas	N/A	N/A / No Involvement	Southwest Florida Water Management District	04/03/2012
Recreation Areas	0	None	FL Department of Environmental Protection	04/02/2012
Recreation Areas	N/A	N/A / No Involvement	National Park Service	03/07/2012
Section 4(f) Potential	3	Moderate	Federal Highway Administration	04/04/2012
Community				
Land Use	N/A	N/A / No Involvement	FL Department of Economic Opportunity	02/21/2012
Relocation	N/A	N/A / No Involvement	Federal Highway Administration	04/04/2012
Social	2	Minimal	US Environmental Protection Agency	04/05/2012
Social	3	Moderate	Federal Highway Administration	04/04/2012

Social	N/A N/A / No Involvement	FL Department of Economic Opportunity	02/21/2012
Secondary and Cumulative			
Secondary and Cumulative Effects	4 Substantial	Southwest Florida Water Management District	04/03/2012

ETAT Reviews and Coordinator Summary: Natural Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/04/2012 by FDOT District 7

Comments:

USEPA DOE: Minimal
 FDOT Recommended DOE: Minimal

The Florida Department of Transportation (FDOT) has evaluated comments from the US Environmental Protection Agency (USEPA) and recommends a Degree of Effect of Minimal.

The USEPA stated that Hillsborough and Pinellas Counties, in the areas surrounding the Howard Frankland Bridge, have not been designated non-attainment or maintenance for ozone, carbon monoxide (CO) or particulate matter (PM) in accordance with the Clean Air Act. There are no violations of the National Ambient Air Quality Standards (NAAQS); nevertheless, it was recommended that the PD&E study include air impact analyses which documents the current pollutant concentrations recorded at the nearest air quality monitors, an evaluation of anticipated emissions, and air quality trend analyses. As population growth and vehicle volumes increase, there is the potential to have air quality conformity and non-attainment issues in the future.

The project involves the replacement of the northbound Howard Frankland Bridge with no vehicular capacity improvements along I-275. No impacts to air quality should occur as a result of the project.

The FDOT will prepare an air quality screening for this project.

No comments were received from the Federal Highway Administration (FHWA).

Degree of Effect: 2 *Minimal* assigned 04/05/2012 by Madolyn Dominy, US Environmental Protection Agency

Coordination Document: No Selection

Direct Effects

Identified Resources and Level of Importance:

Resources: Air Quality

Level of Importance: Low, due to minimal degree of effect. A minimal degree of effect is being assigned to the air quality issue for the proposed roadway project (ETDM #12539, Howard Frankland Bridge).

Comments on Effects to Resources:

Hillsborough and Pinellas Counties, in the area surrounding the Howard Frankland Bridge, have not been designated non-attainment or maintenance for ozone, carbon monoxide (CO) or particulate matter (PM) in accordance with the Clean Air Act. There are no violations of these National Ambient Air Quality Standards (NAAQS). Nevertheless, it is recommended that the environmental review phase of this project include air impact analyses which documents the current pollutant concentrations recorded at the nearest air quality monitors, an evaluation of anticipated emissions, and air quality trend analyses. Air quality modeling using an approved software program should be conducted to determine whether any conformity issues or violations of air quality standards are anticipated within the project area and/or counties. Current and proposed air quality requirements and standards should be used in modeling software programs.

Additional Comments (optional):

As population growth and vehicle volumes increase, there is the potential to have air quality conformity and non-attainment issues in the future. FDOT, MPOs, municipalities, and regional planning agencies should conduct air quality modeling as traffic forecasts increase.

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Air Quality issue for this alternative: Federal Highway Administration

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 4 *Substantial* assigned 06/04/2012 by FDOT District 7

Comments:

SWFWMD DOE: Minimal
 NMFS DOE: Substantial
 FDOT Recommended DOE: Substantial

The Florida Department of Transportation (FDOT) has evaluated comments from the Southwest Florida Water Management District (SWFWMD) and National Marine Fisheries Service (NMFS) and recommends a Degree of Effect of Substantial. The geographic information system (GIS) data from the Environmental Screening Tool (EST) indicates that the Pinellas County Aquatic Preserve and Old Tampa Bay are located within the 100-foot buffer. GIS data indicates there are 0.4 acre of continuous seagrass within the 100-foot buffer and 32.6 acres of continuous and 7.8 acres of discontinuous seagrass within the 200-foot buffer; however, no mangroves were identified within the 500-foot buffer distance.

The SWFWMD identified that the project occupies watersheds that are included in the Tampa Bay Estuary system, which is designated as an Outstanding Florida Water and Aquatic Preserve within Pinellas County. The SWFWMD stated that there are seagrass beds within Old Tampa Bay along the causeways associated with the east and west boundaries of the bridge. These seagrass beds are particularly vulnerable to increased turbidity and sedimentation. The project has the potential to generate increased sedimentation that may degrade water quality and damage seagrass beds within Old Tampa Bay. Wetland impacts to seagrasses will be assessed during the permitting of the project. Routine interaction with SWFWMD staff is recommended during permitting.

The NMFS staff conducted a site inspection of the project area on February 24, 2012, to assess potential concerns to living marine resources within Old Tampa Bay and concluded that the project could directly impact NMFS trust resources. NMFS staff identified that the project could impact seagrasses and/or mangroves. It is recommended that FDOT staff conduct a seagrass/benthic resource survey during the prime growing season (June-August). Mangroves do occur along the shorelines of the bridge's causeways. Certain estuarine habitats within the project area are designated as essential fish habitat (EFH) as identified in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico. Seagrasses have been identified as EFH for juvenile and subadult penaeid shrimp, juvenile and adult stone crab, postlarval, juvenile, and subadult and adult red drum, juvenile and adult schoolmaster and mutton snapper, and juvenile gag, goliath grouper, red grouper, black grouper, yellowfin grouper, Nassau grouper, lane snapper, dog snapper, yellowtail snapper, cubera snapper, and hogfish. Mangroves have been identified as EFH for postlarval/juvenile, subadult, and adult red drum and gray snapper, juvenile schoolmaster, cubera snapper, mutton snapper, lane snapper, yellowtail snapper, dog snapper, and goliath grouper by the Gulf of Mexico Fishery Management Council under provisions of the Magnuson-Stevens Act.

The NMFS requested that an EFH Assessment be prepared for this project. The EFH assessment shall include a description of the proposed action, an analysis of the effects (including cumulative effects) of the proposed action on EFH, the Federal agency's views regarding the effects of the action on EFH, and proposed mitigation (if applicable). Upon review of the EFH Assessment, the NMFS will determine if it is necessary to provide EFH Conservation Recommendations for the project. The NMFS recommends that an Endangered Species Action section 7 consultation be conducted for Gulf sturgeon, smalltooth sawfish, and swimming sea turtles even though the project does not lie within designated critical habitat of these species.

There are sensitive marine and estuarine resources located near the project corridor. Avoidance and minimize efforts will be implemented during design. The FDOT will commit to using proper best management practices (BMPs) during construction to avoid or minimize any direct or secondary impacts to coastal and marine resources.

The FDOT will prepare a Wetland Evaluation and Biological Assessment Report (WEBAR) during the PD&E study. This report will assess potential species, existing habitat, and potential essential fish habitat (EFH) within the project area. This report and the FDOT's findings will be coordinated with the US Fish and Wildlife Service (USFWS) and NMFS.

No comments were received from the Federal Highway Administration (FHWA).

Degree of Effect: 2 *Minimal* assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

Howard Frankland Bridge extends across Old Tampa Bay from Big Island Gap to the Westshore region. The area below the bridge is tidally influenced and is part of the Tampa Bay Estuary system, which is part of an Outstanding Florida Waterway and an Aquatic Preserve beginning at the Pinellas County line. It is also part of the Tampa Bay Watershed. Beds of seagrasses are present in Old Tampa Bay along the causeways associated with the east and west boundaries of the bridge. These seagrass beds are particularly vulnerable to increased turbidity and sedimentation.

Several environmental groups have an invested interest in the ongoing protection of the resources associated with Old Tampa Bay, such as the Tampa Bay Estuary Program (TBEP). TBEP, in conjunction with the SWFWMD Surface Water Improvement and Management (SWIM) program, has invested time and monies into restoration, preservation and enhancement efforts around Old Tampa Bay. Many of their ongoing efforts are located near the Howard Frankland Bridge.

Comments on Effects to Resources:

The project has the potential to generate increased sedimentation that may degrade water quality and damage seagrasses beds within Old Tampa Bay.

Wetland / bottom land impacts are anticipated with the replacement of the northbound section of the Howard Frankland Bridge. While there may be direct impacts to these resources, additional impacts may occur as they relate to the existing recreation, ecotourism, and environmental preservation efforts by governmental groups and private environmental groups. Coordination with these stakeholders, specifically the Tampa Bay Regional Planning Council, Tampa Bay Estuary Program, FFWCC, and the Army Corp, is required as part of the Coastal Zone Management plan.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. For this project, a DOE of "minimal" was assigned to this issue due to the routine nature for SWFWMDS involvement with this type of noticing. Wetland impacts to the seagrasses will be addressed

through permitting for the site during the review period. Future permitting should involve routine interaction with the SWFWMD's regulatory staff.

Choosing construction means and methods to minimize fugitive construction materials and pollutants discharge would be useful to minimize temporary and permanent impacts.

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 02/28/2012 by David A. Rydene, National Marine Fisheries Service

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Old Tampa Bay which contains estuarine habitats such as seagrass, mangrove, and salt marsh used by federally-managed fish species and their prey.

Comments on Effects to Resources:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool (EST) for ETDM Project # 12539. The Florida Department of Transportation (FDOT) District 7 is conducting a PD&E study to evaluate the replacement of the northbound I-275 (SR 93) Howard Frankland Bridge in Hillsborough County and Pinellas County, Florida. The existing bridge is a four-lane, pre-stressed concrete stringer/girder structure.

NMFS staff conducted a site inspection of the project area on February 24, 2012, to assess potential concerns regarding living marine resources within Old Tampa Bay. The areas adjacent to the proposed project are principally the bridge's causeway shorelines and estuarine waters. It appears that the project could impact submerged aquatic vegetation and/or mangroves. NMFS recommends that the FDOT conduct a seagrass/benthic resource survey during the prime seagrass growing season (June-August) to determine the presence/absence of seagrasses and other biogenic features and their distribution in the project area. Seagrass resource maps in FDOT's Environmental Screening Tool indicate that seagrass beds occur in shallow areas in the vicinity of the bridge. A GIS analysis run in the EST indicates that 76.7 acres of National Wetland Inventory estuarine wetlands occur within the project's 100 foot buffer. The seagrass database shows 0.44 acres of continuous seagrass within the 100 foot buffer, 32.6 acres of continuous and 7.8 acres of discontinuous seagrass within the 200 foot buffer, and 312.5 acres of continuous and 237.5 acres of discontinuous seagrass within the 500 foot buffer. However, the mangrove database indicated that no mangroves occurred within the 100, 200, or 500 foot buffers, which is incorrect based on the results of NMFS' site inspection. Mangroves do occur along the shorelines of the bridge's causeways.

Certain estuarine habitats within the project area are designated as EFH as identified in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico. The generic amendment was prepared by the Gulf of Mexico Fishery Management Council as required by the 1996 amendment to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Seagrasses have been identified as EFH for juvenile and subadult penaeid shrimp, juvenile and adult stone crab, postlarval, juvenile, subadult and adult red drum, juvenile and adult schoolmaster, dog snapper, gray snapper, and mutton snapper, and juvenile gag, goliath grouper, red grouper, black grouper, yellowfin grouper, Nassau grouper, lane snapper, yellowtail snapper, cubera snapper, and hogfish by the Gulf of Mexico Fishery Management Council under provisions of the Magnuson-Stevens Act. Mangroves have been identified as EFH for postlarval/juvenile, subadult and adult red drum, gray snapper, and cubera snapper, and juvenile schoolmaster, mutton snapper, dog snapper, lane snapper, yellowtail snapper, and goliath grouper.

Federal agencies which permit, fund, or undertake activities which may adversely impact EFH are required to consult with NMFS and, as a part of the consultation process, an EFH Assessment must be prepared to accompany the consultation request. Regulations require that EFH Assessments include:

1. a description of the proposed action;
2. an analysis of the effects (including cumulative effects) of the proposed action on EFH, the managed fish species, and major prey species;
3. the Federal agency's views regarding the effects of the action on EFH; and
4. proposed mitigation, if applicable.

Provisions of the EFH regulations [50 CFR 600.920(c)] allow consultation responsibility to be formally delegated from federal to state agencies, including FDOT. Whether EFH consultation is undertaken by the federal agency (e.g. Federal Highway Administration) or FDOT, it should be initiated as soon as specific project design and construction impact information are available. EFH consultation can be initiated independent of other project review tasks or can be incorporated in environmental planning documents. Upon review of the EFH Assessment, NMFS will determine if it is necessary to provide EFH Conservation Recommendations on the project.

NMFS recommends that an Endangered Species Act section 7 consultation be conducted for Gulf sturgeon, smalltooth sawfish and swimming sea turtles when sufficient project details become available. However, the project does not lie within the designated critical habitat of Gulf sturgeon, smalltooth sawfish or sea turtles.

The selection of the "Substantial" degree of effect is based on the uncertainty that presently exists with regard to potential seagrass and/or mangrove impacts and what final bridge design and alignment will be proposed.

Additional Comments (optional):

CLC Commitments and Recommendations:

The FDOT will coordinate with the USCG and other appropriate agencies during permitting and design. A USCG permit will be obtained as needed for the proposed northbound bridge replacement.

No comments were received from the US Coast Guard (USCG).

Degree of Effect: 3 *Moderate* assigned 04/04/2012 by Linda Anderson, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Old Tampa Bay, bridged by the Howard Franklin Bridge, is a navigable waterway.

Comments on Effects to Resources:

A US Coast Guard permit is required.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 04/04/2012 by Garrett Lips, US Army Corps of Engineers

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

The project is located within tidal waters accessible by commercial and recreational vessels.

Comments on Effects to Resources:

The Corps recommends avoiding any reduction in safe navigation within the project area during construction or in the operations and maintenance phases.

Additional Comments (optional):

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Navigation issue for this alternative: US Coast Guard

Special Designations

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 02/26/2013 by FDOT District 7

Comments:

USEPA DOE: Moderate

FDEP DOE: Moderate

FHWA DOE: Substantial

SWFWMD DOE: Substantial

FDOT Recommended DOE: Moderate

The Florida Department of Transportation (FDOT) has evaluated comments from the US Environmental Protection Agency (USEPA), Florida Department of Environmental Protection (FDEP), Federal Highway Administration (FHWA), and Southwest Florida Water Management District (SWFWMD) and recommends a Degree of Effect (DOE) of Moderate.

The FDOT discussed the project with SWFWMD on May 29, 2012 and sent an e-mail to FHWA on May 31, 2012. FHWA responded on June 7, 2012 that they believe that the DOE they assigned is appropriate, given that a major structure will be built on a new footprint and a major structure demolished within a designated Aquatic Preserve, an Outstanding Florida Water, and an Ecosystem Management Area. Even with the use of Best Practices to minimize impacts, adverse impacts will be substantial for this fragile ecosystem and will require substantial interaction during Project Development and permitting. SWFWMD indicated that this assignment was based on the consensus of upper level management. Since this is a high profile project SWFWMD had special meetings to discuss potential impacts and permitting and they received comments from their SWIM Department as well. They assigned a Substantial because of the high level of coordination that will occur for this project as defined in the DOE explanation below. Water quality and SSL are a big concern for them. SWFWMD did not want to lower their DOE, but understood that FDOT would assign Moderate for several of the issues based on the fact that the new bridge will be constructed on existing alignment and will be replaced in-kind although just a little wider to accommodate transit. Also, mitigation and requirements will be satisfied as part of the permitting process.

Other special designation resources associated with Floodplains, Recreation Areas, Contamination, and Farmlands are identified in their respective Degree of Effects.

A review of the Geographical Information Systems (GIS) analysis data indicates that the entire portion of the project within Pinellas County is located within the Pinellas County Aquatic Preserve, which is designated as an Outstanding Florida Water (OFW).

The USEPA stated that impacts to the Pinellas County Aquatic Preserve and other natural resources associated with the Aquatic

Preserve should be avoided or minimized to the extent practicable and should be evaluated during the PD&E.

The FDEP identified that Old Tampa Bay experiences fair water quality and is designated impaired for coliforms, nutrients and mercury in fish. The FDEP recommended that the FDOT maximize the treatment of stormwater runoff from the proposed bridge project since the bridge is located within Old Tampa Bay and the Pinellas County Aquatic Preserve, an OFW.

The FHWA assigned a DOE of substantial due to the unknown maintenance of traffic and location of the proposed bridge. If the bridge is not replaced within the footprint of the existing bridge, the impacts to the Aquatic Preserve and Ecosystem Management Area will be greater.

The SWFWMD stated that Tampa Bay is one of the Priority Waterbodies in the SWFWMD's Surface Water Improvement and Management (SWIM) program. The final receiving water body for the project area is Old Tampa Bay, which is designated as Impaired Waters. The north causeway lies within a Sensitive Karst Area. The SWFWMD identified that the construction of a new northbound bridge has the potential to require additional Proprietary Authorization from the State of Florida Board of Trustees since the areas adjacent to the existing right of way are Sovereign Submerged Lands (SSL). SSL authorizations in Hillsborough County will be coordinated with the Tampa Port Authority and SSL authorizations in Pinellas County will be coordinated with the District. The SWFWMD assigned a DOE of substantial due to discharges to the Pinellas County portion of Old Tampa Bay, an OFW and the additional effort to address SSL issues.

The FDOT will use proper best management practices (BMPs) during construction to minimize runoff into the Bay from construction activities and reduce potential turbidity within the waters of Old Tampa Bay. The project will be permitted to meet SWFWMD water quality standards pursuant to state rules and statutes and the Environmental Resource Permit (ERP) Basis of Review (BOR). SSL authorizations will be addressed during permitting with SWFWMD.

No comments were received from the Florida Department of Agriculture and Consumer Services (DACS).

Degree of Effect: 3 *Moderate* assigned 04/05/2012 by Madolyn Dominy, US Environmental Protection Agency

Coordination Document: No Selection

Direct Effects

Identified Resources and Level of Importance:

Resources: Aquatic Preserves, Outstanding Florida Waters, Special Flood Hazard Areas

Level of Importance: The resources listed above (identified as special designations) are of a high level of importance in the State of Florida. EPA is assigning a moderate degree of effect to this issue for the proposed project (ETDM #12539, Howard Frankland Bridge).

Comments on Effects to Resources:

A review of GIS analysis data at the programming screen phase of the project indicates that the following features identified as Special Designations are located within proximity of the project:

Special Flood Hazard Areas - See Comments under Floodplains issue regarding potential floodplain impacts.

Aquatic Preserves - Pinellas County Aquatic Preserve

The Pinellas County Aquatic Preserve was established on March 21, 1972 and was designated as an Outstanding Florida Water on March 1, 1979. The Pinellas County Aquatic Preserve and the Boca Ciega Bay Aquatic Preserve are located on the Gulf coast of west central Florida, and include the state-owned submerged land in Pinellas County waters. The preserves encompass 136,082 hectares (336,265 acres) of stateowned submerged land. The surrounding area is one of the most urbanized areas in Florida, and as such has special management needs. The preserves include nearshore habitats along sandy beaches and mangrove dominated shorelines. Submerged habitats include oyster bars, seagrass beds, coral communities, and springfed caves. Abundant islands, including those formed from dredge spoil material, are also part of the preserve. Approximately 1/3 of Florida's coral species can be found in the Pinellas County Aquatic Preserve.

Outstanding Florida Waters - Pinellas County Aquatic Preserve

The Pinellas County Aquatic Preserve is listed as an Outstanding Florida Waters (OFWs). OFWs are provided the highest level of protection under the Florida Administrative Code (F.A.C.). Degradation of water quality in an OFW is prohibited except under certain circumstances. Pollutant discharges must not lower existing ambient water quality. Any activity within an OFW requiring a Florida Department of Environmental Protection (FDEP) Environmental Resource Permit (ERP) must be deemed to be clearly in the public interest. Additional stormwater retention and treatment requirements may be required. FDOT will need to coordinate and consult with FDEP regarding specific permitting requirements relating to this OFW.

Impact to these natural resources should be avoided or minimized to the greatest extent practicable. All potential impacts to these resources should be evaluated in the PD&E phase of the project and documented in environmental documents.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 04/04/2012 by Linda Anderson, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Old Tampa Bay, within the 100' buffer of the project alignment, is a Pinellas County Aquatic Preserve and an Outstanding Florida Water, as well as an Ecosystem Management Area.

Comments on Effects to Resources:

The degree of effect to these resources is unknown because the project description/purpose and need do not state how traffic will be managed during construction or whether the replacement bridge will be built in the same footprint as the existing bridge. If a temporary bridge is required, or the replacement bridge is not built within the footprint of the existing northbound bridge, the impacts to the Preserve and the Ecosystem Management Area will be greater. Consequently, I am assigning a DOE of substantial.

Additional Comments (optional):**CLC Commitments and Recommendations:**

Degree of Effect: 4 *Substantial* assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Direct Effects**Identified Resources and Level of Importance:**

The southern portion of this project is wholly within the Pinellas County Aquatic Preserve, an area that encompasses the sovereign submerged lands in Pinellas County. Waters within this Preserve are designated as Outstanding Florida Waters.

The entire project is located within the Tampa Bay Watershed of the SWFWMD's Surface Water Improvement and Management (SWIM) Program. The SWFWMD is a cooperator with the Tampa Bay Estuary Program. Specific SWIM projects are discussed in the "Water Quality and Quantity" section of the Environmental Screening Tool (EST).

The final receiving water body for the project area is Old Tampa Bay (WBIDs #1558G and #1558H) which is designated as Impaired Waters.

From the SWFWMD's Graphical Information System (GIS), the north causeway lies within a Sensitive Karst Area (KSA).

While a Sovereign Submerged Lands (SSL) title determination was not requested from the Florida Department of Environmental Protection (FDEP) at this time, research was conducted on the State of Florida- Division of State Lands website (<http://tldslweb.dep.state.fl.us/florida/flpro/viewer.htm>), results included a Quitclaim Deed [0107428] from June 4, 1958 for a "...right of way for highway purposes over, through, and across Old Tampa Bay and the submerged lands adjacent thereto, located in Townships 29 & 30 south, Range 17 east...". The Quitclaim deed specified the ROW as "being 800 feet wide, lying 400 feet each side of, parallel and adjacent to a centerline..." The construction of a new bridge has the potential to extend beyond the established limits set by this Quitclaim Deed and may require additional Proprietary Authorization from the State of Florida Board of Trustees.

Comments on Effects to Resources:

The proposed bridge replacement project has the potential to result in water quality impacts to Outstanding Florida Waters, and to delay the recovery of Impaired Waters as a result of undertreated or untreated stormwater runoff during and after construction.

The construction of a new bridge has the potential to extend beyond the established limits set by this Quitclaim Deed and may require additional Proprietary Authorization from the State of Florida Board of Trustees. If the bottom lands are determined to be titled to the State of Florida a Sovereign Submerged Land (SSL) Authorization from the Board of Trustees (BOT) will need to be obtained or the existing authorization will need to be modified to account for the changes in the Howard Frankland Bridge. SSL Proprietary Authorizations for work performed in Hillsborough County will be obtained through the Tampa Port Authority (http://www.tampaport.com/content/download/367/2300/file/TPA_PERMIT_APPLICATION.pdf). SSL Proprietary Authorizations for work performed in Pinellas County will be orchestrated through the District. In addition to the SSL Proprietary Authorization for the replacement bridge, Public Interest Criteria will need to be assessed.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. For this project, a DOE of "Substantial" was assigned to this issue due to discharges to the Pinellas County portion of Old Tampa Bay (an Outstanding Florida Water - OFW) and the additional effort to address Sovereign Submerged Land (SSL) issues. ERP permitting is expected to be more difficult, and will require close coordination and considerable effort on the part of the SWFWMD's permitting staff.

In those portions of the project that directly discharge into OFWs, additional water quality treatment will be required. Proposed wetland impacts associated with the OFW designation will also be of concern to the SWFWMD.

SSL Authorization may need to be addressed if the submerged lands are determined to be owned by the State. Changes to existing easements or leases have the potential to take a considerable amount of time, along with the evaluation of Public Interest Criteria.

The north causeway is located within or near karst topography. If applicable, it is recommended that the stormwater facilities be designed as shallow as practical and that geotechnical evaluations of specific pond sites be conducted to determine the potential for sinkhole development. A Drainage or Pond Siting Report, incorporating area-specific geotechnical information on the basin, is recommended. Direct discharges to active sinkholes (if applicable) are strongly discouraged due to the potential for groundwater contamination.

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 04/02/2012 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The project area is located within the estuarine resources of the Old Tampa Bay system. Presently, the bay experiences fair water quality and is designated impaired for coliforms, nutrients and mercury in fish. Additionally, the Pinellas County Aquatic Preserve and Outstanding Florida Waters (OFW) occurs within the 500-ft. buffer of the project.

Comments on Effects to Resources:

Every effort should be made to maximize the treatment of stormwater runoff from the proposed bridge project since the project is located within Old Tampa Bay and the Pinellas County Aquatic Preserve, OFW. Because of these designations, the affected waters are afforded a high level of protection under sections 62-4.242(2) and 62-302.700, F.A.C. Site plans should include details on the proposed stormwater treatment system, which must be designed to prevent or mitigate water quality degradation of the receiving waters in Old Tampa Bay. The applicant may be required to demonstrate that the proposed stormwater system meets the design and performance criteria established for the treatment and attenuation of discharges to OFWs, pursuant to Rule 40D-4, F.A.C., and the Southwest Florida Water Management District's Basis of Review for ERP Applications.

Additional Comments (optional):

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Special Designations issue for this alternative: FL Department of Agriculture and Consumer Services

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 02/26/2013 by FDOT District 7

Comments:

FDEP DOE: Moderate

SWFWMD DOE: Substantial

FDOT Recommended DOE: Moderate

The Florida Department of Transportation (FDOT) has evaluated comments from the Florida Department of Environmental Protection (FDEP) and the Southwest Florida Water Management District (SWFWMD) and recommends a Degree of Effect of Moderate.

The FDOT discussed the project with SWFWMD on May 29, 2012. SWFWMD indicated that this assignment was based on the consensus of upper level management. Since this is a high profile project SWFWMD had special meetings to discuss potential impacts and permitting and they received comments from their SWIM Department as well. They assigned a Substantial because of the high level of coordination that will occur for this project as defined in the DOE explanation below. Water quality and SSL are a big concern for them. SWFWMD did not want to lower their DOE, but understood that FDOT would assign Moderate for several of the issues based on the fact that the new bridge will be constructed on existing alignment and will be replaced in-kind although just a little wider to accommodate transit. Also, mitigation and requirements will be satisfied as part of the permitting process.

A review of the Geographical Information Systems (GIS) analysis data indicates that the project is located within portions of the Pinellas County Aquatic Preserve which is an Outstanding Florida Water (OFW). The current list of 303(d) Verified List of Impaired Waters states that surrounding waters are listed for nutrients, fecal coliforms/bacteria, and mercury in fish.

The FDEP stated that every effort should be made to maximize the treatment of stormwater runoff from the proposed bridge since the project is located within Old Tampa Bay and the Pinellas County Aquatic Preserve, an OFW. Site plans should include details on the proposed stormwater treatment systems, which must be designed to prevent or mitigate water quality degradation of the receiving waters in Old Tampa Bay.

The SWFWMD indicated that the bridge replacement project has the potential to result in water quality impacts to OFWs and to delay recovery of Impaired Waters as a result of untreated or undertreated stormwater runoff during and after construction. The SWFWMD assigned the DOE of substantial due to the project's discharges to the Pinellas County portion of Old Tampa Bay and Nutrient Impaired Waters within Old Tampa Bay. Tampa Bay is designated as a Category 4b waterbody (impaired, but no TMDL required) rather than a Category 5 (impaired, needing a TMDL), based on the Integrated Reporting Classification of waterbodies. Based on the determination that Tampa Bay does not currently meet water quality standards, net improvement is required. It was indicated that permitting will require close coordination with SWFWMD's permitting staff. SWFWMD will require that stormwater management systems that discharge directly into OFWs provide treatment for a volume 50 percent more than required for this project's selected treatment systems. There are no anticipated stormwater quantity concerns since this project is located completely within Old Tampa Bay. The SWFWMD has assigned a pre-application file (PA# 398957) for the purpose of tracking its participation in the ETDM review of this project and is maintained in the Tampa Service Office.

The FDOT will create a stormwater pollution prevention plan (SWPPP) and erosion and sediment control plan during the design phase of this project. Proper best management practices (BMPs) will be used during construction. The project should result in minimal adverse impacts to Old Tampa Bay since the project is a bridge replacement and no capacity improvements are proposed at this time. The runoff from this proposed project should be similar to that of the existing bridge. The FDOT will coordinate with SWFWMD for water quality and will adhere to state water quality standards during permitting of the proposed bridge replacement. The FDOT will prepare a Pond Siting Report and updated Bridge Hydraulics reports for this project.

No comments were received from the Federal Highway Administration (FHWA) or the US Environmental Protection Agency (USEPA).

Degree of Effect: 4 *Substantial* assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

As noted previously in the "Special Designations" section of the EST, the southern portion of the Howard Frankland Bridge is wholly within the Pinellas County Aquatic Preserve, which is designated as Outstanding Florida Water.

During March, 2012, the following information was obtained from the FDEP regarding Verified Impaired Waters along this project's alignment:

1. Old Tampa Bay, Assessment Category 5, (WBID 1558G) - Verified impairments (as of 05/14/09) include Bacteria (in shellfish) and Mercury (in fish tissue). A TMDL was not available. However, the FDEP is working on a Reasonable Assurance Plan with the Tampa Bay Estuary Program and the Tampa Bay Nitrogen Consortium. Additional information can be found on FDEP's Basin Management Action Plan (BMAP) web site at:

<http://www.dep.state.fl.us/water/watersheds/bmap.htm>

2. Old Tampa Bay, Assessment Category 5, (WBID 1558H) - Verified impairments (as of 05/14/09) include Bacteria (in shellfish), Fecal Coliform and Mercury (in fish tissue). WBID 1558H (Old Tampa Bay) is also on the Verified List for Nutrients (Chlorophyll-a) with an Assessment Category of 4b. A TMDL was not available. However, the FDEP is working on a Reasonable Assurance Plan with the Tampa Bay Estuary Program and the Tampa Bay Nitrogen Consortium. Additional information can be found on FDEP's Basin Management Action Plan (BMAP) web site at:

<http://www.dep.state.fl.us/water/watersheds/bmap.htm>

The above impaired waters information was obtained from the "Permits" tab of the FDEP's TMDL Tracker, accessible at:

<http://webapps.dep.state.fl.us/DearTmdl/dashboardAction.do?method=dashboard#>

As this bridge replacement project is totally within Old Tampa Bay, there are no anticipated stormwater quantity concerns.

Comments on Effects to Resources:

This bridge replacement project has a potential to result in water quality impacts to Outstanding Florida Waters, and to delay the recovery of Impaired Waters as a result of untreated or undertreated stormwater runoff during and after construction.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. For this project, a DOE of "Substantial" was assigned to this issue due to this project's discharges to the Pinellas County portion of Old Tampa Bay (an Outstanding Florida Water - OFW) and to Nutrient Impaired Waters within Old Tampa Bay. ERP permitting is expected to be more difficult, and will require close coordination and considerable effort on the part of the SWFWMD's permitting staff.

According to FDEP, some of Tampa Bay does not meet the State's dissolved oxygen standards or chlorophyll concentration guidelines with nutrients being the cause. Because the Tampa Bay Estuary Program (TBEP) has pursued the Reasonable Assurance approach, Tampa Bay is designated as a Category 4b waterbody (impaired, but no TMDL required) rather than a Category 5 (impaired, needing a TMDL), based on the Integrated Reporting Classification of water bodies. Based on FDEP's determination that Tampa Bay does not currently meet water quality standards, net improvement is required.

The SWFWMD will require that stormwater management systems that discharge directly into Outstanding Florida Waters (OFWs) provide treatment for a volume 50 percent more than required for this project's selected treatment systems (Reference: Section 5.2.e of the District's Basis of Review, available at <http://www.swfwmd.state.fl.us/permits/rules/>). Of particular interest will be the proposed sediment & erosion control plans for the entire project (refer to Section 2.8.3 of the District's Basis of Review). If applicable, reductions in pollutant loading from stormwater runoff via stormwater treatment facilities or other BMPs will be required to implement future TMDLs and BMAPs should they be finalized and adopted.

If equivalent stormwater quality treatment is to be considered, the FDOT must reasonably demonstrate the following:

- The alternate, contributing areas are hydrologically equivalent to the new and existing, directly-connected impervious watershed areas that would otherwise contribute to the treatment system;
- The pollution source and loading characteristics are reasonably equivalent, and
- The treatment benefits occur in the same receiving waters and in the same general locality as the existing point(s) of discharge from the new project area.

As part of the Tampa Bay Watershed, the SWFWMD has several stormwater and habitat projects within Old Tampa Bay. FDOT should coordinate with the District's Surface Water Improvement and Management (SWIM) department in Tampa regarding the appropriate details & data availability. District SWIM projects that may be helpful in the PD&E and final design phases of the Howard Frankland Bridge project include the following:

1. W240 - Old Tampa Bay Watershed Improvements (project complete), SWFWMD contact - Dr. Xinjian Chen
2. W270 - Estimating Pollutant Loads from Pinellas County Impaired Waters (project complete), SWFWMD contact - Mr. Chris Zajac
3. W392 - Tampa Shoreline Restoration (project complete), SWFWMD contact - B.J. Grant
4. Howard Frankland East - Habitat Restoration (complete in 1994), SWFWMD contact - Dr. Brant Henningsen
5. W317 - Old Tampa Bay / Safety Harbor Restoration (project complete), SWFWMD contact - Ms. Lizanne Garcia
6. W200 - Old Tampa Bay Water Quality and Habitat Assessment and Old Tampa Bay Integrated Model, (project ongoing), SWFWMD Contact - Lizanne Garcia, Tampa Bay Estuary Program Contact - Ed Sherwood. This project proposes to develop an integrated set of watershed, hydrodynamic and water quality models to evaluate management actions to improve water quality and seagrass coverage in Old Tampa Bay. The management actions include evaluating additions of culverts or expanding bridge extensions on the Courtney Campbell Causeway, the Gandy and the Howard Frankland bridges.

Specific studies that contain useful water quality and hydrologic information have been done by FDEP, the SWFWMD and the USGS. These reports can be accessed through the District's Library at <http://www15.swfwmd.state.fl.us/dbtw-wpd/mywebqbe/librarybasic.htm>. Type in the water body of interest, click on "Submit query" then click on the pull-down menu in the upper left and select "Record Display - Web." As of March, 2012, seven (7) reports were available dealing with Old Tampa Bay.

Information on Environmental Resource Permits (ERPs), Storm Water Permits, Dredge & Fill Permits and Works of the District Permits is now available in the EST under Water Quality & Quantity > Permits. Useful (but limited) information includes the permit number, a short description of the project, name of the permittee, project acreage and an approximate location of the project (shown graphically).

As of March, 2012, the EST indicated six (6) permits have been issued within 500 feet of the existing Howard Frankland Bridge / roadway alignment. Previous roadway / drainage improvement permits that may be of interest to FDOT in the future PD&E and design phases are as follows:

1034.000 - DOT-I-275/4TH ST.TO KENNEDY BLVD., FDOT, D7
1034.001 - DOT-HOWARD FRANKLIN BRIDGE., FDOT, D7

As applicable, water quantity concerns must be addressed for the project in accordance with Chapter 4 of the District's Basis of Review. This includes making provisions to allow runoff from up-gradient areas to be conveyed to down-gradient areas without adversely affecting the stage point or manner of discharge and without degrading water quality (refer to Section 4.8 of the District's Basis of Review, available at <http://www.swfwmd.state.fl.us/permits/rules/>).

As applicable, the District's Basis of Review document describes design approaches and criteria that will provide reasonable assurances that the proposed surface water management systems will meet the conditions for issuance of an Environmental Resource Permit (ERP). Parameters frequently over or under estimated include: seasonal high water levels, seasonal high groundwater table elevations, soil vertical & horizontal hydraulic conductivity, depth to the soil confining units, historic basin storage, floodplain storage, conveyance way hydraulic capacity, peak discharge rates and timing, tailwater conditions in the receiving system, total discharged volume, and off-site hydrograph timing impacts. Site-specific design data is preferable to "book values."

As applicable, the District recommends that the FDOT consider providing a pond siting report that addresses the above referenced design approaches and criteria. For those improvements that may affect existing bridge and cross drainage facilities, updated bridge hydraulics reports should be prepared and submitted with the ERP application.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

For ETDM #12539 - Howard Frankland Bridge, the District has assigned a pre-application file (PA# 398957) for the purpose of tracking its participation in the ETDM review of this project. File PA# 398957 is maintained at the Tampa Service Office of the SWFWMD. Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 04/02/2012 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The project area is located within the estuarine resources of the Old Tampa Bay system. Presently, the bay experiences fair water quality and is designated impaired for coliforms, nutrients and mercury in fish. Additionally, the Pinellas County Aquatic Preserve and Outstanding Florida Waters (OFW) occurs within the 500-ft. buffer of the project.

Comments on Effects to Resources:

Every effort should be made to maximize the treatment of stormwater runoff from the proposed bridge project since the project is located within Old Tampa Bay and the Pinellas County Aquatic Preserve, OFW. Because of these designations, the affected waters are afforded a high level of protection under sections 62-4.242(2) and 62-302.700, F.A.C. Site plans should include details on the proposed stormwater treatment system, which must be designed to prevent or mitigate water quality degradation of the receiving waters in Old Tampa Bay. The applicant may be required to demonstrate that the proposed stormwater system meets the design and performance criteria established for the treatment and attenuation of discharges to OFWs, pursuant to Rule 40D-4, F.A.C., and the Southwest Florida Water Management District's Basis of Review for ERP Applications.

Additional Comments (optional):

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Water Quality and Quantity issue for this alternative: Federal Highway Administration, US Environmental Protection Agency

Wetlands

Project Effects

Coordinator Summary Degree of Effect: 4 *Substantial* assigned 06/04/2012 by FDOT District 7

Comments:

USFWS DOE: Moderate
USEPA DOE: Substantial
USACE DOE: Substantial
SWFWMD DOE: Substantial
FDEP DOE: Substantial
NMFS DOE: Substantial
FDOT Recommended DOE: Substantial

The Florida Department of Transportation (FDOT) has evaluated comments from the US Fish and Wildlife Service (USFWS), the US Environmental Protection Agency (USEPA), the US Army Corps of Engineers (USACE), the Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (FDEP), and the National Marine Fisheries Service (NMFS) and recommends a Degree of Effect of Substantial.

Geographical Information Systems (GIS) data from the Environmental Screening Tool (EST) indicates that there are approximately 77, 174 and 542 acres of estuarine wetlands within the 100-, 200-, and 500-foot buffer distances. GIS data for seagrasses is identified in the Coastal and Marine DOE. GIS data indicates there are 0.4 acre of continuous seagrass within the 100-foot buffer distance and 32.6 acres of continuous and 7.8 acres of discontinuous seagrass within the 200-foot buffer distance.

The USFWS indicated mangroves and other coastal vegetation provide important nursery areas for many species of fish and wildlife. Best Management Practices (BMPs) should be followed during construction to reduce sedimentation and turbidity. As per Section 404 of the Clean Water Act, FDOT must show that steps were taken to avoid wetland impacts, to minimize potential impacts on wetlands and to provide compensation for any remaining unavoidable impacts.

The USEPA identified that there are between approximately 77 and 542 acres of estuarine wetlands within the 100- and 500-foot buffer distances. There are also seagrass beds identified along the corridor within the 500-foot buffer distance. Seagrass impacts may also occur during the replacement of the bridge and as a result of shading from the bridge. These wetland systems provide essential fish habitat and help with water quality. The PD&E study should focus on identifying wetland areas and seagrass beds that have the potential to be impacted by the project. The PD&E study should also include delineation and functional analysis of wetlands within the corridor.

The USACE noted the project is located within an important estuarine system with tidal flats, seagrass and other estuarine habitats. The PD&E study should include a review of construction activities that will be required, including barge routes, barge staging areas, potential demolition methods, quantity of permanent and temporary fill or dredging required to construct the proposed bridge, and to evaluate the need to construct temporary access structures, such as trestles. If unavoidable impacts to wetlands occur, the USACE prefers utilizing a federally approved mitigation bank to offset impacts.

The SWFWMD identified the Howard Frankland Bridge as being located above tidally-influenced, open water associated with Old Tampa Bay. The average depth of water below the bridge is 12 feet deep with the deepest channel located near the center of the bridge with a range of 13 to 18 feet deep (reference - NOAA Nautical Chart 11416). Seagrasses are located in close proximity to the north and south causeways at the ends of the bridge. According to data collected, it appears the most concentrated areas of seagrasses are directly adjacent to the causeways with seagrasses transitioning into tidal flats as they head further waterward of the bridge and causeways. The Tampa Bay Estuary Program estimates Old Tampa Bay saw an 11 percent increase in seagrass coverage in the last 2 years. Vegetation along the causeways consists of mangroves, seagrasses, buttonwood, shoreline seapurslane, and seaside oxeeye. In 2009, the FDOT was issued a permit for the construction of rock groins on the south side of the causeway in Hillsborough County to help stabilize the shoreline. A submerged aquatic vegetation (SAV) survey shall be conducted between April and November as part of the permit process. The SAV survey should be no older than 2 years. Seagrass and wetland impacts should be assessed using the Uniform Mitigation Assessment Method (UMAM). Coordination may need to be conducted with the Tampa Bay Estuary Program and the SWFWMD's Surface Water Improvement and Management (SWIM) section. The SWFWMD has assigned a pre-application file (PA# 398957) for the purpose of tracking its participation in the ETDM review of this project and is maintained in the Tampa Service Office.

The FDEP indicated that seagrass species are commonly dominated by turtle grass, Cuban shoalgrass and manatee grass. These seagrass species are susceptible to damage from increased turbidity, sedimentation and shading. Avoidance and minimization of wetlands and aquatic resources should be evaluated. Once avoidance and minimization efforts have been exhausted, mitigation shall be proposed to offset the adverse impacts of the project to the existing wetland functions and values.

NMFS recommendations can be found in the Coastal and Marine DOE.

The FDOT will prepare a Wetlands Evaluation and Biological Assessment Report (WEBAR) as part of the PD&E study. The WEBAR will assess locations and function of existing wetlands and seagrass within the project limits. This report and the FDOT's findings will be coordinated with the USFWS, NMFS, and FFWCC. Permitting will be conducted with the appropriate regulatory agencies during design and prior to construction. The FDOT will take measures to minimize and/or avoid impacts to wetlands.

No comments were received from the Federal Highway Administration (FHWA).

Degree of Effect: 4 *Substantial* assigned 04/05/2012 by Madolyn Dominy, US Environmental Protection Agency

Coordination Document: No Selection

Direct Effects**Identified Resources and Level of Importance:**

Resources: Wetlands, Wetlands Habitat, Water Quality, Seagrass Beds

Level of Importance: The resources listed above are of a high level of importance in the State of Florida. EPA is assigning a

substantial degree of effect to this issue for the proposed project (ETDM #12539, Howard Frankland Bridge).

Comments on Effects to Resources:

A review of the GIS analysis data for the proposed project indicates that there are between approximately 77 and 542 acres of estuarine wetlands with the 100- to 500-foot buffer distances. In addition, there are seagrass beds (continuous and discontinuous) of up to 54 acres within the 500-foot buffer distance of the project. These estuarine wetlands and seagrasses serve many critical functions, including providing for essential fish habitat and water quality protection. Direct impacts to wetlands may occur during the replacement and construction of the bridge replacement. Potential impacts include, but are not limited to, loss of wetlands function, loss of wildlife habitat, degradation of water quality in wetlands, degradation of water quality in surface waters, and reduction in flood storage and capacity. Seagrass impacts may also occur during the replacement of the bridge and as a result of shading from the bridge.

There may also be indirect and cumulative impacts resulting from operation and maintenance of the structure, stormwater runoff from the bridge, vessel traffic in Old Tampa Bay, and additional development surrounding the bridge area.

One issue of concern is stormwater runoff and the increase of pollutants into surface waters and wetlands as a result of the project and other point and nonpoint sources. Every effort should be made to maximize the collection and treatment of stormwater. Stormwater collection and treatment mechanisms should be designed to protect the function of surrounding wetlands, floodplains, and surface water features. Engineering design features and hydrological drainage structures should be such that stormwater transport, flow, and discharge meet or exceed requirements.

The PD&E study should focus on identifying wetlands areas and seagrass beds to be potentially impacted by the project. The PD&E study should include a delineation of wetlands; functional analysis of wetlands to determine their value and function; an evaluation of stormwater treatment areas (if applicable) to determine their impact on wetlands; avoidance and minimization strategies for wetlands; and mitigation plans to compensate for adverse impacts. An evaluation and survey of seagrasses and the potential impacts to these resources within the project area should be conducted.

Indirect and cumulative effects on wetlands and seagrasses should be evaluated to identify and quantify incremental and cumulative impacts on these natural resources as a result of past, present, and reasonably foreseeable actions, including the proposed project and other land use actions.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 04/04/2012 by Garrett Lips, US Army Corps of Engineers

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

The project is located in an important estuarine system with tidal flats, seagrass and other vegetated estuarine habitats within the project area. The project is also located adjacent to Important manatee areas located near the power plant on the western side of the project, and along the eastern side.

Comments on Effects to Resources:

The study should include a thorough review of what construction activities will be required, such as barge routes, barge staging areas, potential demolition methods, quantity of both permanent or temporary fill or dredging required to construct the bridge. Also, be sure to evaluate the need to construct temporary access structures, such as trestles. A seagrass survey performed during the growing season should be undertaken to ensure an accurate accounting of potential seagrass resources within the affected area. Please also include a summary of the existing and proposed utility lines within the project area. If the bridge material is being considered to be placed in an artificial reef site, please ensure the material meets the standards. A thorough understanding of which artificial reef may be utilized should include the authorization (permit #) from the Department of the Army. If no federally approved sites are available then additional coordination and planning may be required. If impacts to seagrass or other high value resources are anticipated, the corps recommends every practicable effort to avoid or minimize the adverse impacts. If unavoidable impacts are anticipated, the corps prefers utilizing a federally approved mitigation bank.

Additional Comments (optional):

The USCG authorizes bridge structures under Section 9 of the Rivers and Harbors Act of 1899, and the remaining (if any) fill/dredge activities would be evaluated by the Corps for compliance with Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899.

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The Howard Frankland Bridge is located above tidally influenced, open water associated with Old Tampa Bay. The average depth of the water below the bridge is 12 feet deep with the deepest channel located near the center of the bridge with a range of 13 feet to 18 feet deep (reference - NOAA Nautical Chart 11416). Due to the bathymetry of the water surrounding the bridge, seagrasses are located in close proximity to the north and south causeways at the ends of the bridge. Based on the data collected by the SWFWMD Surface Water Improvement and Management (SWIM) section, it appears the most concentrated areas of seagrasses are directly adjacent to these causeways with the seagrasses transitioning into tidal flats as they head further waterward of the bridge and causeways, in both Pinellas County and Hillsborough County sections. The Tampa Bay Surface Water Improvement and Management (SWIM) Plan (February 8, 1999) indicates there are three (3) types of seagrasses located within Tampa Bay. The Tampa Bay Estuary

Program (TBEP), utilizing SWFWMD data, estimates Old Tampa Bay saw an 11% increase in seagrass coverage in the last 2 years with approximately 6, 977-acres of seagrasses in the estuary.

The east and west terminus of the proposed route are situated on man-made causeways with mangrove swamps (FLUCCs 612) and vegetated shoreline (FLUCCs 652). These areas are vegetated with several species, such as seagrape (*Coccoloba uvifera*), buttonwood (*Conocarpus erectus*), all 3 types of mangroves, shoreline seapurslane (*Sesuvium portulacastrum*), and seaside oxeye (*Borrchia frutescens*), which are indicative of the tidal nature of the system. There have been several restoration projects completed in these areas, conducted by SWIM or in cooperation with TBEP or other stakeholders. In 2009 a permit was issued by the District to FDOT for the construction of a Rock Groin to help stabilize the shoreline along the southern side of the Hillsborough Causeway section. The north side of this causeway appears to be an undisturbed mangrove swamp with shoreline extending to Old Tampa Bay waters.

Comments on Effects to Resources:

Wetland / open water impacts can occur resulting from the placement of the new pilings and from the potential shading impacts associated with the replacement bridge. Currently there is minimal vegetation near the abutments for Howard Frankland Bridge.

Seagrass impacts are likely to occur during the replacement of Howard Frankland Bridge. A comparison of the 2010 seagrass survey and the 2008 seagrass survey showed an 11% increase in the seagrass coverage for Tampa Bay (SWFWMD Seagrass 2010 Seagrass Distribution from Tarpon Springs to Boca Grande); therefore, it is likely the increasing coverage will continue prior to the commencement of construction. A Submerged Aquatic Vegetation (SAV) Survey will need to be conducted between the months of April and November. The SAV Survey will be reviewed as part of the permit application process. As a general guideline, the SAV Survey should be no older than 2 years due to the dynamic nature of seagrasses.

Seagrass impacts would be in the form of direct impacts and also shading impacts. The direct impacts would occur from the installation of the new pilings for the replacement Howard Frankland Bridge and also from the removal of the existing pilings during the demolition phase. Depending on the height of the replacement bridge, shading impacts to the seagrass beds are possible. In the past, the District has accepted Contingency Plans associated with the potential shading impacts since they are difficult to predict prior to the construction of the actual structures. An example of an acceptable Contingency Plan would consist of restoration of nearby seagrass beds with prop damage using the transplanted seagrasses removed from the piling impacted areas.

Seagrass and wetland impacts would be evaluated utilizing the Uniform Mitigation Assessment (UMAM); however, the mitigation offsetting the seagrass impacts would require preservation, restoration or creation of seagrass beds. The Tampa Bay Estuary Program and SWIM are currently working on several restorations and enhancement projects located near Tampa Bay. Since Public Interest Criteria may need to be addressed as part of the review for the Sovereign Submerged Lands (SSL), it may behoove the FDOT to contact these programs to enquire about future restoration efforts for the Tampa Bay area.

While soft coral and sponges are classified as fauna, the substrate supporting their habitat would fall within the limits of the wetland / open water environment. The potential destruction of the existing habitat and colonies would require mitigation to offset the impact. Most of the conditions conducive to these environments are located outside of the shipping canals, due to water depths, so the relocation of the embedded rocks and colonies may be sufficient to offset the impacts. In addition, a matting material can be installed which may encourage an expansion of the existing colonies or habitats outside the project area. These areas should be identified and/or surveyed during the SAV survey to assist in the permit application review and assessment of total wetland / open water impacts.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) of "Substantial" based on their opinion of the quality of wetlands and the potential acreage of wetlands that may be impacted both directly and indirectly by the project, the level of potential coordination or effort associated with the SWFWMD's regulatory and proprietary interests and obligations, and the lack of information concerning the final bridge and roadway cross sections.

Tampa Bay Surface Water Improvement and Management Plan (February 1999) and Tampa Bay Estuary Programs Charting the Course (May 2006) are both active reports associated with the overall health of Tampa Bay and the projected goals to help establish more coverage of seagrasses. Review of these documents may offer some assistance in reduction of seagrass impacts from the water quality stand point and also possible projects to offset submerged and emergent impacts resulting from the replacement bridge.

Wetland impacts can be reduced by the following:

- (1) Adjustment of the alignment to avoid direct impacts to the emergent and submerged wetland areas,
- (2) Implementation of strict controls over sediment transport off site during construction,
- (3) Restriction of the activity of vehicles and equipment to only those areas that must be utilized for construction and staging,
- (4) Implementing effective mitigation measures to compensate for wetland impacts; and,
- (5) Selection of treatment pond sites away from existing wetlands.

Old Tampa Bay is a known manatee use area; it is recommended that the FDOT develop a project-specific manatee protection plan to eliminate the possibility of construction-related manatee injury or death in the project area.

Adequate and appropriate wetland mitigation activities may be required for unavoidable wetland and surface water impacts associated with the project. The project mitigation needs may be addressed in the FDOT Mitigation Program (Subsection 373.4137, F.S.) which requires the submittal of anticipated wetland and surface water impact information to the SWFWMD. This information is utilized to evaluate mitigation options, followed by nomination and multi-agency approval of the preferred options. These mitigation options typically include enhancement of wetland and upland habitats within existing public lands, public land acquisition followed by habitat improvements, and the purchase of private mitigation bank credits. The SWFWMD may choose to exclude a project in whole or in part if the SWFWMD is unable to identify mitigation that would offset wetland and surface water impacts of the project. Under this scenario, the SWFWMD will coordinate with the FDOT on which impacts can be appropriately mitigated through the program as opposed to separate mitigation conducted independently. Depending on the quantity and quality of the proposed wetland impacts, the SWFWMD may propose purchasing credits from a mitigation bank and/or pursue and propose alternative locations for mitigation.

For ERP purposes of mitigating any adverse wetland impacts within the same drainage basin, the project is located within the Upper Coastal Drainage Basin. The SWFWMD requests that the FDOT continue to collaborate on the potential wetland impacts as this project proceeds into future phases, and include the associated impacts on FDOT's annual inventory.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

For ERP permitting purposes, the project area is located in the Tampa Bay Watershed. The SWFWMD has assigned a pre-application file (PA# 398957) for the purpose of tracking its participation in the ETDM review of this project. The pre-application file is maintained at the SWFWMD's Tampa Service Office. Please refer to the pre-application file when contacting SWFWMD regulatory staff regarding this project.

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 04/02/2012 by Lauren P. Milligan, FL Department of Environmental Protection

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The National Wetlands Inventory GIS report indicates that there are 541.6 acres of estuarine wetlands within the 500-ft. project buffer zone in Old Tampa Bay. Additionally, 53.4 acres of continuous seagrass beds and 36.8 acres of discontinuous seagrasses occur within the 500-ft. project buffer. Seagrass species are commonly dominated by turtle grass, cuban shoalgrass and manatee grass extending within the project area. These seagrass species are susceptible to damage from increased turbidity, sedimentation and shading.

Comments on Effects to Resources:

The project will require an environmental resource permit (ERP) from the Southwest Florida Water Management District or, possibly, the DEP's Southwest District Office. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of bridge construction to the greatest extent practicable:

- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.
- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to seagrass beds and forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):

The following recommendations should also be considered:

- 1) To the extent possible, avoid areas of extensive seagrass meadows and diverse and abundant vertebrate and invertebrate marine life.
- 2) Future environmental documentation should provide information regarding the protection of environmental resources, such as:
 - a) Identification, demarcation, and protection of any adjacent submerged aquatic resources (seagrass beds, oyster beds, soft corals, etc.);
 - b) Best Management Practices (BMPs) to be utilized during bridge/road repair, demolition, and construction activities to prevent violations of state water quality standards within receiving waters of the state, per Rule 62-302, F.A.C.; and
 - c) Implementation of standard manatee protection conditions during in- and over-water construction activities.

CLC Commitments and Recommendations:

Degree of Effect: 3 *Moderate* assigned 03/14/2012 by Jane Monaghan, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Wetlands in Old Tampa Bay (mangrove and estuarine habitats, seagrass, salt marshes) and all of the services provided by wetlands such as flood protection, water filtration, nursery and foraging areas for fish and wildlife.

Comments on Effects to Resources:

Wetlands provide important habitat for fish and wildlife. The Service policy requires that these valuable resources be avoided to the greatest extent practicable. Mangroves and other coastal vegetation provide important nursery areas for many species of fish and wildlife. Current surveys and mapping should be done to document mangroves, sea grass beds and other benthic resources. It is difficult at this time to determine the amount of impacts being proposed. Storm water runoff from the new structure should be contained and treated. All best management practices should be followed during construction to reduce sedimentation and turbidity. As per Section 404 of the Clean Water Act, FDOT must show that steps were taken to avoid wetland impacts, to minimize potential impacts on wetlands and to provide compensation for any remaining unavoidable impacts.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: 4 *Substantial* assigned 02/28/2012 by David A. Rydene, National Marine Fisheries Service

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Old Tampa Bay which contains estuarine habitats such as seagrass, mangrove, and salt marsh used by federally-managed fish species and their prey.

Comments on Effects to Resources:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool (EST) for ETDM Project # 12539. The Florida Department of Transportation (FDOT) District 7 is conducting a PD&E study to evaluate the replacement of the northbound I-275 (SR 93) Howard Frankland Bridge in Hillsborough County and Pinellas County, Florida. The existing bridge is a four-lane, pre-stressed concrete stringer/girder structure.

NMFS staff conducted a site inspection of the project area on February 24, 2012, to assess potential concerns regarding living marine resources within Old Tampa Bay. The areas adjacent to the proposed project are principally the bridge's causeway shorelines and estuarine waters. It appears that the project could impact submerged aquatic vegetation and/or mangroves. NMFS recommends that the FDOT conduct a seagrass/benthic resource survey during the prime seagrass growing season (June-August) to determine the presence/absence of seagrasses and other biogenic features and their distribution in the project area. Seagrass resource maps in FDOT's Environmental Screening Tool indicate that seagrass beds occur in shallow areas in the vicinity of the bridge. A GIS analysis run in the EST indicates that 76.7 acres of National Wetland Inventory estuarine wetlands occur within the project's 100 foot buffer. The seagrass database shows 0.44 acres of continuous seagrass within the 100 foot buffer, 32.6 acres of continuous and 7.8 acres of discontinuous seagrass within the 200 foot buffer, and 312.5 acres of continuous and 237.5 acres of discontinuous seagrass within the 500 foot buffer. However, the mangrove database indicated that no mangroves occurred within the 100, 200, or 500 foot buffers, which is incorrect based on the results of NMFS' site inspection. Mangroves do occur along the shorelines of the bridge's causeways.

Certain estuarine habitats within the project area are designated as EFH as identified in the 2005 generic amendment of the Fishery Management Plans for the Gulf of Mexico. The generic amendment was prepared by the Gulf of Mexico Fishery Management Council as required by the 1996 amendment to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Seagrasses have been identified as EFH for juvenile and subadult penaeid shrimp, juvenile and adult stone crab, postlarval, juvenile, subadult and adult red drum, juvenile and adult schoolmaster, dog snapper, gray snapper, and mutton snapper, and juvenile gag, goliath grouper, red grouper, black grouper, yellowfin grouper, Nassau grouper, lane snapper, yellowtail snapper, cubera snapper, and hogfish by the Gulf of Mexico Fishery Management Council under provisions of the Magnuson-Stevens Act. Mangroves have been identified as EFH for postlarval/juvenile, subadult and adult red drum, gray snapper, and cubera snapper, and juvenile schoolmaster, mutton snapper, dog snapper, lane snapper, yellowtail snapper, and goliath grouper.

Federal agencies which permit, fund, or undertake activities which may adversely impact EFH are required to consult with NMFS and, as a part of the consultation process, an EFH Assessment must be prepared to accompany the consultation request. Regulations require that EFH Assessments include:

1. a description of the proposed action;
2. an analysis of the effects (including cumulative effects) of the proposed action on EFH, the managed fish species, and major prey species;
3. the Federal agency's views regarding the effects of the action on EFH; and
4. proposed mitigation, if applicable.

Provisions of the EFH regulations [50 CFR 600.920(c)] allow consultation responsibility to be formally delegated from federal to state agencies, including FDOT. Whether EFH consultation is undertaken by the federal agency (e.g. Federal Highway Administration) or FDOT, it should be initiated as soon as specific project design and construction impact information are available. EFH consultation can be initiated independent of other project review tasks or can be incorporated in environmental planning documents. Upon review of the EFH Assessment, NMFS will determine if it is necessary to provide EFH Conservation Recommendations on the project.

NMFS recommends that an Endangered Species Act section 7 consultation be conducted for Gulf sturgeon, smalltooth sawfish and swimming sea turtles when sufficient project details become available. However, the project does not lie within the designated critical habitat of Gulf sturgeon, smalltooth sawfish or sea turtles.

The selection of the "Substantial" degree of effect is based on the uncertainty that presently exists with regard to potential seagrass and/or mangrove impacts and what final bridge design and alignment will be proposed.

Additional Comments (optional):

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Wetlands issue for this alternative: Federal Highway Administration

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 06/04/2012 by FDOT District 7

Comments:

FFWCC DOE: Moderate
SWFWMD DOE: Moderate
USFWS DOE: Moderate
FDOT Recommended DOE: Moderate

The Florida Department of Transportation (FDOT) has evaluated comments from the Florida Fish and Wildlife Conservation Commission (FFWCC), the Southwest Florida Water Management District (SWFWMD), and the US Fish and Wildlife Service (USFWS) and recommends a Degree of Effect of Moderate.

Geographical Information Systems (GIS) data from the Environmental Screening Tool (EST) indicates that 122 acres and 245 acres of the Greater Tampa Bay Ecosystem Management Area are located within the 100- and 200-foot buffer distances. FFWCC occurrences for the black skimmer, least tern and American oystercatcher are located within the 100-foot buffer distance. GIS data indicates there are approximately 122 acres and 245 acres of West Indian Manatee Consultation Area within the 100- and 200-foot buffer distances.

The FFWCC identified two land cover types within the project area: High Impact Urban for the bridge and the adjacent narrow causeway, and the open water of Tampa Bay. Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: Florida manatee (FE), brown pelican (SSC), American oystercatcher (SSC), black skimmer (SSC), least tern (ST), limpkin (SSC), reddish egret (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (FE), roseate spoonbill (SSC), loggerhead sea turtle (FT), green sea turtle (FE), Kemp's ridley sea turtle (FE), and leatherback sea turtle (FE). The project site is within US Fish and Wildlife Service Consultation Areas for Manatee and Piping Plover, and within the core foraging area for three wood stork colonies. The greatest potential for adverse impacts is associated with in-water work required for bridge demolition and reconstruction. It will be important to avoid and minimize effects on the Florida manatee and sea turtles during removal of the old bridge structure and construction of the new bridge. Possible manatee protection measures that may be required by the FFWCC include Standard Manatee Conditions for In-Water Work, restrictions on blasting, monitoring of turbidity barriers, exclusionary grating on culverts, presence of manatee observers during in-water work, a defined or limited construction window, and no nighttime work. If blasting is to be considered as a method used in construction, be aware that in the area of the project, it is important to perform the blasting during specific times of the year, if possible and an extensive blast plan and marine species watch plan would need to be developed and submitted to the FFWCC for approval as early as possible.

The SWFWMD indicated the majority of this bridge replacement will occur over open salt water, which is providing habitat and feeding areas for several birds and aquatic life forms. Potential species that may be located within the project area includes the smalltooth sawfish, Gulf sturgeon, bald eagle and the Florida manatee. Impacts to seagrasses will need to be mitigated in a manner which would offset the habitat loss. The UMAM would account for the time lag associated with the time it would take for the seagrass bed to be restored to its current production level, both for the seagrasses as food for certain species and for the habitat value. The Florida Manatee is a listed threatened species and will require additional measures to be in place in order to protect this mammal during the construction process for this site. A Specific Condition will be used in the Environmental Resource Permit (ERP) outlining the standard operating procedure during the demolition of the old bridge and construction of the replacement bridge. Please be advised that stormwater outfall pipes and structures extending below the Mean High Water Line (MHWL), exceeding 8 inches in diameter, will require manatee grating to be installed over the waterward end to ensure no manatees can become entrapped.

The USFWS identified 3 potential species within the project area: Florida manatee, wood stork, and piping plover. In-water construction will follow the standard in-water construction conditions and at least two dedicated, experienced, manatee observers will be present at all times. No nighttime work should be done in areas with high manatee use. A current sea grass survey, done during the growing season (June-August), and estimate of impacts to submerged aquatic vegetation should be submitted to our office within two years before the construction start date. If blasting is required, formal consultation will be required with USFWS for the manatee. The project is located within the Core Foraging Area (CFA) of several active nesting colonies of the endangered wood stork. To minimize adverse effects to the wood stork and other wetland dependent species, USFWS recommends that impacts to suitable foraging habitat be avoided. USFWS does not anticipate impacts to suitable foraging habitat at this time. The piping plover can be seen foraging in Florida almost ten months out of the year. No critical habitat has been designated for this species within the footprint of the project but critical habitat has been identified in Tampa Bay. Unless onshore foraging habitat is modified in some way, this project is not likely to adversely affect piping plovers.

The FDOT will commit to use proper best management practices (BMPs) during construction. The FDOT will adhere to the Standard Manatee Conditions for In-Water Work during construction to ensure there is no harm to manatees or other marine species. No USFWS Critical Habitat is documented within the project area. There will be no land use changes as a result of the construction of the proposed bridge. The FDOT will prepare a Wetland Evaluation and Biological Assessment Report (WEBAR) during the PD&E study. This report will assess potential species, existing habitat, and potential essential fish habitat (EFH) within the project area. This report and the FDOT's findings will be coordinated with the USFWS, NMFS, and FFWCC.

No comments were received from the Federal Highway Administration (FHWA).

Degree of Effect: 3 Moderate assigned 04/04/2012 by Scott Sanders, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

The Office of Conservation Planning Services of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated an agency review of ETDM #12539, Hillsborough and Pinellas Counties, and provides the following comments related to potential effects to fish and wildlife resources on this Programming Phase project.

The Project Description Summary states that this project involves the replacement of the northbound Howard Frankland Bridge (I-275) over Old Tampa Bay. The replacement would carry four lanes of traffic, the same as the existing bridge, but will also be evaluated for an additional 24 feet of Right-of-way to accommodate the proposed Gateway to Hillsborough County two-way light rail line (ETDM 12256). The bridge is three miles long, and the Project Development and Environment (PD&E) study area extends approximately one mile beyond the bridge on each end along the existing causeway.

The project area was evaluated for potential fish, wildlife, and habitat resources within 500 feet of the proposed alignment. Our assessment reveals that the project area has only two land cover types: High Impact Urban for the bridge and the adjacent narrow causeway, and the Open Water of Tampa Bay. The project is within the Greater Tampa Bay Ecosystem Management Area, and the Pinellas portion of the project is within the Pinellas County Aquatic Preserve. Although seagrasses are not found beneath the bridge, 90.22 acres of continuous and discontinuous seagrass beds have been mapped within the assessment area adjacent to the causeways.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: Florida manatee (FE), brown pelican (SSC), American oystercatcher (SSC), black skimmer (SSC), least tern (ST), limpkin (SSC), reddish egret (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), wood stork (FE), roseate spoonbill (SSC), loggerhead sea turtle (FT), green sea turtle (FE), Kemp's ridley sea turtle (FE), and leatherback sea turtle (FE). The project site is within U.S. Fish and Wildlife Service Consultation Areas for Manatee and Piping Plover, and within the core foraging area for three wood stork colonies.

Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; and potential water quality degradation as a result of additional stormwater runoff from the expanded impervious surface (light rail) draining into Tampa Bay. The greatest potential for adverse impacts is associated with in-water work required for bridge demolition and reconstruction. It will be important to avoid and minimize effects on the Florida manatee and sea turtles during removal of the old bridge structure and construction of the new bridge. Since no information was provided in terms of seasonality of bridge construction, the duration of project work, methods for constructing the bridge, and any dredging that may be required, it would be premature for us to recommend specific avoidance and minimization measures for the manatee and sea turtles at this time. However, possible manatee protection measures that may be required by our agency include Standard Manatee Conditions for In-Water Work, restrictions on blasting, monitoring of turbidity barriers, exclusionary grating on culverts, presence of manatee observers during in-water work, a defined or limited construction window, and no nighttime work. If blasting is to be considered as a method used in construction, please be aware that in the area of the project, it is important to perform the blasting during specific times of the year, if possible. In addition, an extensive blast plan and marine species watch plan will need to be developed, and submitted to FWC for approval as early in the process as possible. Further coordination with our agency will be necessary in order to determine site-specific measures for this project. For technical assistance and coordination on manatees and sea turtles, respectively, please contact Ms. Mary Duncan and Dr. Robbin Trindell of our Imperiled Species Management Section in Tallahassee at (850) 922-4330 very early in the planning process for the PD&E Study.

Comments on Effects to Resources:

Based on the project information provided, we believe that direct and indirect effects of this project could be moderate provided manatee and sea turtle protection measures are implemented, and direct discharge of stormwater runoff is minimized or mitigated.

Additional Comments (optional):

The use of clean concrete bridge material for offshore artificial reef construction has been a highly successful program in Florida for providing reef fish habitat enhancement and offshore recreational fishing and diving opportunities. If this is being considered for the Howard Frankland Bridge, early coordination with our agency and our county partners is essential due to required permitting, scheduling, the reef site selection and approval process, coordination with potential contractors for selection and transport of material, and to ensure that special conditions and standards are defined and adhered to, such as removal of any exposed steel rebar from bridge reef material to ensure public safety, minimize loss of fishing gear, and avoid entanglement hazards for marine life. Both Pinellas and Manatee Counties have active, permitted offshore artificial reef sites located in the Gulf of Mexico that are available to accept concrete bridge material. For further coordination on artificial reef development, and input on the protection of marine resources, please contact FWC staff Keith Mille at keith.mille@MyFWC.com or (850) 617-9633, and Lisa Gregg at lisa.gregg@MyFWC.com at the Division of Marine Fisheries Management in Tallahassee at (850) 617-9621.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email brian.barnett@MyFWC.com to initiate the process for further overall coordination on this project.

CLC Commitments and Recommendations:

Degree of Effect: 3 Moderate assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The majority of this bridge replacement will occur over open salt water, which is providing habitat and feeding areas for several birds and aquatic life forms. As discussed briefly in the Wetland Section of SWFWMD's EST comments, the substrate near the north and south causeways has a high potential of habitats for soft coral, sponges and other benthic communities.

In addition to the benthic communities, threatened species that may be located within the scope of the project area for Howard Frankland Bridge includes the Small Tooth Sawfish, Gulf Sturgeon, Bald Eagle, and the Florida Manatee.

Seagrass beds serve as a fishery for shallow-water feeders and bottom feeders. These fish serve as food for other aquatic animals and birds alike. Based on the bathymetry shown on the NOAA Navigational Chart 11416, it appears the shallow water areas adjacent

to the north and south causeway sections would draw coelenterates, mollusks, baitfish and birds of prey. The aquatic fauna is quite diverse in the habitats associated with the Howard Frankland Bridge.

Comments on Effects to Resources:

While there are many mammals, ovarian, and aquatic species that can be found in the water and air surrounding the Howard Frankland Bridge, SWFWMD permits will be written as they relate to threatened / endangered species and the potential habitat impacts associated with wetlands and the protected bottom lands.

As discussed in the Wetlands Section of SWFWMD's EST comments, impacts to seagrasses will need to be mitigated in a manner which would offset the habitat loss. The UMAM would account for the time lag associated with the time it would take for the seagrass bed to be restored to its current production level, both for the seagrasses as food for certain species and for the habitat value for the fish, crustaceans, and snails. This value may affect the total area to be preserved, restored, or created to offset the wetland impact.

Disruption of the coarse sand substrate with embedded rocks will have a negative influence on the current production levels for colonies of soft corals and sponges. A survey of the area will be needed to determine the type and coverage area for these benthic communities as part of the evaluation for the permit application.

The Florida Manatee has been observed in Old Tampa Bay. The Florida Manatee is a listed threatened species and will require additional measures to be in place in order to protect this mammal during the construction process for this site. A Specific Condition will be used in the ERP outlining the standard operating procedure during the demolition of the old bridge and construction of the replacement bridge. Please be advised that stormwater outfall pipes and structures extending below the Mean High Water Line, exceeding 8 inches in diameter, will require manatee grating to be installed over the waterward end to ensure no manatees can become entrapped. [Reference - "Grates and Other Manatee Exclusion Devices for Culverts and Pipes" (February 2011), available at http://myfwc.com/media/415238/manatee_grates.pdf].

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) of "Moderate" regarding this section. While there are a number of threatened and endangered species that may inhabit the area, ensuring the continuing safety of these animals would require coordination with Florida Fish and Wildlife Conservation Commission and their regulations. Correspondence with FFWCC, regarding permitting concerns for Howard Frankland Bridge, would be a completeness item during the permitting process.

The following comments are offered in the event that the FDOT elects to pursue an Environmental Resource Permit General Permit for Construction for the project.

Wildlife and Habitat impacts can be reduced by the following:

- (1) Adjustment of the alignment to avoid direct impacts to the emergent and submerged wetland areas,
- (2) Implementation of strict controls over sediment transport off site during construction,
- (3) Restriction of the activity of vehicles and equipment to only those areas that must be utilized for construction and staging; and,
- (4) Implementing effective mitigation measures to compensate for seagrass/wetland impacts.

Old Tampa Bay is a known manatee use area; it is recommended that the FDOT develop a project-specific manatee protection plan to eliminate the possibility of construction-related manatee injury or death in the project area.

For ERP permitting purposes, the project area is located in the Tampa Bay Watershed. The SWFWMD has assigned a pre-application file (PA# 398957) for the purpose of tracking its participation in the ETDM review of this project. The pre-application file is maintained at the SWFWMD's Tampa Service Office. Please refer to the pre-application file when contacting SWFWMD regulatory staff regarding this project.

CLC Commitments and Recommendations:

Degree of Effect: 3 Moderate assigned 03/14/2012 by Jane Monaghan, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and the ecosystems upon which they depend.

Comments on Effects to Resources:

Project Description: Replace northbound bridge (I-275, over Old Tampa Bay) with new one.

The Florida Department of Transportation (FDOT) District 7 is conducting a PD&E study to evaluate the replacement of the northbound I-275 (SR 93) Howard Frankland Bridge in Hillsborough County and Pinellas County, Florida. The existing bridge is a four-lane, pre-stressed concrete stringer/girder structure

Florida Manatee (*Trichechus manatus latirostris*)

This species can be found year round in Tampa Bay and there are several important warm water gathering sites near the project action area. If blasting is proposed for the removal of the old structure, formal consultation with our office is required for manatees. All other in-water construction will follow the standard in-water construction conditions and at least two dedicated, experienced, manatee observers will be present at all times. No nighttime work should be done in areas with high manatee use. A current sea grass survey, done during the growing season (June-August), and estimate of impacts to submerged aquatic vegetation should be submitted to our office within two years before the construction start date.

Wood Stork (*Mycteria americana*)

The project corridor for the replacement of the northbound bridge passes through the Core Foraging Areas (CFA) of several active nesting colonies of the endangered wood stork. The Service has determined that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork and other wetland dependent species, we recommend that impacts to suitable foraging habitat be avoided. We do not anticipate impacts to suitable foraging habitat at this time. Please refer to the North Florida Field Office website for WOST colony locations and effect

determinations for any wetland impacts: <http://www.fws.gov/northflorida>

Piping Plover (*Charadrius melodus*) This species can be seen foraging in Florida almost ten months out of the year. No critical habitat has been designated for this species within the footprint of the project but critical habitat has been identified in Tampa Bay. Unless onshore foraging habitat is modified in some way, this project is not likely to adversely affect piping plovers.

Additional Comments (optional):

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit a review of the Wildlife and Habitat issue for this alternative:
Federal Highway Administration

ETAT Reviews and Coordinator Summary: Cultural

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: **3** *Moderate* assigned 06/04/2012 by FDOT District 7

Comments:

SWFWMD DOE: N/A/No Involvement
SHPO DOE: Minimal
FHWA DOE: Moderate
FDOT Recommended DOE: Moderate

The Florida Department of Transportation (FDOT) has evaluated comments from the Southwest Florida Water Management District (SWFWMD), the Florida Department of State (SHPO), and the Federal Highway Administration (FHWA) and recommends a Degree of Effect of Moderate.

Geographical Information Systems (GIS) data from the Environmental Screening Tool (EST) indicates that A Cultural Resource Assessment Survey of the Tampa Interstate Study Activity A, Task I (EA) project area between Old Tampa Bay and the Dale Mabry interchange exists within the 100-foot buffer distance. The Tampa Bay Bridge (I-275 NB) and Old Tampa Bay Bridge (I-275 SB) are identified within the 100-foot buffer distance.

The FHWA noted that the northbound Howard Frankland Bridge was constructed in 1959 and rehabilitated in 1996, so it is over 50 years old. The FHWA stated that the bridge's eligibility for listing in the National Register of Historic Places (NRHP) needs to be evaluated in a Cultural Resource Assessment Survey (CRAS). The SHPO indicated that the rehabilitation conducted in 1996 that made the northbound bridge match the construction of the southbound bridge makes this resource not eligible for listing in the NRHP. The SHPO requested a technical memorandum that provides a desktop review of the cultural resources in the project area to be submitted to their office for comment. An underwater CRAS may be necessary as the project develops. Submerged sites are likely in the area.

The FDOT will prepare a CRAS as part of the PD&E Study. If applicable, Section 106 Consultation should be conducted to assess potential project impacts to any cultural resources that are determined eligible for listing in the NRHP.

No comments were received from the Seminole Tribe of Florida.

Degree of Effect: **3** *Moderate* assigned 04/05/2012 by Linda Anderson, Federal Highway Administration

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

The northbound Howard Frankland Bridge (#150107) over Old Tampa Bay was built in 1959 and rehabilitated in 1996. Consequently, it is over 50 years old.

Comments on Effects to Resources:

A bridge over 50 years of age may be eligible for the National Register of Historic Places (NRHP). Rehabilitation in 1996 may have made the bridge ineligible, if it was ever eligible. This bridge's eligibility needs to be evaluated via a CRAS. Demolition of an NRHP-eligible bridge invokes Section 106 as well as Section 4(f). If project termini are expanded to address the LOS of F in the 2035 Design Year, a CRAS of the additional APE may be required. I am assigning a DOE of "moderate" due to the unknown factors.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: **2** *Minimal* assigned 04/04/2012 by Alyssa McManus, FL Department of State

Coordination Document: Tech Memo Required

Direct Effects

Identified Resources and Level of Importance:

There are no IDENTIFIED significant properties located within this project area. However, this particular project corridor should be subjected to a desktop cultural resources survey and the results of this survey submitted to this office for comment. The Howard Franklin Bridge NB bridge was built in 1959, but when the SB bridge was constructed in the early 1990s, the NB lane was

Economic

Project Effects

Coordinator Summary Degree of Effect: 0 *None* assigned 06/04/2012 by FDOT District 7

Comments:

FDOT Recommended DOE: None

The Florida Department of Transportation (FDOT) recommends a Degree of Effect of None.

A review of the Geographic Information Systems (GIS) analysis data indicates that there is one census blockgroup (120570046002) with a traditionally underserved population of greater than 90% within the 100-foot buffer area. Even though the GIS analysis indicates there is a census blockgroup within 100 feet of the project, there are no residences within the project area since the project termini are on the causeway portion of I-275. The project involves the replacement of the existing northbound Howard Frankland Bridge. The project will evaluate a potential transit envelope along the proposed bridge.

This project should be developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968, along with Title VI of the Civil Rights Act, Executive Order 12898 (Environmental Justice), which ensures that minority and/or low-income households are neither disproportionately adversely impacted by major transportation projects, nor denied reasonable access to them by excessive costs or physical barriers (Environmental Protection Agency [EPA], 1994).

The FDOT will conduct public outreach to residents and businesses in the corridor area to solicit input on the project.

No comments were received from the Federal Highway Administration (FHWA).

None found

The following organization(s) were expected to but did not submit a review of the Economic issue for this alternative: Federal Highway Administration

Land Use

Project Effects

Coordinator Summary Degree of Effect: N/A *N/A / No Involvement* assigned 06/04/2012 by FDOT District 7

Comments:

FDEO DOE: N/A/No Involvement

FDOT Recommended DOE: N/A/No Involvement

The Florida Department of Transportation (FDOT) has evaluated comments from the Florida Department of Economic Opportunity (FDEO) and recommends a Degree of Effect of N/A/No Involvement.

Geographical Information Systems (GIS) data from the Environmental Screening Tool (EST) indicates that there are 73 acres of bays and estuaries and 50 acres of transportation land uses within the 100-foot buffer distance.

The proposed PD&E study is included in the FDOT's FY 2009/2010 to FY 2013/2014 Adopted SIS 5-Year Plan, Capacity Improvement Projects - Highway (July 2009). The study is programmed in the FDOT's Five Year Work Program (Item No. 422904-1) in 2012/2013. The replacement of the 4-lane northbound Howard Frankland Bridge is consistent with the Pinellas County MPO's Cost Feasible Long Range Transportation Plan (LRTP), since it is primarily related to preservation of the facility rather than expansion. The transit envelope along I-275 is consistent with the Hillsborough County MPO's Cost Affordable LRTP and the Pinellas County MPO's Cost Feasible (2015-2035) LRTP. The transit envelope is also consistent with the Tampa Bay Area Regional Transportation Authority's (TBARTA) Mid-Term Regional Network (2035) and Long-Term Regional Network (2050).

The FDEO noted that since this project is for the replacement of an existing bridge that is already part of the local government's transportation system, the replacement would also be consistent with the comprehensive plan.

The project involves the replacement of the existing northbound Howard Frankland Bridge. No land use changes are proposed with this project.

No comments were received from the Federal Highway Administration (FHWA).

Degree of Effect: N/A *N/A / No Involvement* assigned 02/21/2012 by Chris Wiglesworth, FL Department of Economic Opportunity

Coordination Document: No Selection

Direct Effects

Identified Resources and Level of Importance:

Hillsborough and Pinellas County Comprehensive plans.

Comments on Effects to Resources:

Since this project is for the replacement of an existing bridge that is already part of the local government's transportation system, the replacement would also be consistent with the comprehensive plan.

Additional Comments (optional):

CLC Commitments and Recommendations:

Degree of Effect: N/A N/A / No Involvement assigned 02/21/2012 by Chris Wiglesworth, FL Department of Economic Opportunity

Coordination Document: No Selection

Direct Effects

Identified Resources and Level of Importance:

Hillsborough and Pinellas County Comprehensive Plans.

Comments on Effects to Resources:

Since this project is for the replacement of an existing bridge that is already part of the local government's transportation system, the replacement would also be consistent with the comprehensive plan.

Additional Comments (optional):

CLC Commitments and Recommendations:

ETAT Reviews and Coordinator Summary: Secondary and Cumulative

Secondary and Cumulative Effects

Project Effects

Coordinator Summary Degree of Effect: 3 Moderate assigned 02/26/2013 by FDOT District 7

Comments:

SWFWMD DOE: Substantial

FDOT Recommended DOE: Moderate

The Florida Department of Transportation (FDOT) has evaluated comments from the Southwest Florida Water Management District (SWFWMD) and recommends a Degree of Effect of Moderate.

The FDOT discussed the project with SWFWMD on May 29, 2012. SWFWMD indicated that this assignment was based on the consensus of upper level management. Since this is a high profile project SWFWMD had special meetings to discuss potential impacts and permitting and they received comments from their SWIM Department as well. They assigned a Substantial because of the high level of coordination that will occur for this project as defined in the DOE explanation below. Water quality and SSL are a big concern for them. SWFWMD did not want to lower their DOE, but understood that FDOT would assign Moderate for several of the issues based on the fact that the new bridge will be constructed on existing alignment and will be replaced in-kind although just a little wider to accommodate transit. Also, mitigation and requirements will be satisfied as part of the permitting process.

The SWFWMD indicated that there are multiple ecosystems that provide habitat for marine life and other wildlife located within the proposed project area. In order to reduce the chance for turbidity and sedimentation secondary impacts, a detailed plan of the erosion and turbidity barrier to be utilized should be in place prior to demolition and construction of the bridges. Limiting the length of the proposed construction timeframe may reduce the interruption to the foraging for the avian wildlife in the area. Manatee protection specific conditions outlined in the Environmental Resource Permit (ERP) will address measures to be taken by construction personnel to reduce the chance of disturbing the Florida manatee. Coordination with Florida Fish and Wildlife Conservation Commission (FFWCC) should be initiated during the permitting phase of development to account for the requirements set forth by the agency for both manatee and sea turtle protection. This is a bridge replacement project. In the absence of stormwater treatment, the project has the potential to contribute to water quality impacts to Old Tampa Bay. There are no anticipated stormwater quantity concerns. Compliance with existing permit requirements and the successful use of erosion and sediment control best management practices (BMPs) will help assure that minimum water quality standards are met. For groundwater resources along the causeways, ensure that spillages of petroleum products and other chemicals do not occur during construction, and that stormwater treatment ponds (if applicable) do not intrude into the limerock or penetrate confining material of the aquifer system, either directly or by sinkhole formation. A proper turbidity monitoring program should be defined during the permitting process and put into place prior to the installation of the replacement bridge and the demolition of the existing bridge and should include information regarding the proper mixing zones or variances required for discharges to OFWs. Shading impacts of seagrass beds will be minimized for the permanent bridge structure if the bridge remains within the existing footprint of Howard Frankland Bridge. Secondary impacts to the ecosystems are primarily associated with water quality impacts and a contingency plan should be discussed during the permitting process in order to take a proactive stance if unanticipated impacts should occur. Reductions of direct and secondary wetland impacts will be considered based upon the proposed width of the bridge, type of pilings to be utilized, and construction methods for the installation of the piling and concrete slabs.

Permitting will be conducted with the appropriate regulatory agencies during design and prior to construction. The FDOT will take measures to minimize and/or avoid impacts to wetlands. The FDOT will create a stormwater pollution prevention plan (SWPPP) and erosion and sediment control plan during the design phase of this project. Proper BMPs will be used during construction. The project should result in minimal adverse impacts to Old Tampa Bay since the project is a bridge replacement and no capacity improvements are proposed at this time. The runoff from this proposed project should be similar to that of the existing bridge. The FDOT will coordinate with SWFWMD for water quality and will adhere to state water quality standards during permitting of the proposed bridge replacement.

Degree of Effect: 4 *Substantial* assigned 04/03/2012 by Hank Higginbotham, Southwest Florida Water Management District

Coordination Document: Permit Required

At-Risk Resource: Wildlife and Habitat

Comments on Effects: There are multiple ecosystems located within the proposed project area. These systems are providing habitat and foraging areas for marine life and other wildlife. During the construction of the replacement bridge there is potential for secondary impacts disrupting these species. The shoreline has an established mangrove fringe which, if a buildup of sedimentation were to occur, has the potential to disrupt the fisheries associated with this ecosystem. The activity levels resulting from the construction of the bridge has the potential to disrupt the fish and foraging birds utilizing the waterway below the bridge. During several trips over the Howard Frankland Bridge by District staff it has been noted there were pelicans resting on the channel markers below the existing bridge. With the increased noise and activity levels, it is reasonable to assume these birds will no longer be foraging in these areas. Increased turbidity in the water may also impact the other species of wildlife in the waterway. Increased activities associated with the installation of the pilings for the replacement bridge has the potential to disrupt the normal patterns for manatees located in the area. In addition, nighttime construction activities have the potential of disrupting the nesting behavior and hatchlings for sea turtles, which have a potential nesting areas adjacent to the causeways at both ends of the bridge.

Recommended Avoidance, Minimization, and Mitigation Measures: In order to reduce the chance for turbidity and sedimentation secondary impacts, a detailed plan of the erosion and turbidity barrier to be utilized should be in place prior to demolition and construction of the bridges. Limiting the length of the proposed construction timeframe may reduce the interruption to the foraging for the avian wildlife in the area.

Recommended Actions to Improve At-Risk Resources: Manatee protection specific conditions outlined in the ERP permits addresses measures to be taken by construction personnel to reduce the chance of disturbing the Florida Manatee. Coordination with FFWCC should be initiated during the permitting phase of development to account for the requirements set forth by the agency for both manatee and sea turtle protection.

At-Risk Resource: Water Quality and Quantity

Comments on Effects: This is a bridge replacement project. In the absence of stormwater treatment, the project has the potential to contribute to water quality impacts to Old Tampa Bay. There are no anticipated stormwater quantity concerns.

Recommended Avoidance, Minimization, and Mitigation Measures: Compliance with existing permit requirements and the successful use of erosion and sediment control BMPs will help assure that minimum water quality standards are met. For groundwater resources along the causeways, ensure that spillages of petroleum products and other chemicals do not occur during construction, and that stormwater treatment ponds (if applicable) do not intrude into the limerock or penetrate confining material of the aquifer system, either directly or by sinkhole formation.

Recommended Actions to Improve At-Risk Resources: For surface water resources in Old Tampa Bay, reduce pollutant loads by treating stormwater runoff from currently untreated areas, by controlling erosion from the project site, by protecting Bay waters from the introduction of oils, greases and fuel spillage from equipment and by completing restoration strategies after construction completion.

At-Risk Resource: Wetlands

Comments on Effects: Howard Frankland Bridge is currently located over the Gulf Intracoastal Waterway and is extending over sensitive environmental areas, which are providing habitat to seagrasses, soft coral, sponges, algae, and numerous other flora and fauna. The shorelines adjacent to the existing abutments have established mangrove fringes with other salt tolerate species diversifying the ecosystem. These areas are also providing habitat and foraging areas for both salt dependent and non-salt dependent wildlife.

Recommended Avoidance, Minimization, and Mitigation Measures: Secondary impacts associated with the replacement of the Howard Frankland Bridge will most likely occur as a result of turbidity and shading impacts. A proper turbidity monitoring program should be defined during the permitting process and put into place prior to the installation of the replacement bridge and the demolition of the existing bridge. Please include information regarding the proper mixing zones or variances required for discharges to OFWs. Due to the slope of the existing approaches to Howard Frankland Bridge, there is a potential for discharge of untreated water from the construction site. This may result in secondary impacts to the mangrove swamps near the abutments. It is recommended that a contingency plan be in place in case an unforeseen event occurs where turbid, untreated water is discharged into the mangrove area or Old Tampa Bay. Shading impacts of seagrass beds will be minimized for the permanent bridge structure if the bridge remains within the existing footprint of Howard Frankland Bridge. Secondary impacts to the ecosystems are primarily associated with water quality impacts and a contingency plan should be discussed during the permitting process in order to take a proactive stance if unanticipated impacts should occur.

Recommended Actions to Improve At-Risk Resources: Construction of the replacement bridge will have wetland impacts associated with it. Reductions of direct and secondary impacts will be considered based upon the proposed width of the bridge, type of pilings to be utilized, and construction methods for the installation of the piling and concrete slabs.

Eliminated Alternatives

There are no eliminated alternatives for this project.

Project Scope

General Project Commitments

Date	Description
01/17/2013	Responses to FHWA comments to P&N Statement has been uploaded as an attachment.

Required Permits

Permit	Type	Conditions	Review Org	Review Date
Large Construction (>= 5 AC)	Stormwater		FDOT District 7	01/03/12
Consent of Use, Lease, or Easement to use Sovereign Submerged Lands	State		FDOT District 7	01/03/12
Local Environmental Permits	County/Municipality - Local		FDOT District 7	01/03/12
Dredge and Fill Permit	USACE		FDOT District 7	01/03/12
Environmental Resource Permit	State		FDOT District 7	01/03/12
U.S. Coast Guard Bridge Permit	Federal		FDOT District 7	01/03/12
Section 10/Section 404 Department of the Army Permit	USACE		FDOT District 7	01/03/12

Required Technical Studies

Technical Study Name	Type	Conditions	Review Org	Review Date
Bridge Hydraulic Report	ENGINEERING		FDOT District 7	01/03/2012
Bridge Development Report	ENGINEERING		FDOT District 7	01/03/2012
Contamination Screening Evaluation Report	ENVIRONMENTAL		FDOT District 7	01/03/2012
Endangered Species Biological Assessment	ENVIRONMENTAL		FDOT District 7	01/03/2012
Wetlands Evaluation Report	ENVIRONMENTAL		FDOT District 7	01/03/2012
Type 2 CE	ENVIRONMENTAL		FDOT District 7	01/03/2012
Project Development Summary Report (PDSR)	ENGINEERING		FDOT District 7	01/03/2012
Essential Fish Habitat Assessment	ENVIRONMENTAL		FDOT District 7	01/03/2012
Comments and Coordination Report	ENVIRONMENTAL		FDOT District 7	01/03/2012
Biological Assessment including Section 7 Consultation	ENVIRONMENTAL		FDOT District 7	01/03/2012
Air Quality Technical Memorandum	ENVIRONMENTAL		FDOT District 7	01/03/2012
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL		FDOT District 7	01/03/2012
Cultural Resource Assessment Survey	ENVIRONMENTAL		FDOT District 7	01/03/2012

Class of Action

Class of Action Determination

Class of Action	Other Actions	Lead Agency	Cooperating Agencies	Participating Agencies
Categorical Exclusion	Endangered Species Assessment	Federal Highway Administration	No Cooperating Agencies have been identified.	No Participating Agencies have been identified.

Class of Action Signatures

Name	Agency	Review Status	Date	ETDM Role
Theresa Farmer	FDOT District 7	ACCEPTED	02/21/2013	FDOT ETDM Coordinator
<p>Comments: The FDOT would like to propose that the Class of Action for the Northbound Howard Frankland Bridge Replacement project be a Type 2 Categorical Exclusion based on the following factors:</p> <ol style="list-style-type: none"> 1. The northbound bridge will remain open while the new bridge is constructed, therefore a temporary bridge will not be constructed. The new bridge is intended to be constructed parallel and in between the two existing bridges. The existing northbound bridge will then be demolished. 2. The purpose of this project is to replace the existing northbound Howard Frankland Bridge due to its structural condition and its relatively short remaining service life. This project will not increase the number of lanes. 3. There were only two issues identified as Substantial during the ETDM Programming Screen ETAT review; coastal and marine and wetlands. The FDOT, in coordination with NMFS, is preparing an Essential Fish Habitat (EFH) Assessment for this project and will comply with any EFH Conservation Recommendations from NMFS. As requested by NMFS, the FDOT will conduct an Endangered Species Action Section 7 consultation for Gulf sturgeon, smalltooth sawfish, and swimming sea turtles even though the project does not lie within designated critical habitat of these species. There are estuarine wetlands and seagrasses present in the project area. The FDOT will prepare a Wetlands Evaluation and Biological Assessment Report (WEBAR) as part of the PD&E study. The WEBAR will assess locations and function of existing wetlands and seagrass within the project limits. This report and the FDOT's findings will be coordinated with the USFWS, NMFS, and FFWCC. Permitting will be conducted with the appropriate regulatory agencies during design and prior to construction. The FDOT will take measures to minimize and/or avoid impacts to wetlands and seagrasses. The FDOT will mitigate for any impacts that may occur. 4. The project is not expected to be controversial nor adversely affect any community or neighborhood. 				

Linda Anderson	Federal Highway Administration	ACCEPTED	02/28/2013	Lead Agency ETAT Member
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Comments:
 The Federal Highway Administration (FHWA) concurs with the determination of the Florida Department of Transportation (FDOT) that a Type II Categorical Exclusion is a suitable Class of Action for ETDM Project # 12539, Howard Franklin Bridge. Concurrence is based on the content of agency reviews and assignments of Degree of Effect in the Programming Summary Report, which suggest that there will be no significant impacts associated with the project.

However, ongoing coordination and cooperation with Southwest Florida Water Management Department, Florida Department of the Environment, U. S. Fish and Wildlife Service, and Florida Fish and Wildlife Conservation Commission is required. FHWA is concerned about the impact of bridge construction on wildlife using the bay and about construction and operational impacts to water quality within the bay, an Outstanding Florida Water (OFW) and an Impaired Water that is recovering. If it appears during the PD&E process that this project will have significant environmental impacts, the class of action will be elevated.

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Appendices

PED Comments

Advanced Notification Comments

There are no comments for this project.

GIS Analyses

Since there are so many GIS Analyses available for Project #12539 - Howard Frankland Bridge, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fl.a-etat.org/est/index.jsp?tpID=12539&startPageName=GIS%20Analysis%20Results>

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 03/01/2013 by Theresa Farmer Milestone** is selected. GIS Analyses snapshots have been taken for Project #12539 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

Note: Attachments are not included in this Summary Report, but can be accessed by clicking on the links below:

Date	Type	Size	Link / Description
	Ancillary Project Documentation	93 KB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=13733
	Form SF-424: Application for Federal Assistance	28 KB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=12686

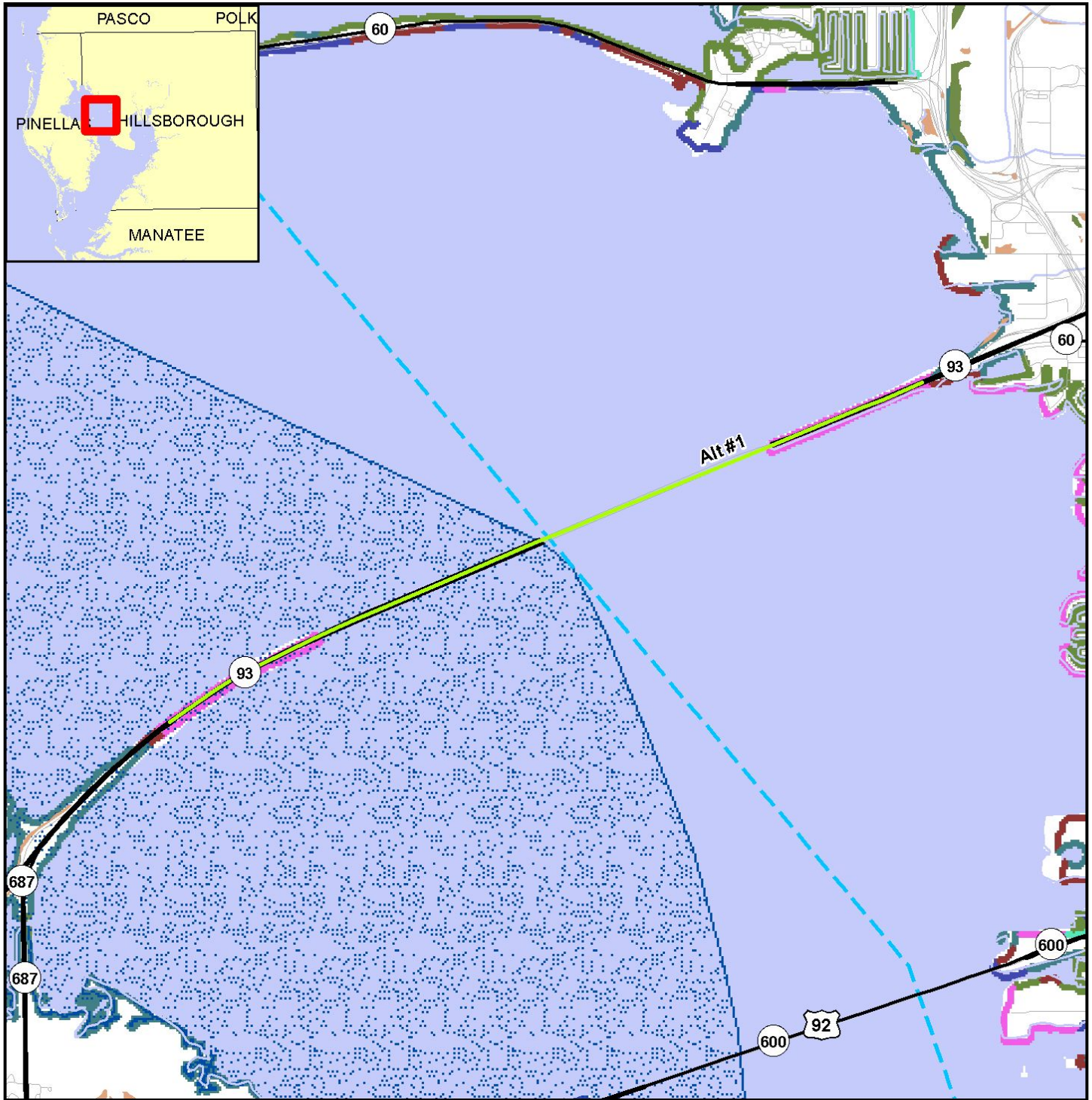
Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

Project-Level Hardcopy Maps

12539 Howard Frankland Bridge

1 Mile South of Bridge to 1 Mile North of Bridge



Coastal and Marine Resource Map

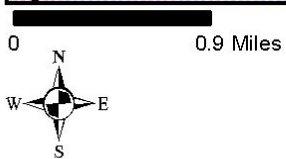
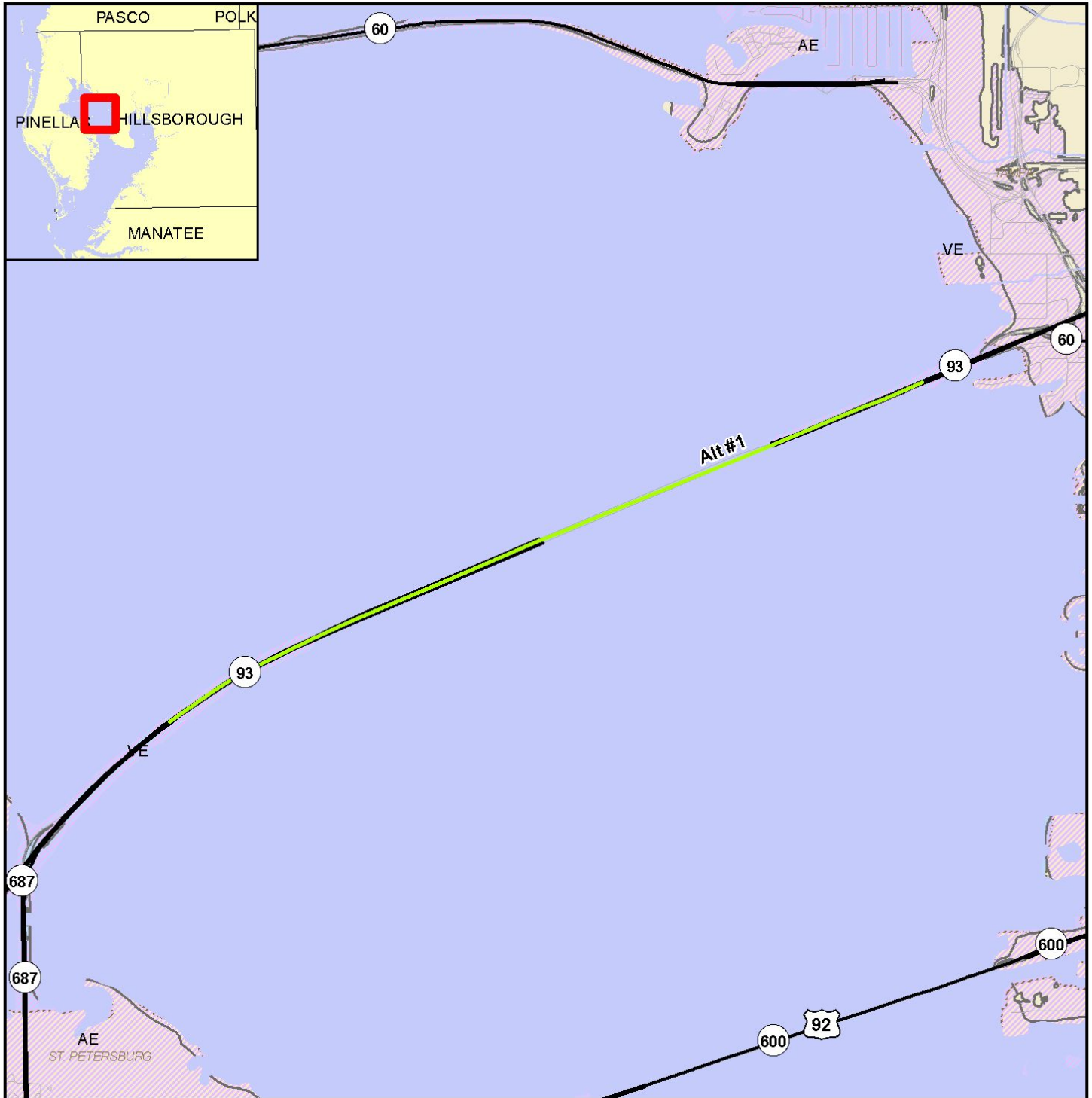
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|---------------------------|------------------------|-------------------------------|--------------------------------------|
| ETDM Alternative Point | Major Road | Continuous Seagrass | Gravel Beach/Riprap |
| ETDM Alternative Terminus | Local Road or Trail | Discontinuous Seagrass | Exposed Tidal Flat |
| ETDM Alternative Segment | River, Stream or Canal | Coastal Barrier Resource Area | Sheltered Tidal Flat |
| ETDM Alternative Polygon | Water Body | Swamp or Marsh | Mixed Sand And Gravel Beach |
| Aquatic Preserve | Navigable Water Way | Exposed Rocky Platform | Sheltered Rock/Seawall/Vegetated |
| | | Sand Beach | Exposed Vertical Rocky Shore/Seawall |

Data Sources: NAVTEQ; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts

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12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



Data Sources:
 NAVTEQ
 US Geological Survey
 Federal Emergency Management Agency

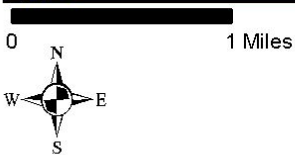
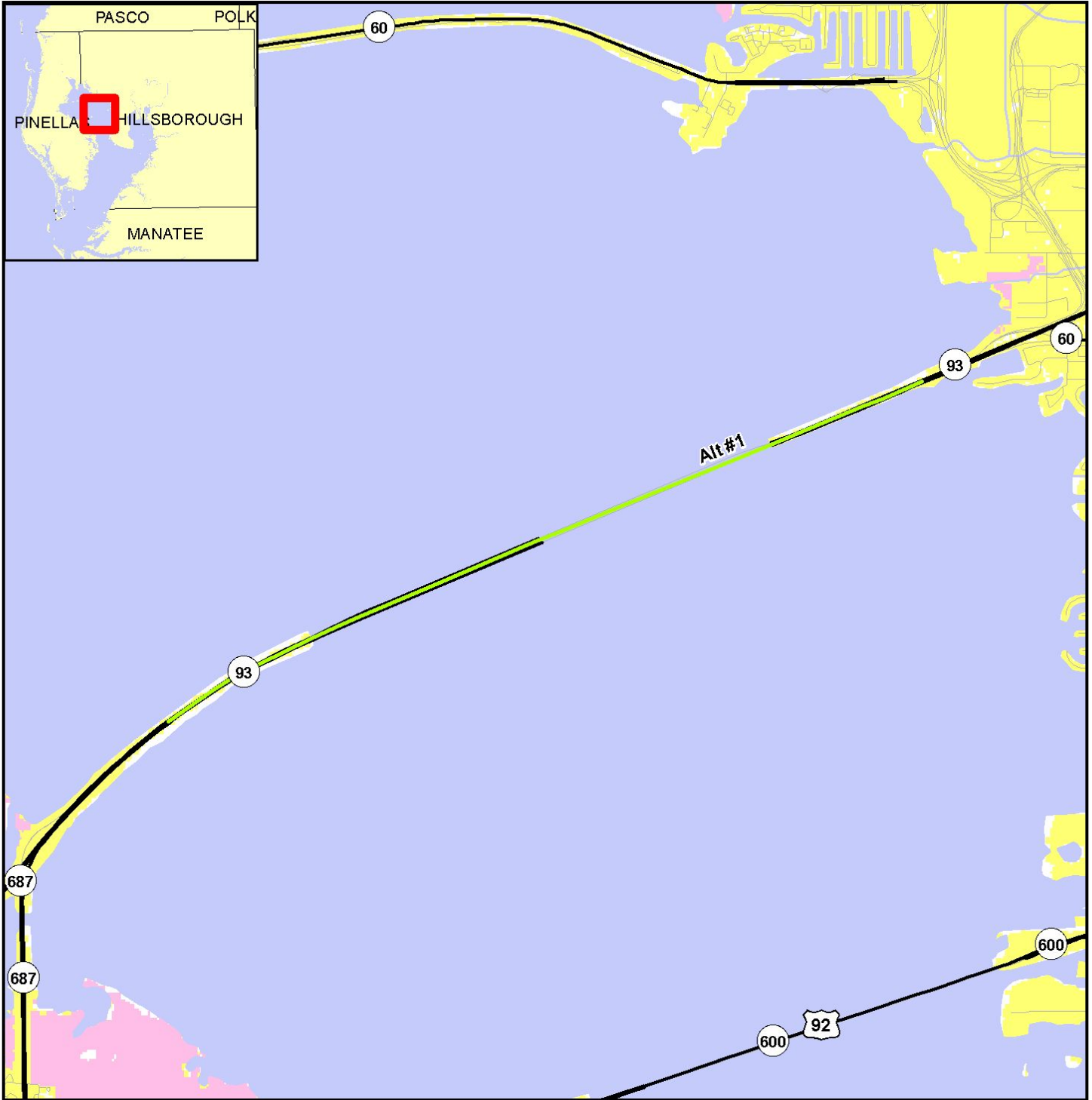
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|---------------------------|---------------------------|
| ETDM Alternative Point | Railroad |
| ETDM Alternative Terminus | River, Stream or Canal |
| ETDM Alternative Segment | Water Body |
| ETDM Alternative Polygon | City Limits |
| Major Road | County Boundaries |
| Local Road or Trail | Special Flood Hazard Area |

Floodplain Resource Map

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12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



Integrated Wildlife Habitat Ranking System Map

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ▨ ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

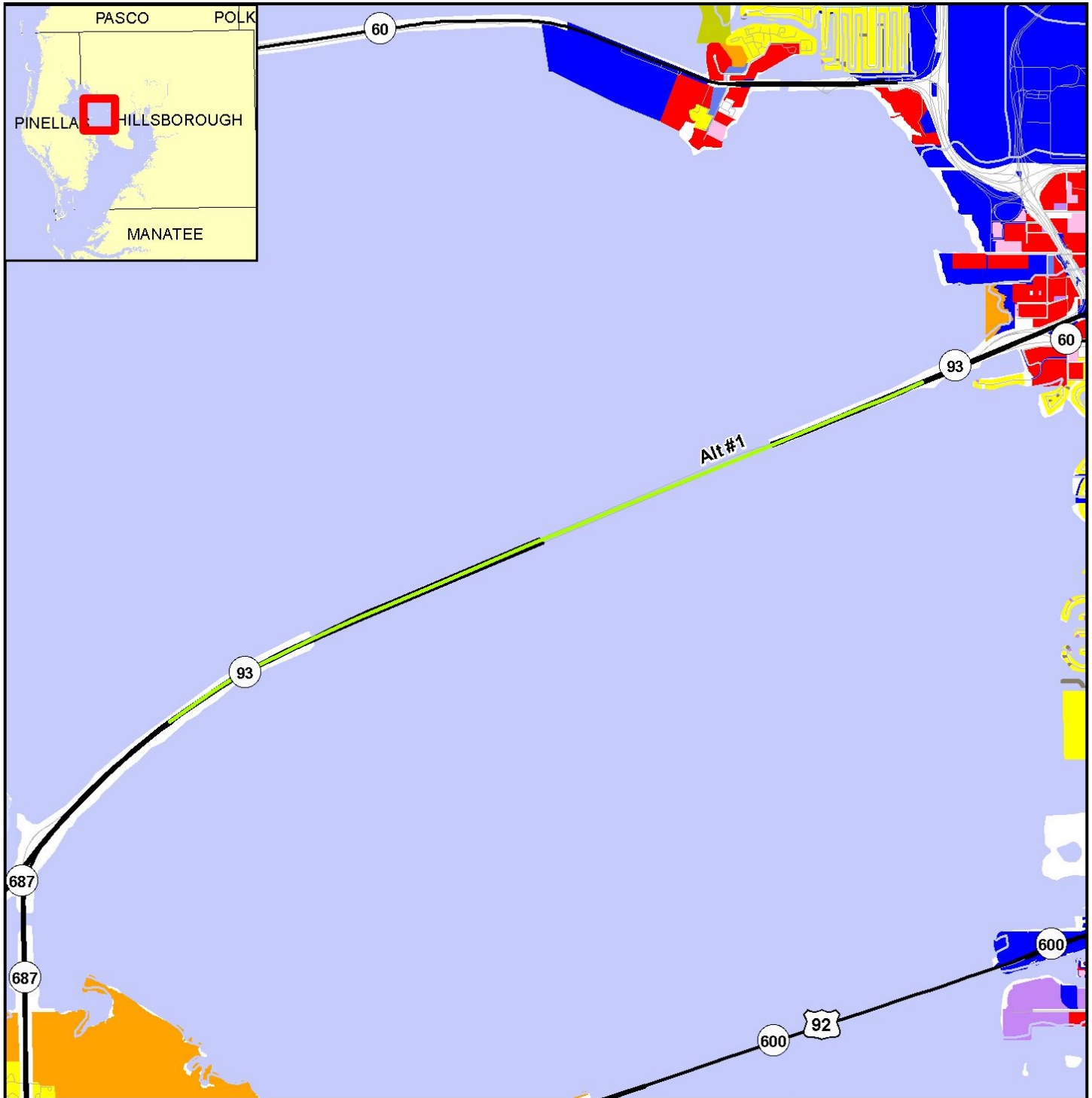
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission

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12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



0 0.4 Miles



Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Revenue
 Florida Department of Transportation
 Florida County Property Appraiser Offices

Land Use Map

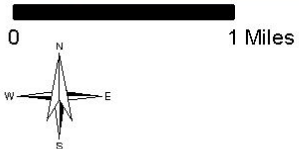
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|---------------------------|------------------------|-------------------------|-------------------------|
| ETDM Alternative Point | Railroad | Open (Not Agricultural) | Retail/Office |
| ETDM Alternative Terminus | River, Stream or Canal | Other | Vacant (Residential) |
| ETDM Alternative Segment | Agricultural | Public | Vacant (Nonresidential) |
| ETDM Alternative Polygon | Industrial | Right-of-Way | Water |
| Major Road | Institutional | Recreational | No Data |
| Local Road or Trail | Mining | Residential | |

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12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



Species Potential Habitat Model Map

- | | | |
|-----------------------------|--------------------------|-----------------------------------|
| ● ETDM Alternative Point | — Railroad | Potential Habitat Richness |
| ● ETDM Alternative Terminus | — River, Stream or Canal | □ 1 - 2 Species |
| — ETDM Alternative Segment | ■ Water Body | ■ 3 - 5 Species |
| ▨ ETDM Alternative Polygon | — Major Road | ■ 6 - 8 Species |
| — Local Road or Trail | | ■ 9 - 10 Species |
| | | ■ 11 - 13 Species |

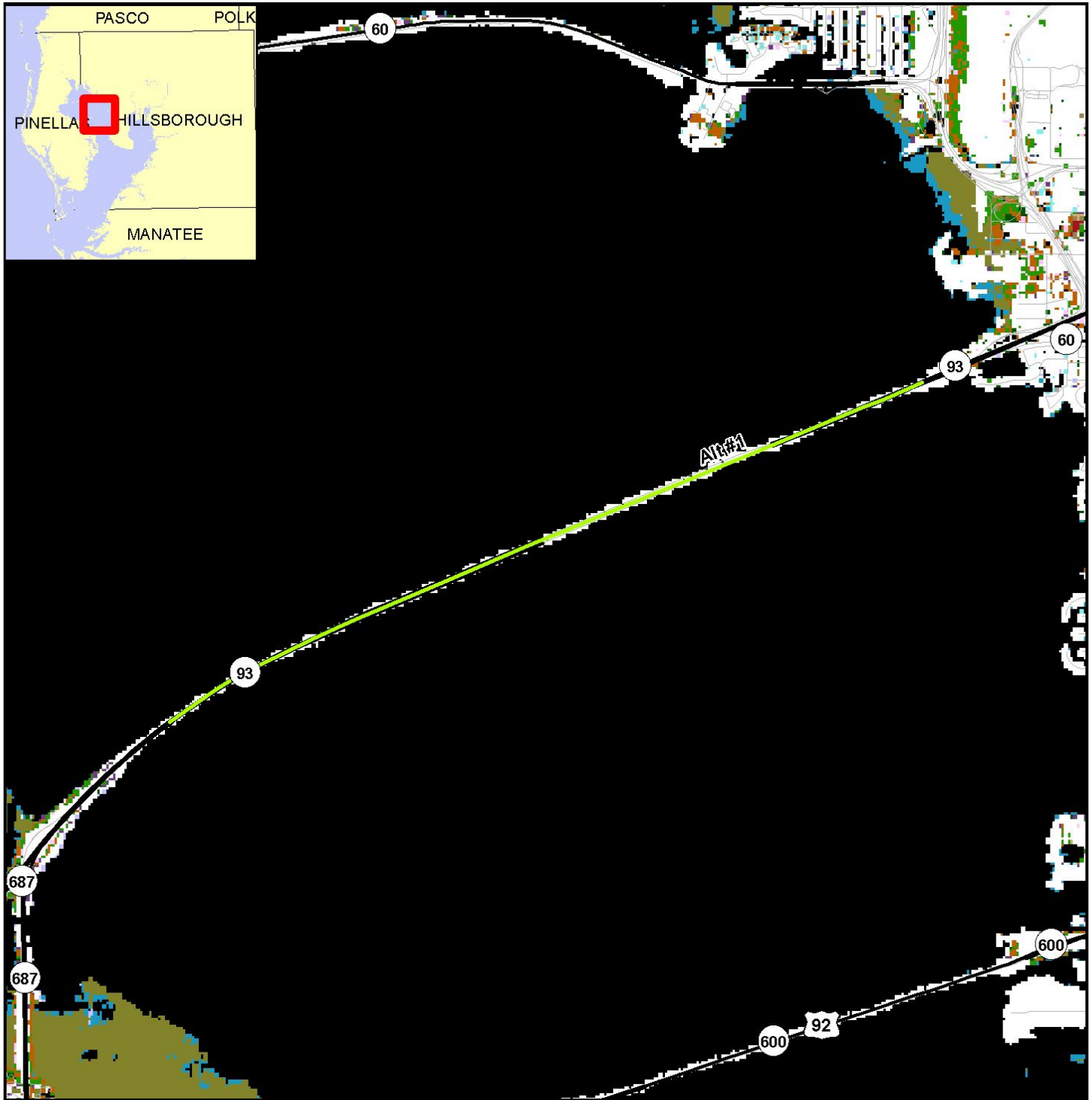
Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Fish & Wildlife Conservation Commission

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12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



Vegetation and Land Cover Map

- | | | | | | | |
|---------------------------|----------------------------|----------------------------------|----------------------------|---------------------|---------------------|-------------------|
| ETDM Alternative Polygon | Not Classified | Hardwood Hammocks and Forests | Bay Swamp | Mangrove Swamp | Unimproved Pasture | Brazilian Pepper |
| ETDM Alternative Segment | Coastal Strand | Pinelands | Cypress Swamp | Scrub Mangrove | Sugarcane | High Impact Urban |
| ETDM Alternative Terminus | Sand/Beach | Cabbage Palm-live Oak Hammock | Cypress/Pine/Cabbage Palm | Tidal Flats | Citrus | Low Impact Urban |
| ETDM Alternative Point | Xeric Oak Scrub | Tropical Hardwood Hammock | Mixed Wetland Forest | Open Water | Row and Field Crops | Extractive |
| Major Road | Sand Pine Scrub | Freshwater Marsh and Wet Prairie | Hardwood Swamp | Shrub and Brushland | Other Agriculture | |
| Local Road or Trail | Sandhill | Sawgrass Marsh | Hydric Hammock | Grassland | Exotic Plants | |
| | Dry Prairie | Cattail Marsh | Bottomland Hardwood Forest | Bare Soil/Clearcut | Australian Pine | |
| | Mixed Hardwood-pine Forest | Shrub Swamp | Salt Marsh | Improved Pasture | Melaleuca | |

Data Sources:

NAVTEQ; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission

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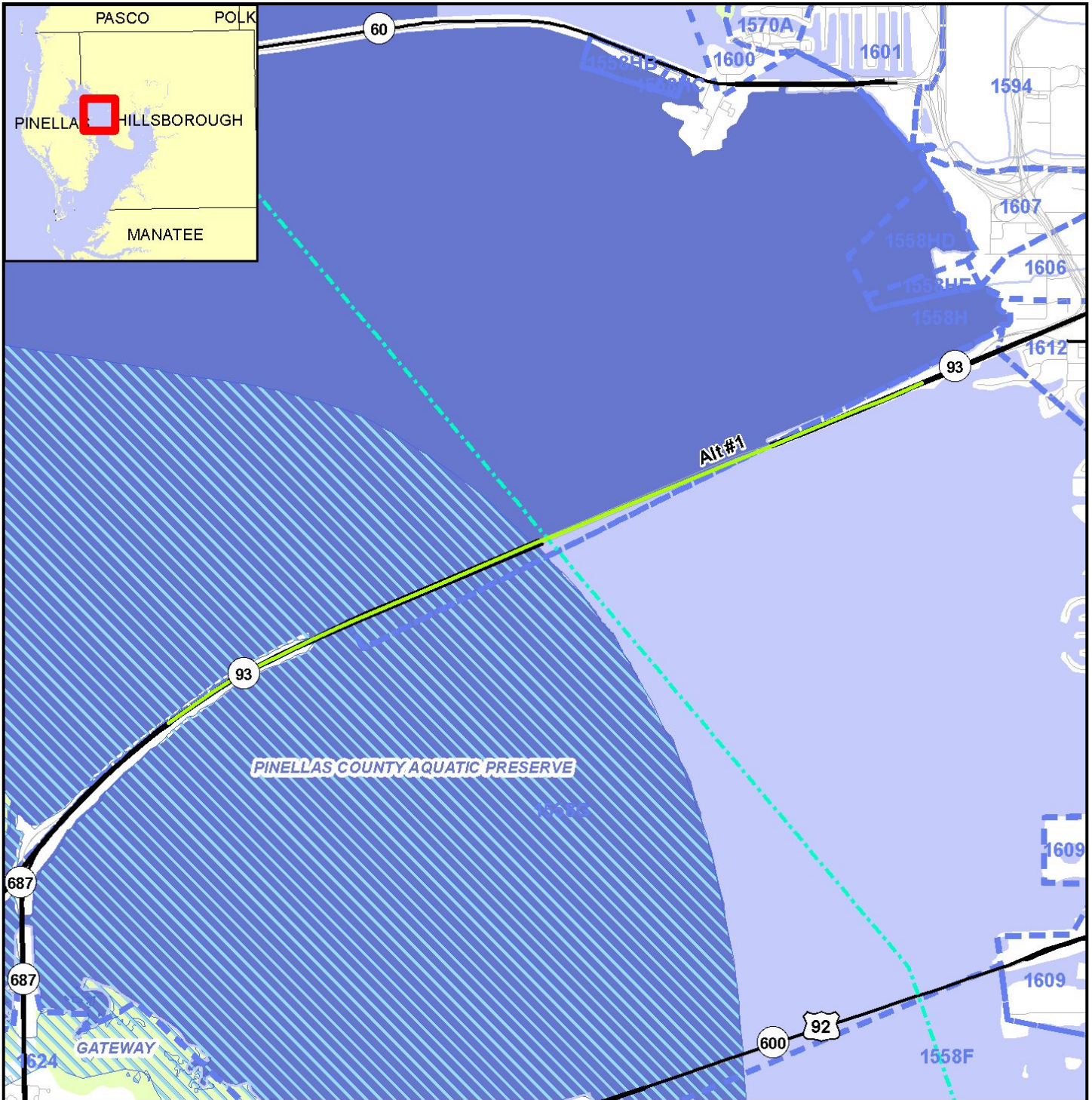


Map Generated on: 2/13/2012



12539 Howard Frankland Bridge

SR 687 (4th Street) to SR 60 (Kennedy Boulevard)



Water Resources Map

- | | | | | |
|-----------------------------|--------------------------|-----------------------------|--------------------------|-------------------------|
| 0 | 1 Miles | — Railroad | — SFWMD Canals | ■ Surface Water Class I |
| ⊙ ETDM Alternative Point | ▲ 1st Magnitude Spring | ■ Drainage Basin | ■ Surface Water Class II | ■ Water Body |
| ● ETDM Alternative Terminus | — River, Stream or Canal | ■ Outstanding Florida Water | ■ Swamp/Marsh | |
| — ETDM Alternative Segment | — Navigable Water Way | | | |
| ■ ETDM Alternative Polygon | | | | |

Data Sources: — Major Road
 NAVTEQ — Local Road or Trail
 US Geological Survey Florida Department of Transportation Florida Geological Survey
 Florida Department of Environmental Protection US Bureau of Transportation Statistics

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12539 Howard Frankland Bridge

1 Mile South of Bridge to 1 Mile North of Bridge



Wetland Resource Map

0 0.7 Miles



- ETDM Alternative Polygon
- ETDM Alternative Segment
- ETDM Alternative Terminus
- ETDM Alternative Point
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources: NAVTEQ; Florida Water Management Districts; US Geological Survey

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Appendix B

Agency Marine Wildlife
Watch Plans

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida, and emailed to FWC at ImperiledSpecies@myFWC.com.
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at http://www.myfwc.com/WILDLIFEHABITATS/manatee_sign_vendors.htm. Questions concerning these signs can be forwarded to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



CONSTRUCTION SPECIAL PROVISIONS STURGEON PROTECTION GUIDELINES

The shortnose sturgeon (*Acipenser brevirostrum*) and the gulf sturgeon (*A. oxyrinchus desotoi*) are listed under the Endangered Species Act as endangered and threatened, respectively. These species are under the jurisdiction of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS). In Florida, the lower St Johns River is habitat for shortnose sturgeon. Major portions of the Suwannee and Withlacoochee Rivers are designated as critical habitat for the gulf sturgeon.

The following special provisions will be incorporated into any construction contract where involvement with sturgeon may occur:

The FDOT will coordinate with the NMFS and USFWS early in the project development stage of new bridge projects. All efforts should be made to avoid known spawning habitats, nursery areas, feeding areas and thermal refuges.

1. Advise construction personnel of the potential presence of these species, of their endangered status and federal protection, and of the need to avoid any actions that would jeopardize these species.
2. The Florida Department of Transportation (FDOT) shall advise all FDOT project personnel and Contractor personnel on the project that there are civil and criminal penalties for harming, harassing or killing sturgeon, which are protected under the Endangered Species Act of 1973. The FDOT and the Contractor will be held responsible for any sturgeon harmed, harassed, or killed as a result of the project activity.
3. The FDOT shall provide information to all FDOT and Contract personnel for identification of sturgeon.
4. Appropriate work shift personnel will be instructed in the appearance, habits, biology, migratory patterns, and preservation of sturgeon. At least one of these trained personnel will be on site during construction activities to maintain a constant surveillance for these species, assure the cessation of activities (such as dredging, excess turbidity, and construction barge activity), which may endanger these species, and assure that uninhibited passage for the animals is provided.
5. Post signs on site warning of the presence of sturgeon, of their endangered status, and precautions needed.
6. Turbidity from construction activity will be adequately controlled to prevent degradation of the quality and transparency of the water. When sturgeon are present, turbidity curtains of appropriate dimension will be used to restrict the

animals access to the work area. Pollution booms or turbidity curtains should use tangle resistant or hemp rope when anchoring, or employ surface anchors to prevent entangling sturgeon. Continuous surveillance will be maintained in order to free animals which may become trapped in silt or turbidity barriers.

7. No dredging of the river bottom will be conducted for barge access.
8. Drilled shaft pile construction will be used whenever prudent and feasible as determined by FDOT.
9. Care shall be taken in lowering equipment or material below the water surface and into the stream bed. These precautions will be taken to ensure no harm occurs to any sturgeon which may have entered the construction area undetected.
10. Construction debris shall not be discarded into the water.
11. If the use of explosives is necessary, no blasting will occur during sturgeon spawning season or in known spawning, staging, feeding, or vital nursery areas.

The following protection measures will be employed for blasting:

- A. For each explosive charge, detonation will **not** occur if a sturgeon is known to be within a circular area ("the danger zone") encompassing the detonation site defined by the following radius:

$$r = 560(\sqrt[3]{W})$$

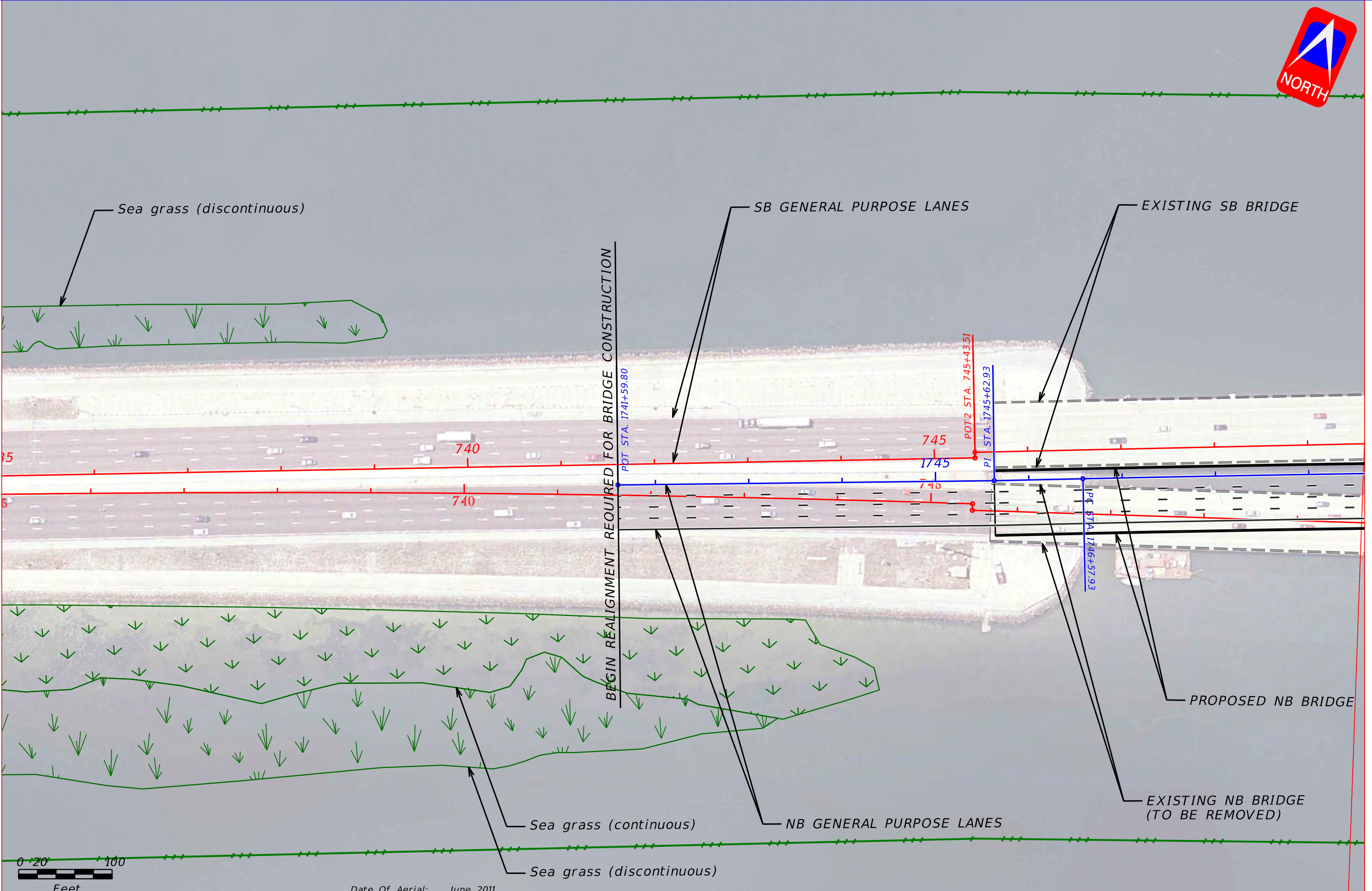
Where: r = radius of danger zone in feet

W = weight of explosive charge in pounds (tetra or TNT)

- B. In the event that a sturgeon is killed during blasting, the NMFS and/or the USFWS will be notified immediately.
12. Any dead sturgeon will be secured on site for carcass analysis by notified agency representative.
13. Following completion of the project, a report summarizing any involvement with sturgeon will be prepared for NMFS and/or USFWS.

Appendix C

Concept Plans/Seagrass



Date Of Aerial: June 2011

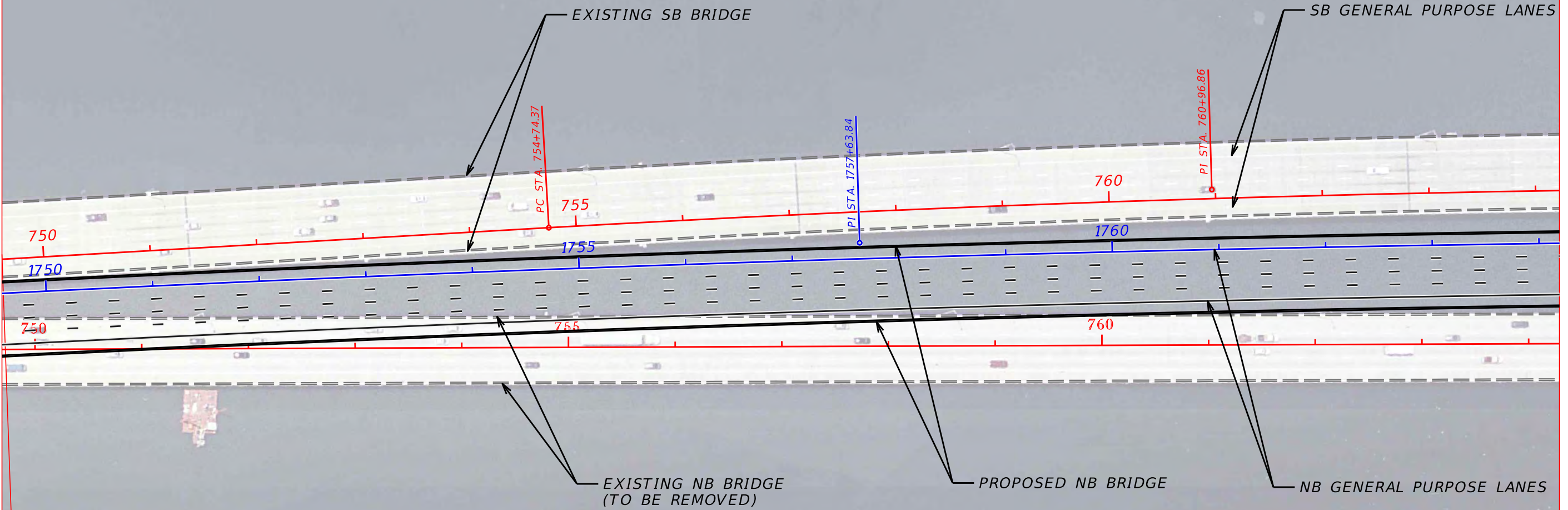
LEGEND	Existing Right Of Way
	Existing Limited Access Right Of Way

American Consulting Engineers of Florida, LLC.
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
 Certificate of Authorization No. 9302
 Jeffrey S. Novotny, P.E. No. 51083

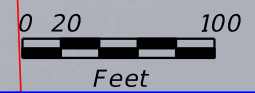
<i>STATE OF FLORIDA</i> DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
Bridge Replacement
 (Only)
 Center Option

SHEET NO.
RC-1-1

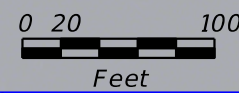
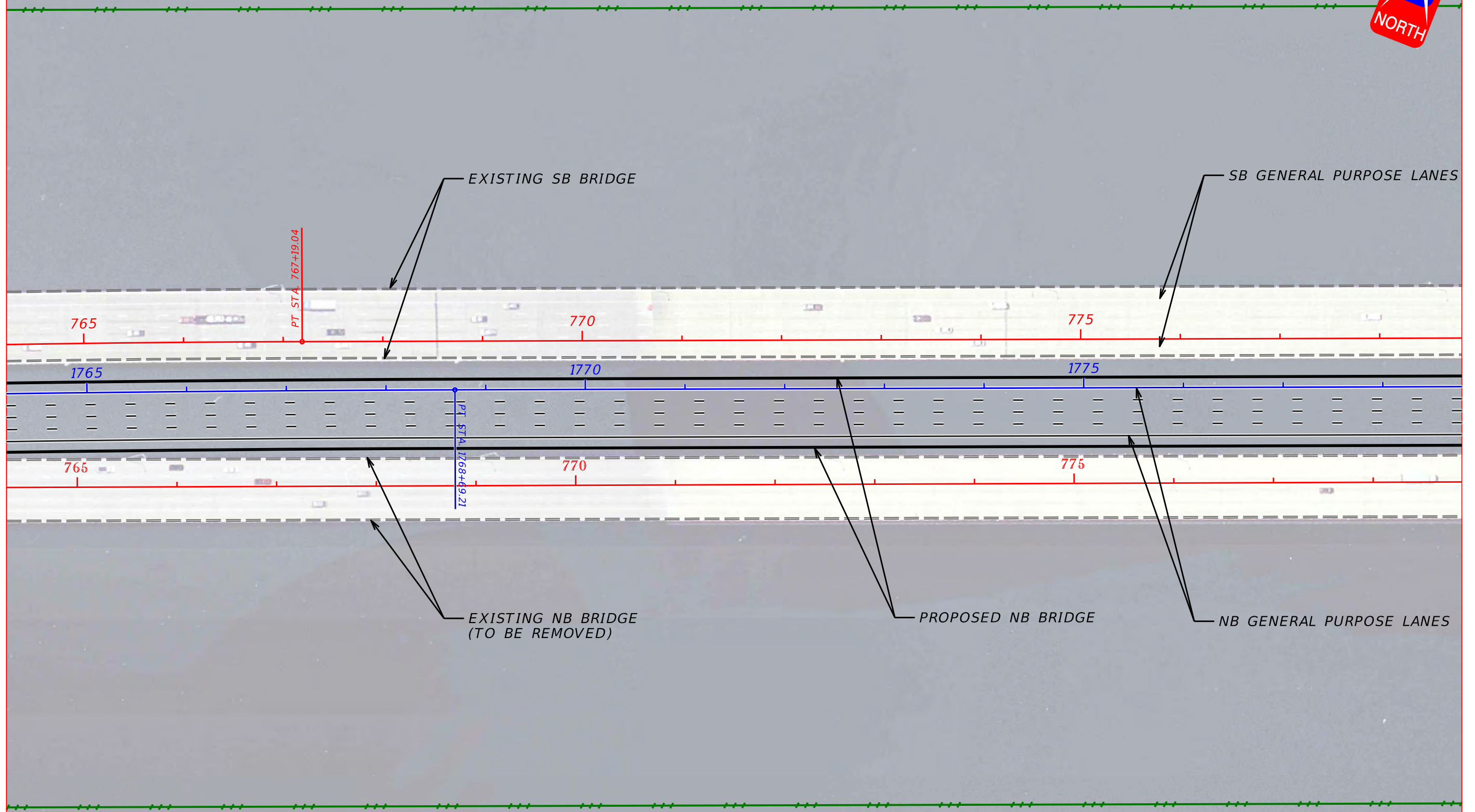


CURVE DATA RC-1
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 $D = 0^\circ 08' 27''$
 $T = 1,105.91$
 $L = 2,211.27$
 $R = 40,716.53$
 PC STA. = 1746+57.93
 PT STA. = 1768+69.21



Date Of Aerial: June 2011

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	Existing Limited Access Right Of Way		DEPARTMENT OF TRANSPORTATION				RC-1-2
			ROAD NO.	COUNTY			
		I-275	PINELLAS HILLSBOROUGH	422799-1-12-04			



Date Of Aerial: June 2011

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	Existing Limited Access Right Of Way		ROAD NO.	COUNTY		FINANCIAL PROJECT ID	RC-1-3
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SB GENERAL PURPOSE LANES

EXISTING SB BRIDGE

885 885 890 890

1885 1890

NB GENERAL PURPOSE LANES

PROPOSED NB BRIDGE

EXISTING NB BRIDGE
(TO BE REMOVED)

PC STA. 885+78.17

PC STA. 1890+43.06

PI STA. 894+59.93



Date Of Aerial: June 2011

LEGEND

- Existing Right Of Way
- Existing Limited Access Right Of Way

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Certificate of Authorization No. 9302
Jeffrey S. Novotny, P.E. No. 51083

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
(I-275/S.R. 93) PD&E Study
**Bridge Replacement
(Only)
Center Option**

SHEET NO.
RC-1-4



SB GENERAL PURPOSE LANES

EXISTING SB BRIDGE

895

900

1895

1900

905

1905

895

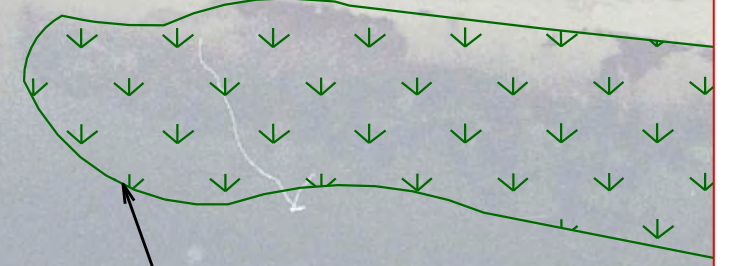
900

905

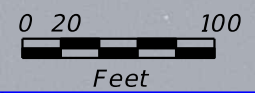
NB GENERAL PURPOSE LANES

PROPOSED NB BRIDGE

EXISTING NB BRIDGE
(TO BE REMOVED)



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 D = 0° 20' 28"
 T = 646.29
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 R = 16,797.57
 PC STA. = 1890+43.06
 PT STA. = 1903+35.02



Date Of Aerial: June 2011

LEGEND

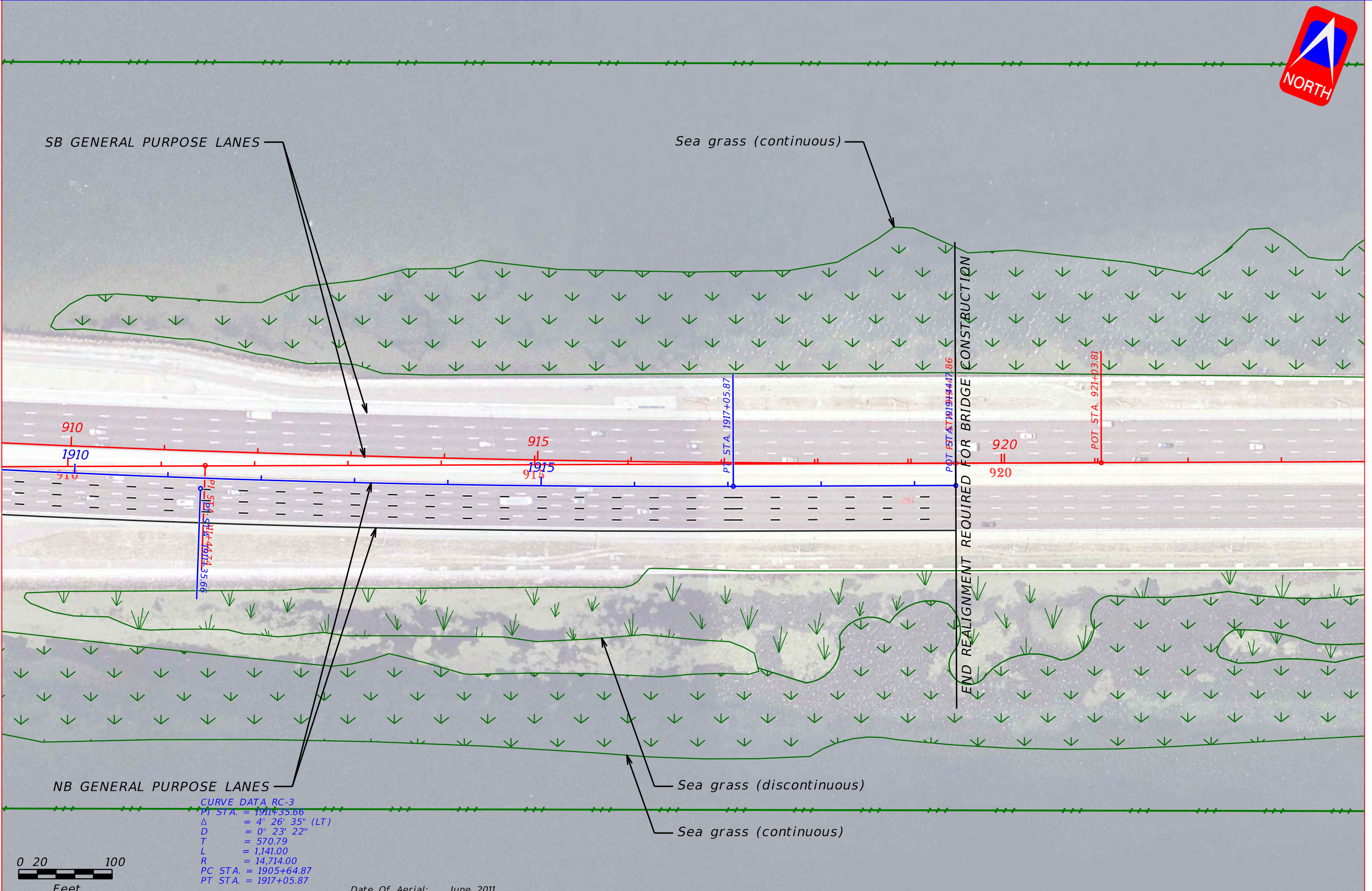
- Existing Right Of Way
- Existing Limited Access Right Of Way

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
Bridge Replacement
 (Only)
 Center Option

SHEET NO.
RC-1-5



SB GENERAL PURPOSE LANES

Sea grass (continuous)

910

915

920

1910

1915

920

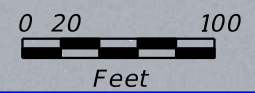
NB GENERAL PURPOSE LANES

Sea grass (discontinuous)

Sea grass (continuous)

END REALIGNMENT REQUIRED FOR BRIDGE CONSTRUCTION

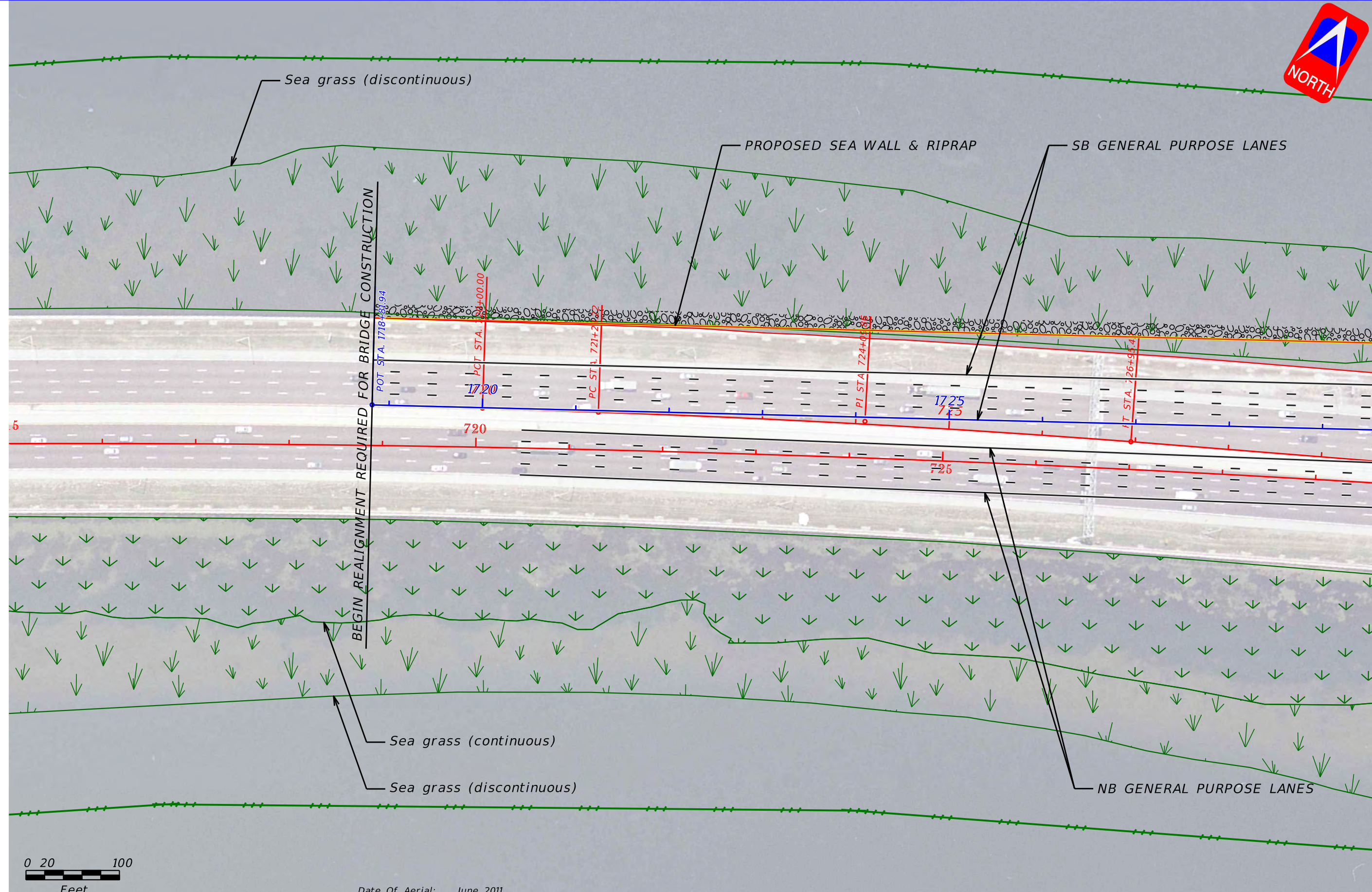
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 R = 14,714.00
 PC STA. = 1905+64.87
 PT STA. = 1917+05.87



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	Existing Limited Access Right Of Way		ROAD NO. COUNTY FINANCIAL PROJECT ID	Bridge Replacement (Only) Center Option		RC-1-6
			I-275 PINELLAS HILLSBOROUGH 422799-1-12-04			

Bridge Replacement Option B



Date Of Aerial: June 2011

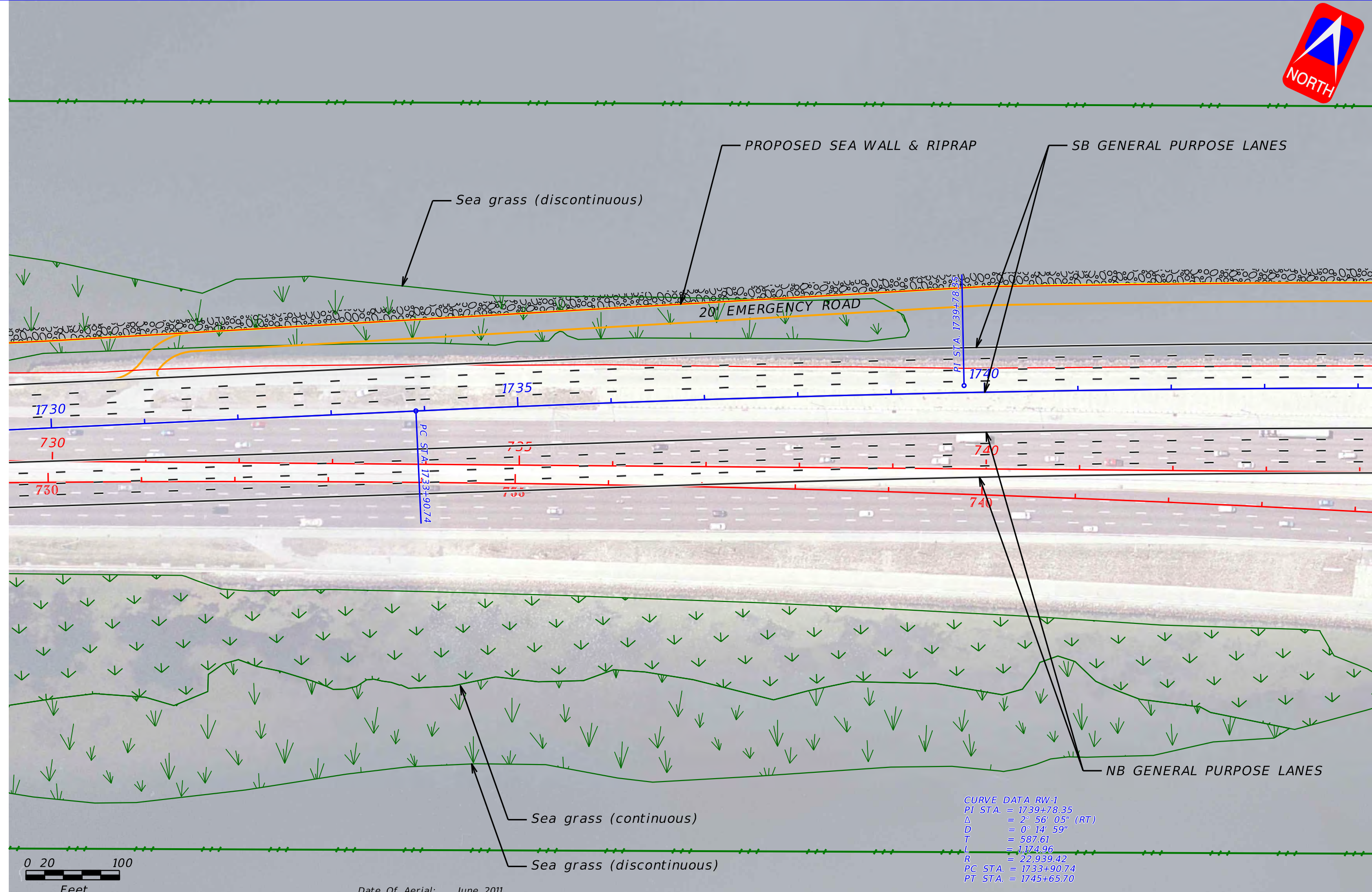
LEGEND	Existing Right Of Way
	Existing Limited Access Right Of Way

American Consulting Engineers of Florida, LLC.
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

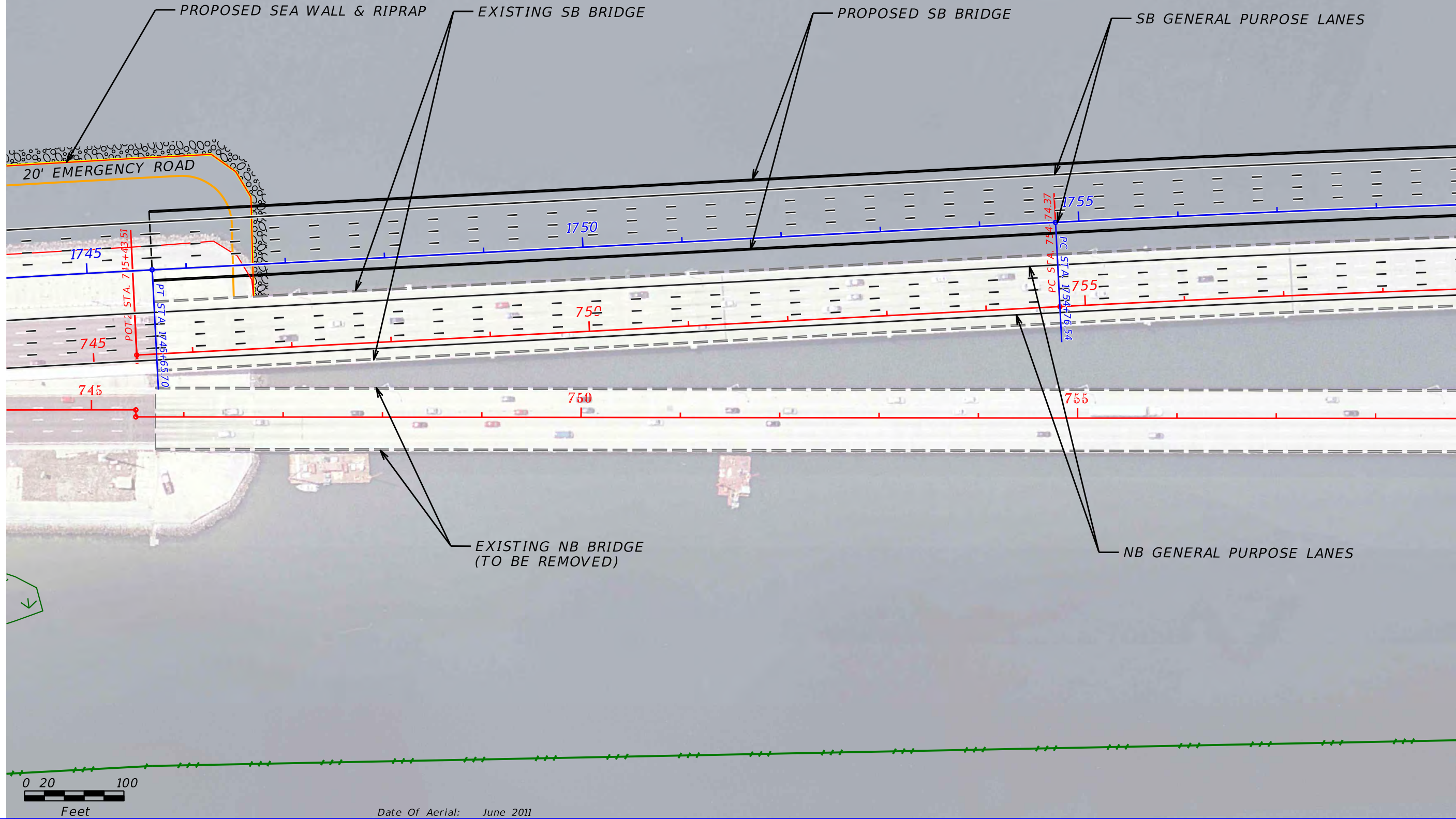
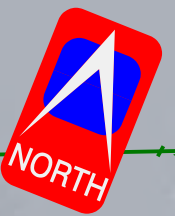
Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
Bridge Replacement
 (Only)
 West Option

SHEET NO.
RW-1-1

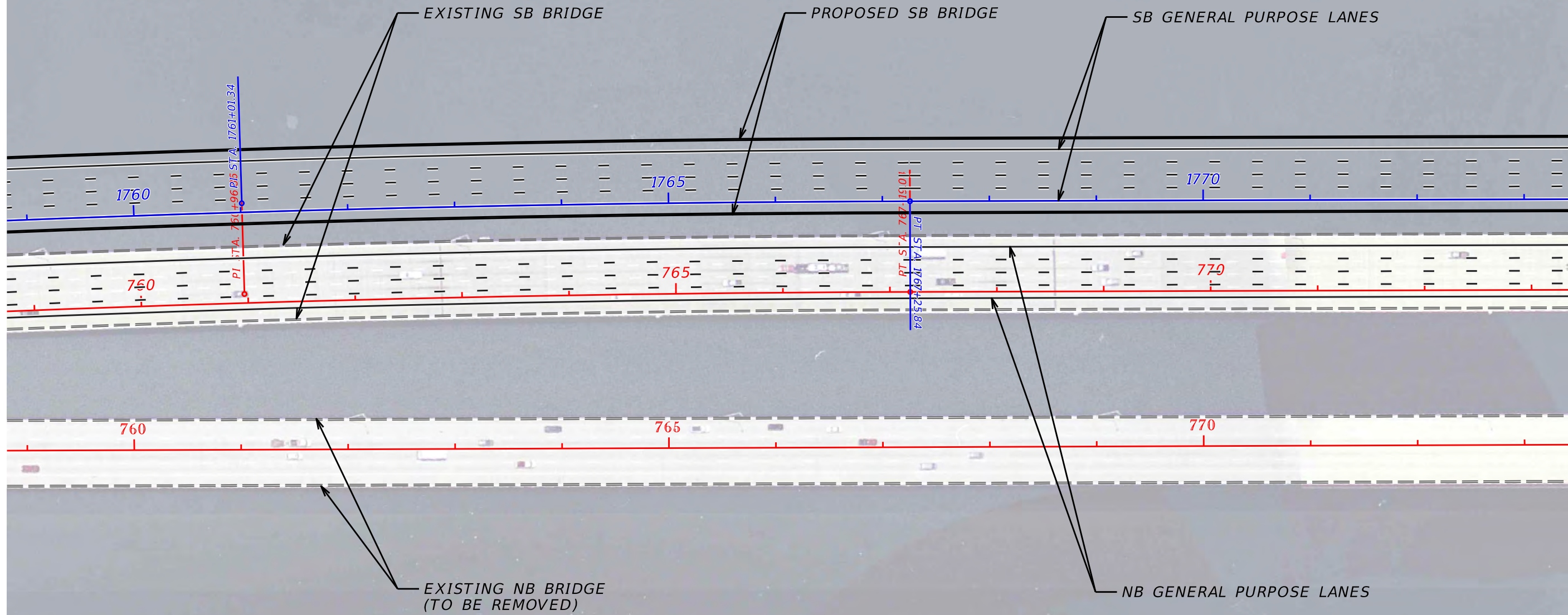


Date Of Aerial: June 2011

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	--- Existing Limited Access Right Of Way		ROAD NO.	COUNTY			FINANCIAL PROJECT ID
			I-275	PINELLAS HILLSBOROUGH			422799-1-12-04



LEGEND	--- Existing Right Of Way	American Consulting Engineers of Florida, LLC. 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Jeffrey S. Novotny, P.E. No. 51083	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		Northbound Howard Frankland Bridge Replacement (I-275/S.R. 93) PD&E Study Bridge Replacement (Only) West Option	SHEET NO.	
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 PT STA. = 1767+25.84



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	--- Existing Limited Access Right Of Way		ROAD NO.	COUNTY		FINANCIAL PROJECT ID	RW-1-4
			I-275	PINELLAS HILLSBOROUGH		422799-1-12-04	



SB GENERAL PURPOSE LANES

PROPOSED SB BRIDGE

EXISTING SB BRIDGE

85

1890

1895

85

890

895

85

890

895

NB GENERAL PURPOSE LANES

EXISTING NB BRIDGE
(TO BE REMOVED)

CURVE DATA RW-3
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 D = 0° 14' 57"
 T = 885.03
 L = 1,769.20
 R = 23,003.24
 PC STA. = 1885+84.95
 PT STA. = 1903+54.14



Date Of Aerial: June 2011

LEGEND

- Existing Right Of Way
- Existing Limited Access Right Of Way

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 Wesley Chapel, Florida 33544
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 Certificate of Authorization No. 9302
 Jeffrey S. Novotny, P.E. No. 51083

STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION

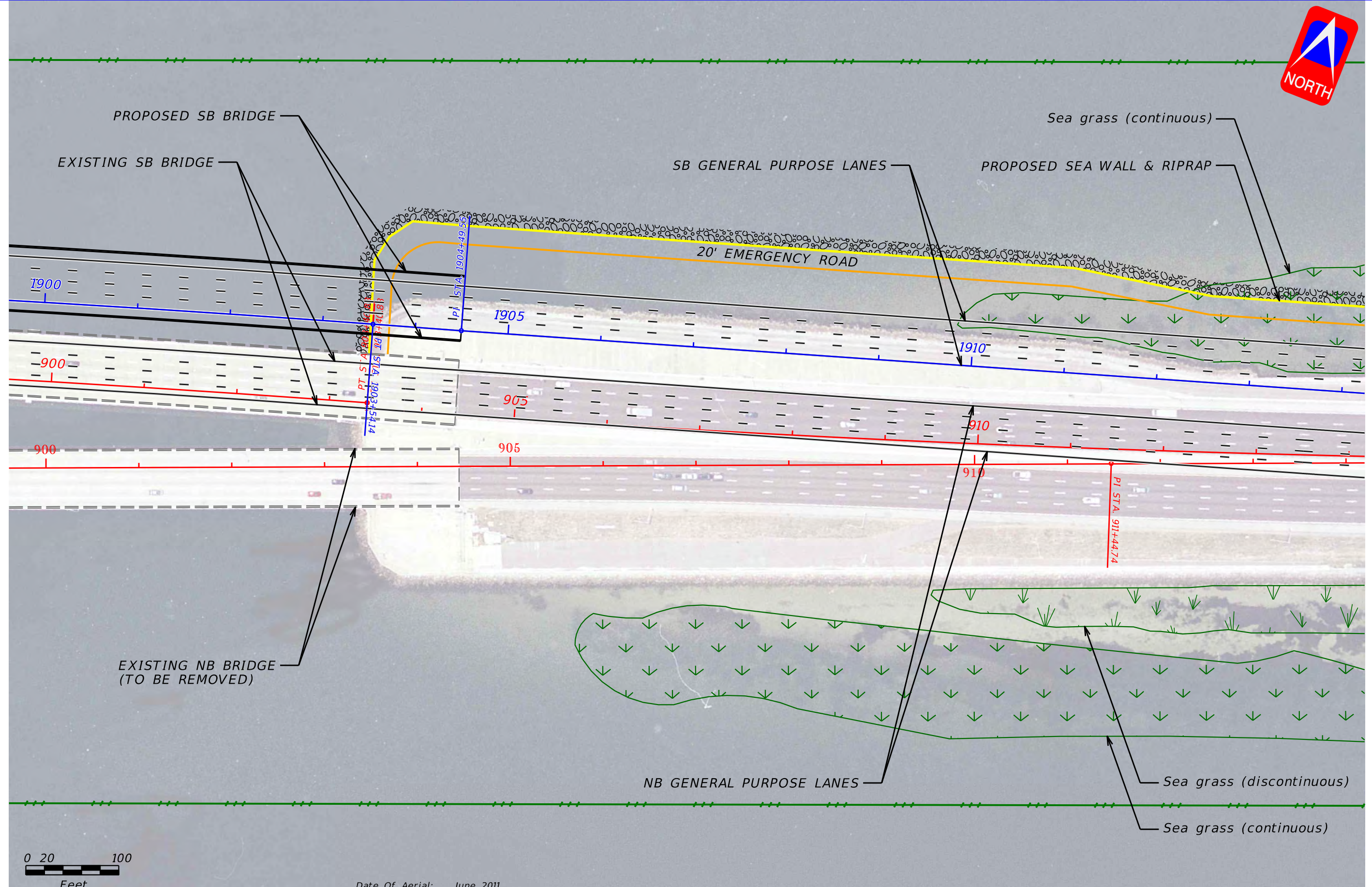
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study

Bridge Replacement
 (Only)
 West Option

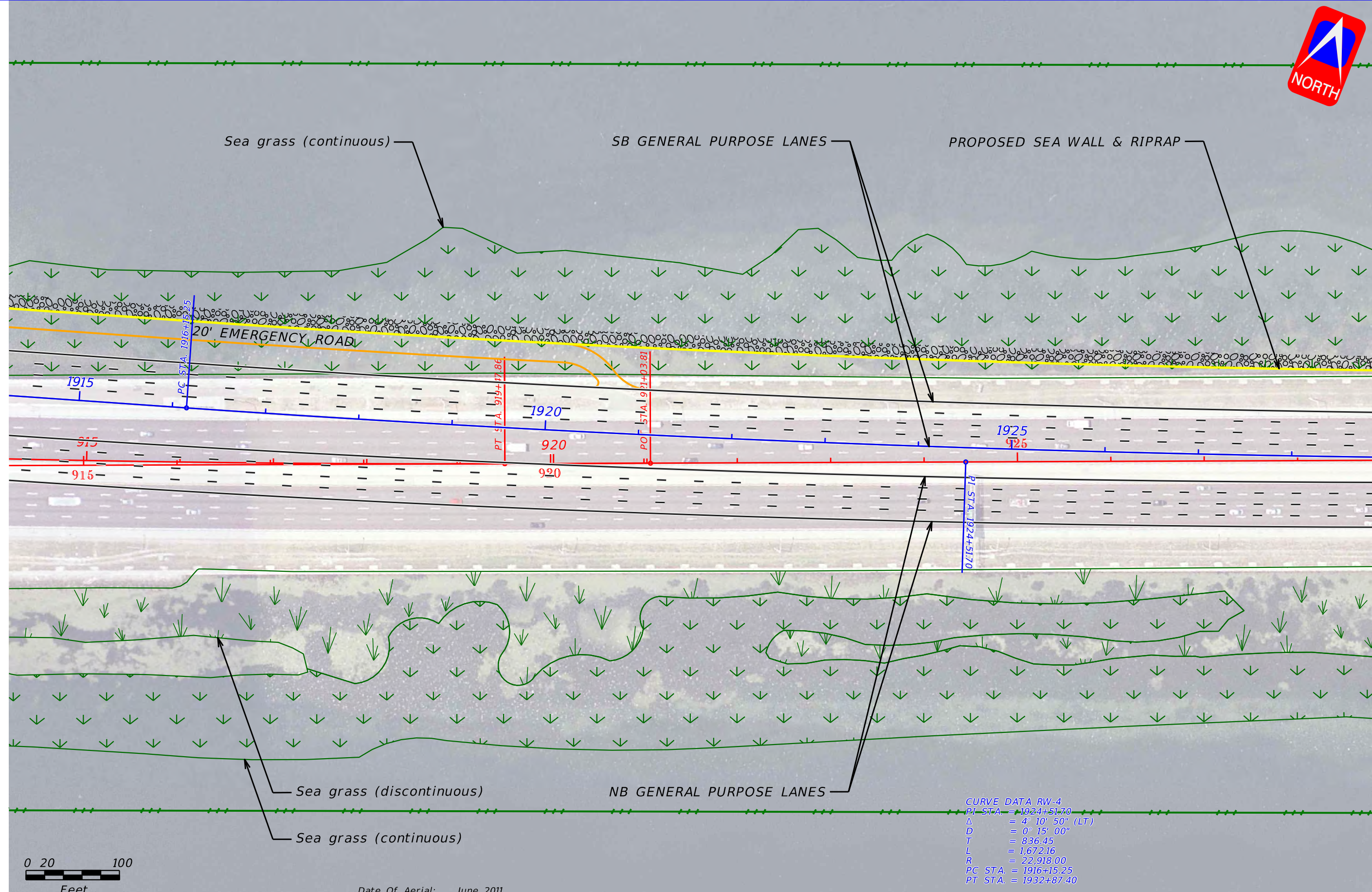
SHEET NO.

RW-1-5



Date Of Aerial: June 2011

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	Existing Limited Access Right Of Way		ROAD NO.	COUNTY		FINANCIAL PROJECT ID	RW-1-6
			I-275	PINELLAS HILLSBOROUGH		422799-1-12-04	
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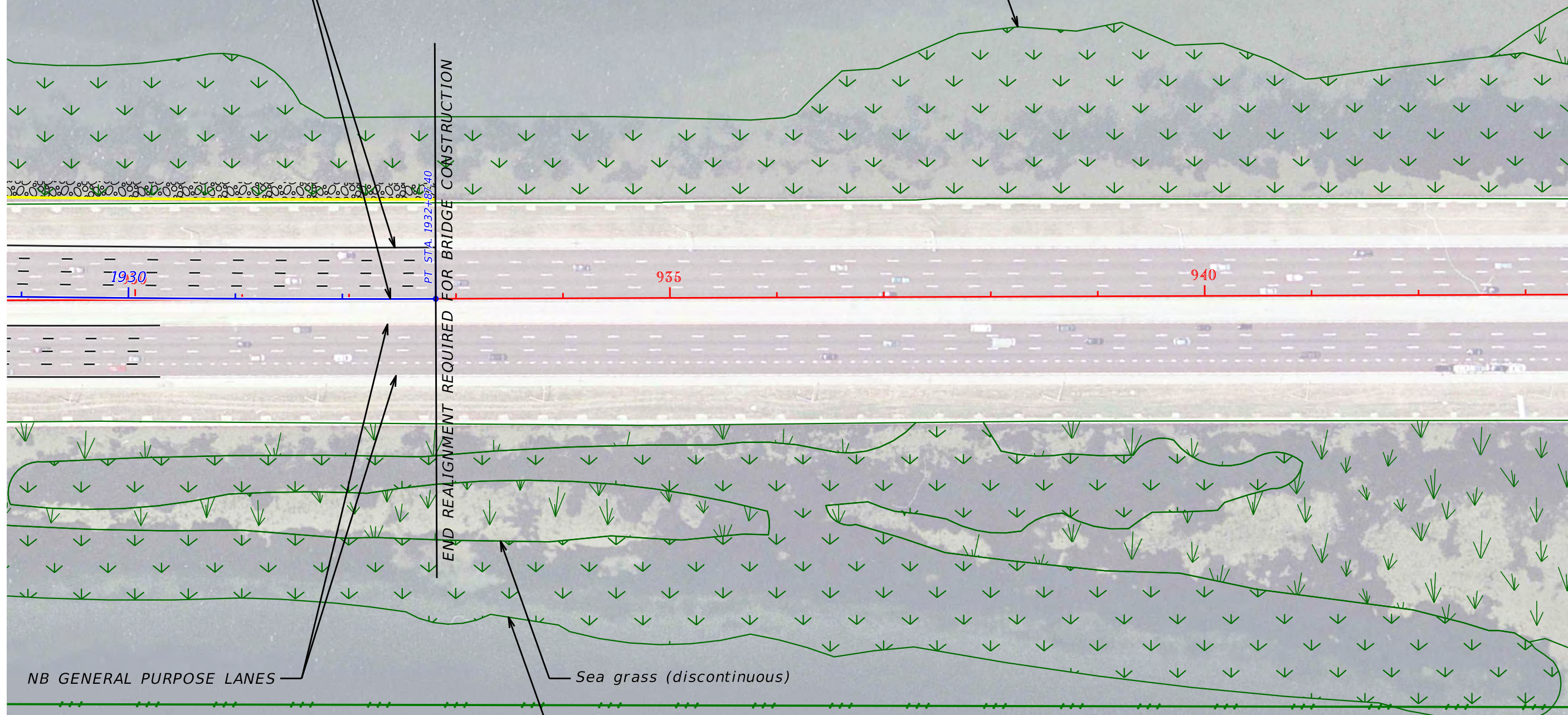
Date Of Aerial: June 2011

LEGEND	--- Existing Right Of Way	American Consulting Engineers of Florida, LLC. 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Jeffrey S. Novotny, P.E. No. 51083	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		Northbound Howard Frankland Bridge Replacement (I-275/S.R. 93) PD&E Study Bridge Replacement (Only) West Option	SHEET NO.	
	--- Existing Limited Access Right Of Way		ROAD NO.	COUNTY		FINANCIAL PROJECT ID	RW-1-7
			I-275	PINELLAS HILLSBOROUGH		422799-1-12-04	



SB GENERAL PURPOSE LANES

Sea grass (continuous)



END REALIGNMENT REQUIRED FOR BRIDGE CONSTRUCTION

PT STA. 1932+67.40

1930

935

940

NB GENERAL PURPOSE LANES

Sea grass (discontinuous)

Sea grass (continuous)



Date Of Aerial: June 2011

LEGEND

- Existing Right Of Way
- Existing Limited Access Right Of Way

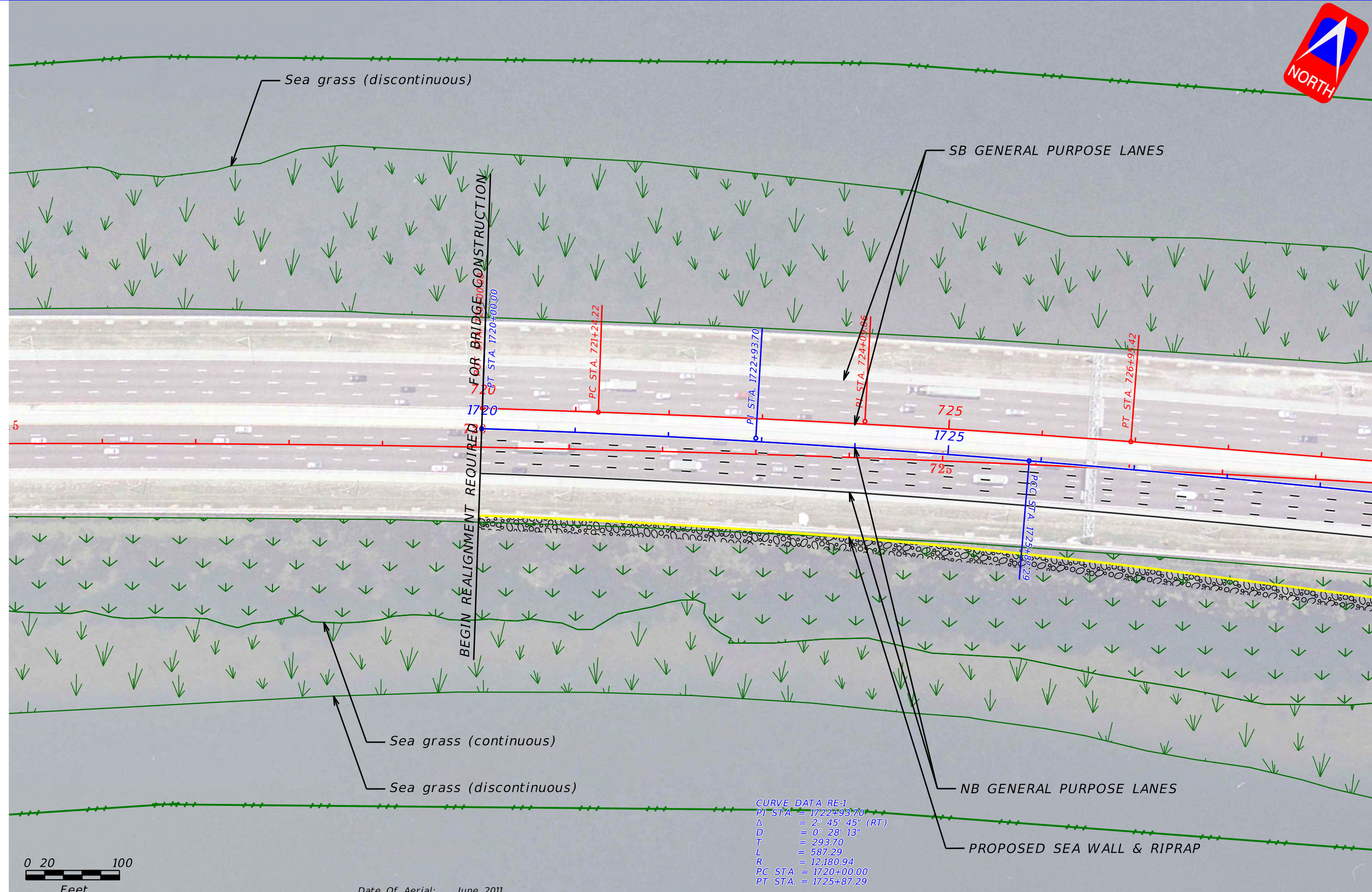
American Consulting Engineers of Florida, LLC.
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 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
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 Jeffrey S. Novotny, P.E. No. 51083

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
**Bridge Replacement
 (Only)
 West Option**

SHEET NO.
RW-1-8

Bridge Replacement Option C



CURVE DATA RE-1
 PI STA. = 1722+93.70
 Δ = 2° 45' 45" (RT)
 D = 0° 28' 13"
 T = 293.70
 L = 587.29
 R = 12,180.94
 PC STA. = 1720+00.00
 PT STA. = 1725+87.29

LEGEND	Existing Right Of Way
	Existing Limited Access Right Of Way

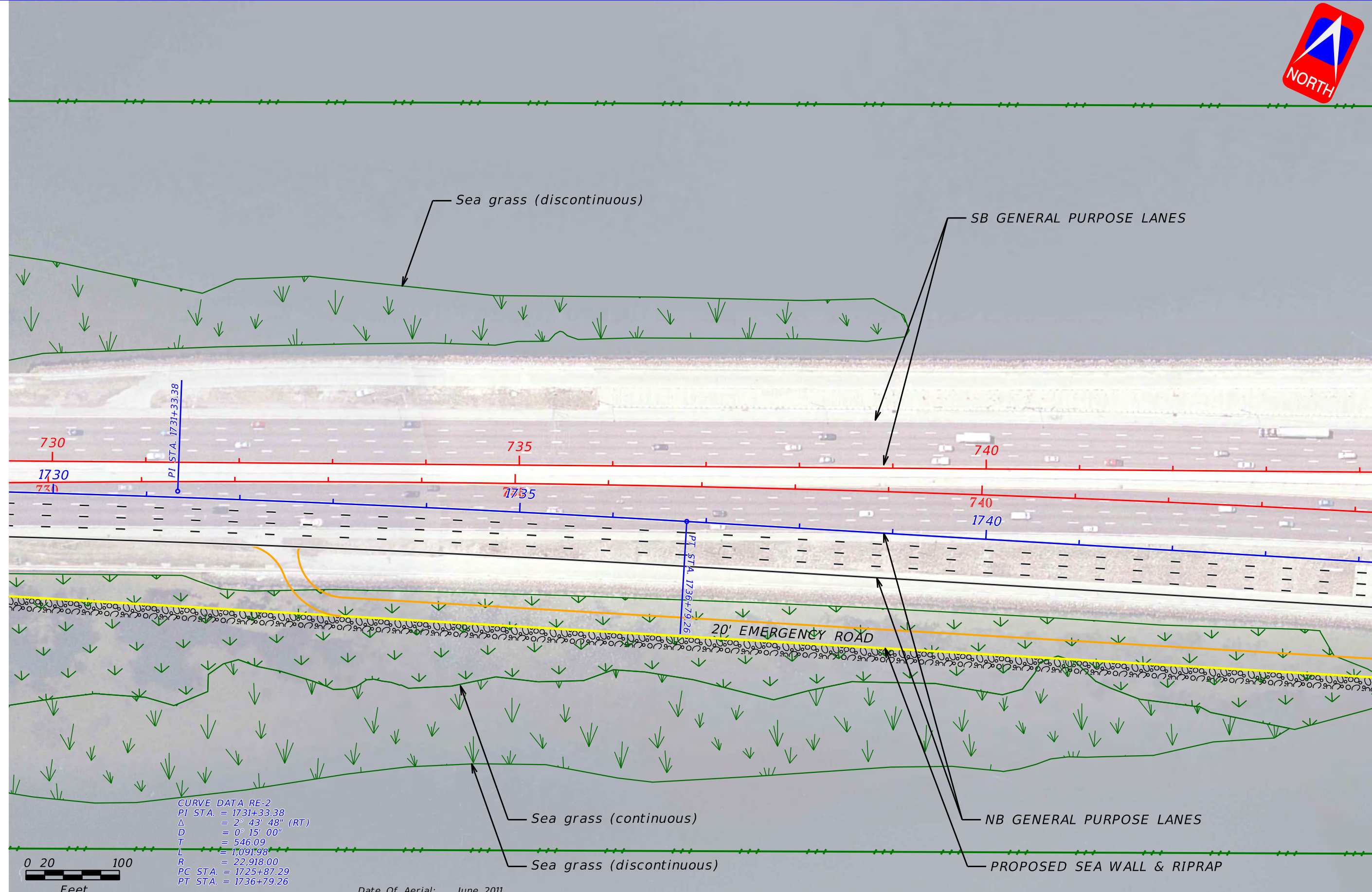
Date Of Aerial: June 2011

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
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I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
**Bridge Replacement
 (Only)
 East Option**

SHEET NO.
 RE-1-1



CURVE DATA RE-2
 PI STA. = 1731+33.38
 Δ = 2° 43' 48" (RT)
 D = 0° 15' 00"
 T = 546.09
 L = 1,091.98
 R = 22,918.00
 PC STA. = 1725+87.29
 PT STA. = 1736+79.26

Date Of Aerial: June 2011

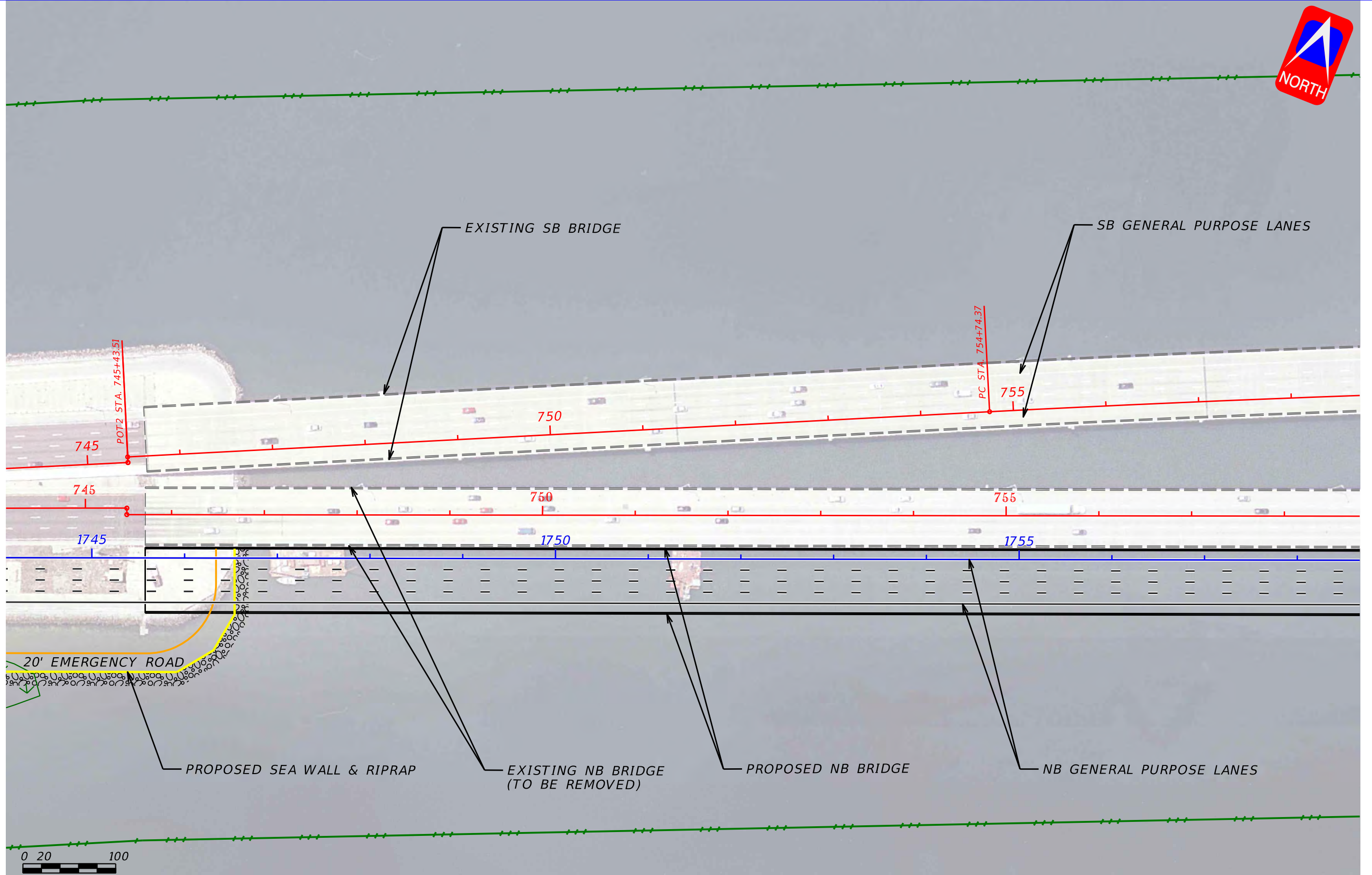
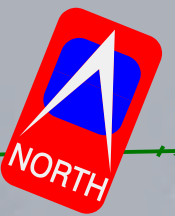
LEGEND	Existing Right Of Way
	Existing Limited Access Right Of Way

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Bridge Replacement
 (Only)
 East Option

SHEET NO.
RE-1-2



Date Of Aerial: June 2011

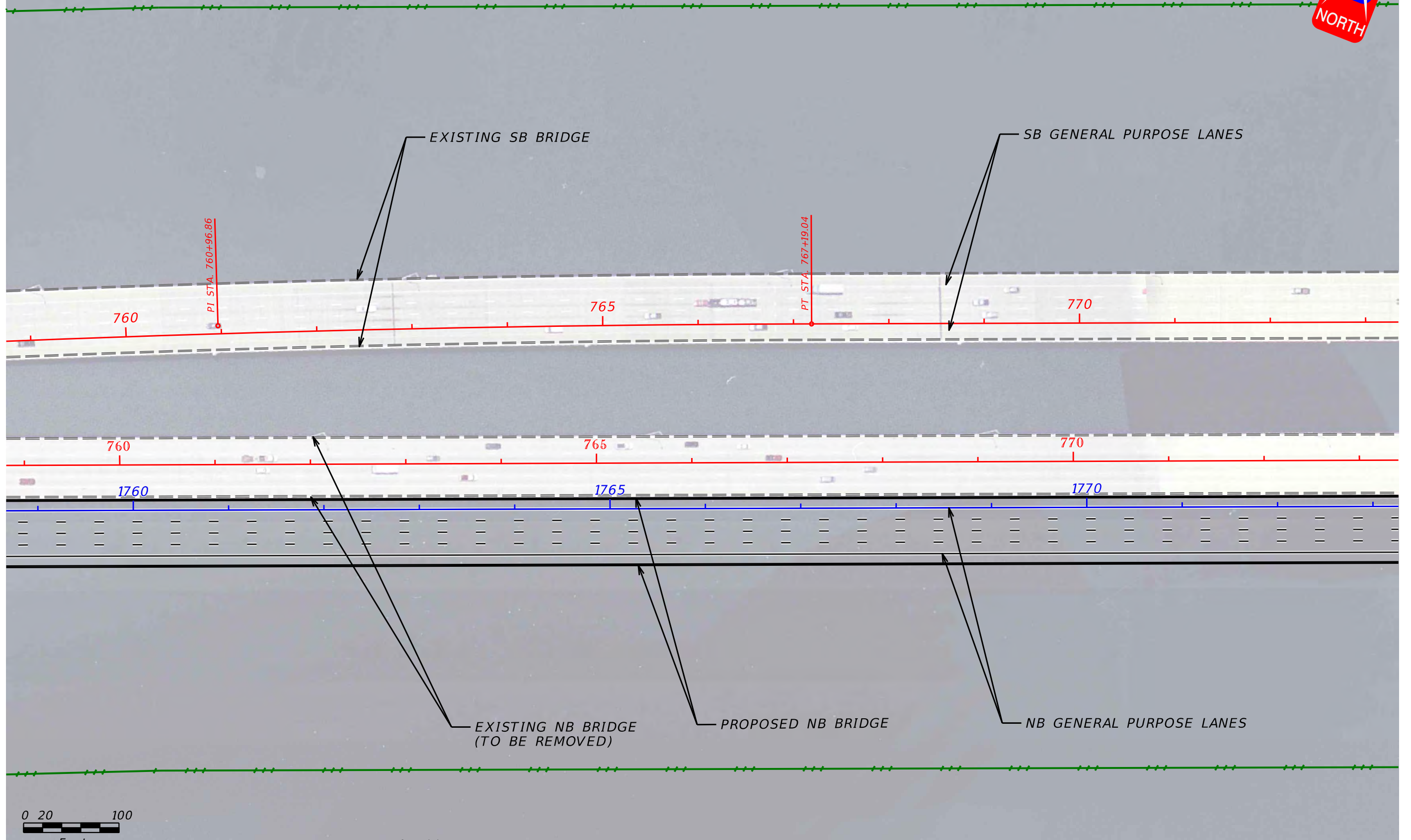
LEGEND		Existing Right Of Way
		Existing Limited Access Right Of Way

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 (Only)
 East Option

SHEET
NO.
RE-1-3



LEGEND

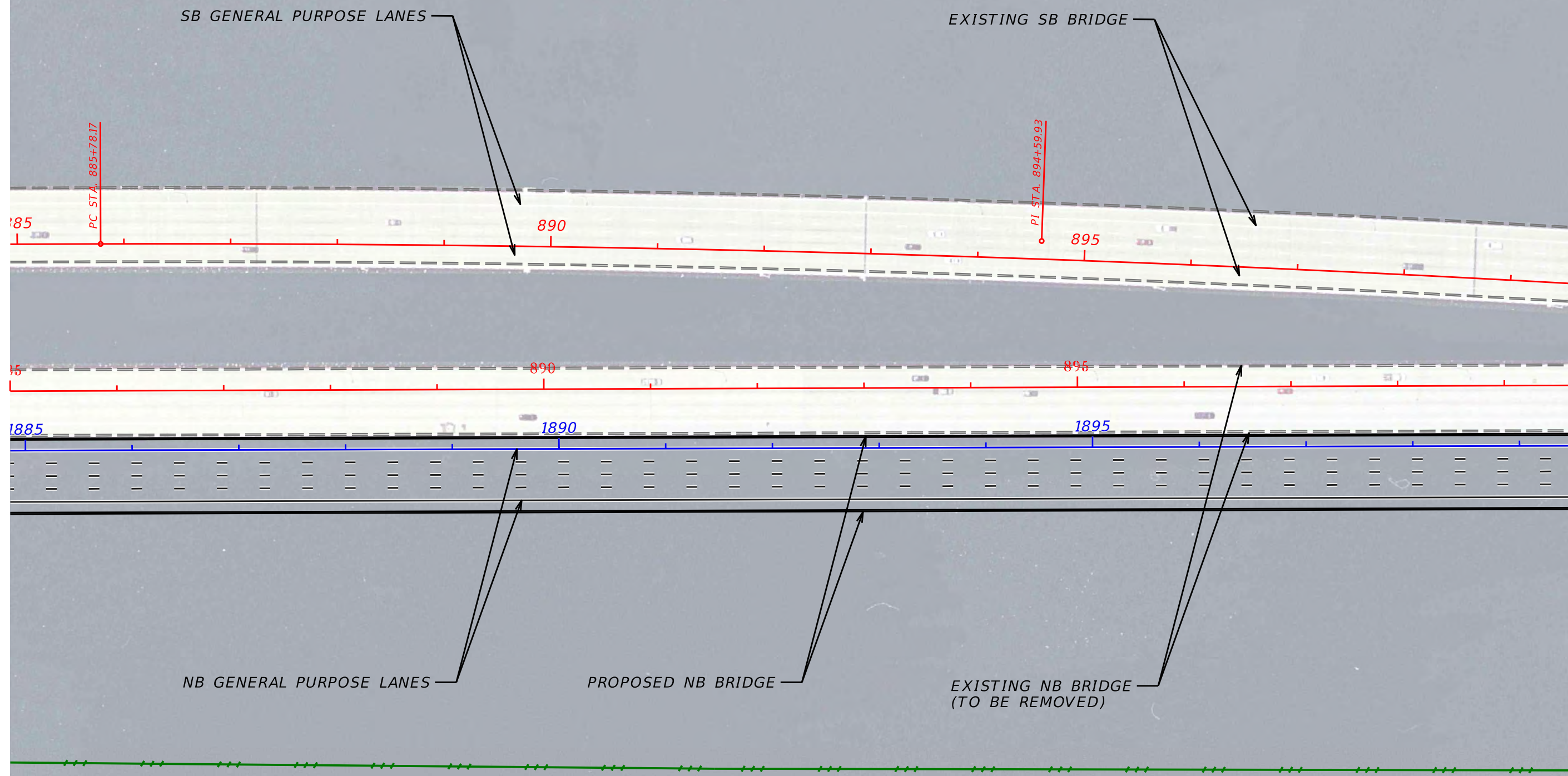
- Existing Right Of Way
- Existing Limited Access Right Of Way

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**Bridge Replacement
 (Only)
 East Option**

SHEET NO.
RE-1-4



Date Of Aerial: June 2011

LEGEND

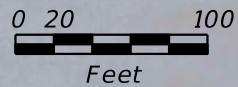
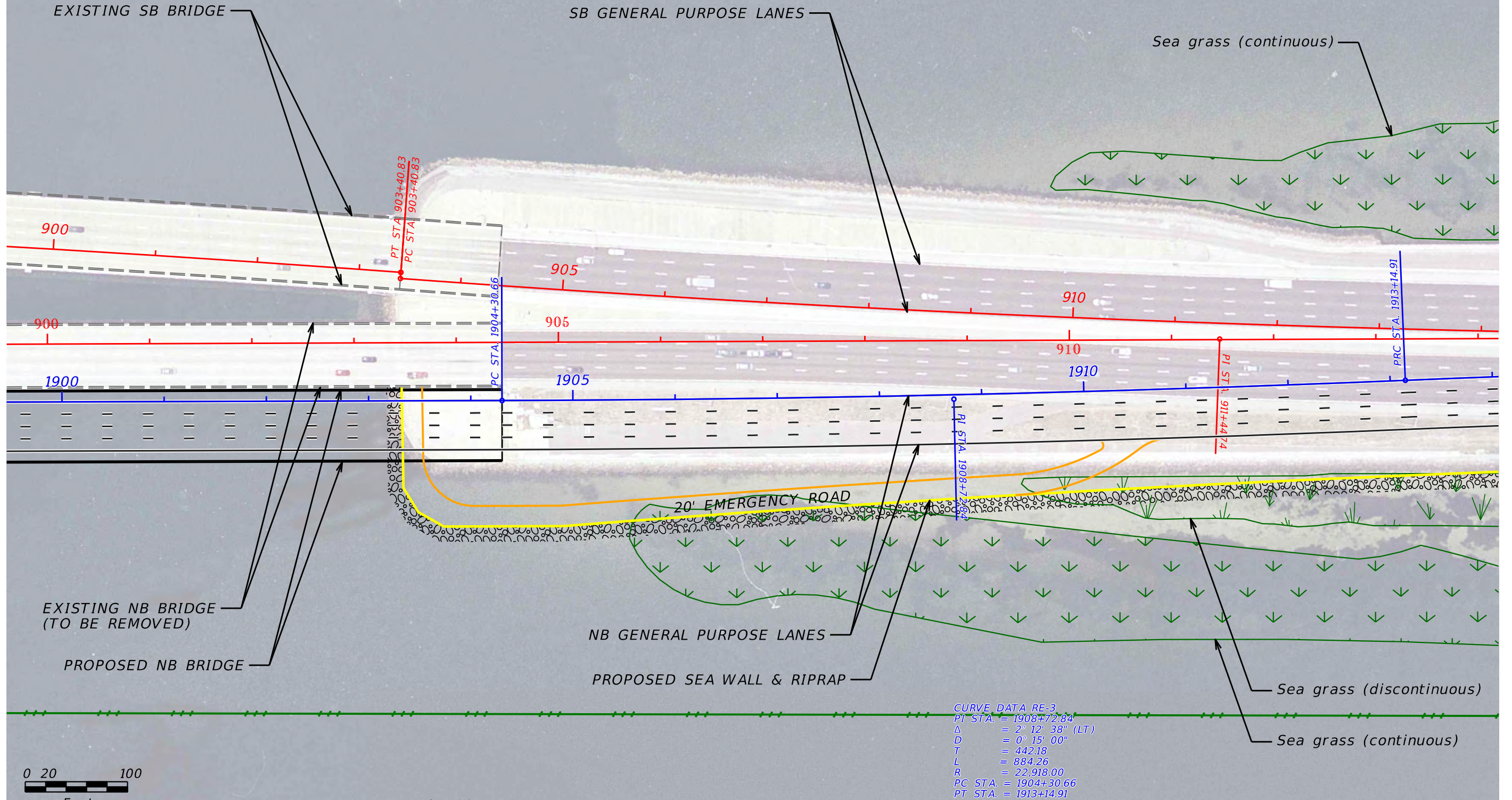
- Existing Right Of Way
- Existing Limited Access Right Of Way

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Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study
**Bridge Replacement
 (Only)
 East Option**

SHEET NO.
RE-1-5



Date Of Aerial: June 2011

LEGEND

- Existing Right Of Way
- Existing Limited Access Right Of Way

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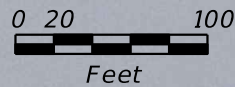
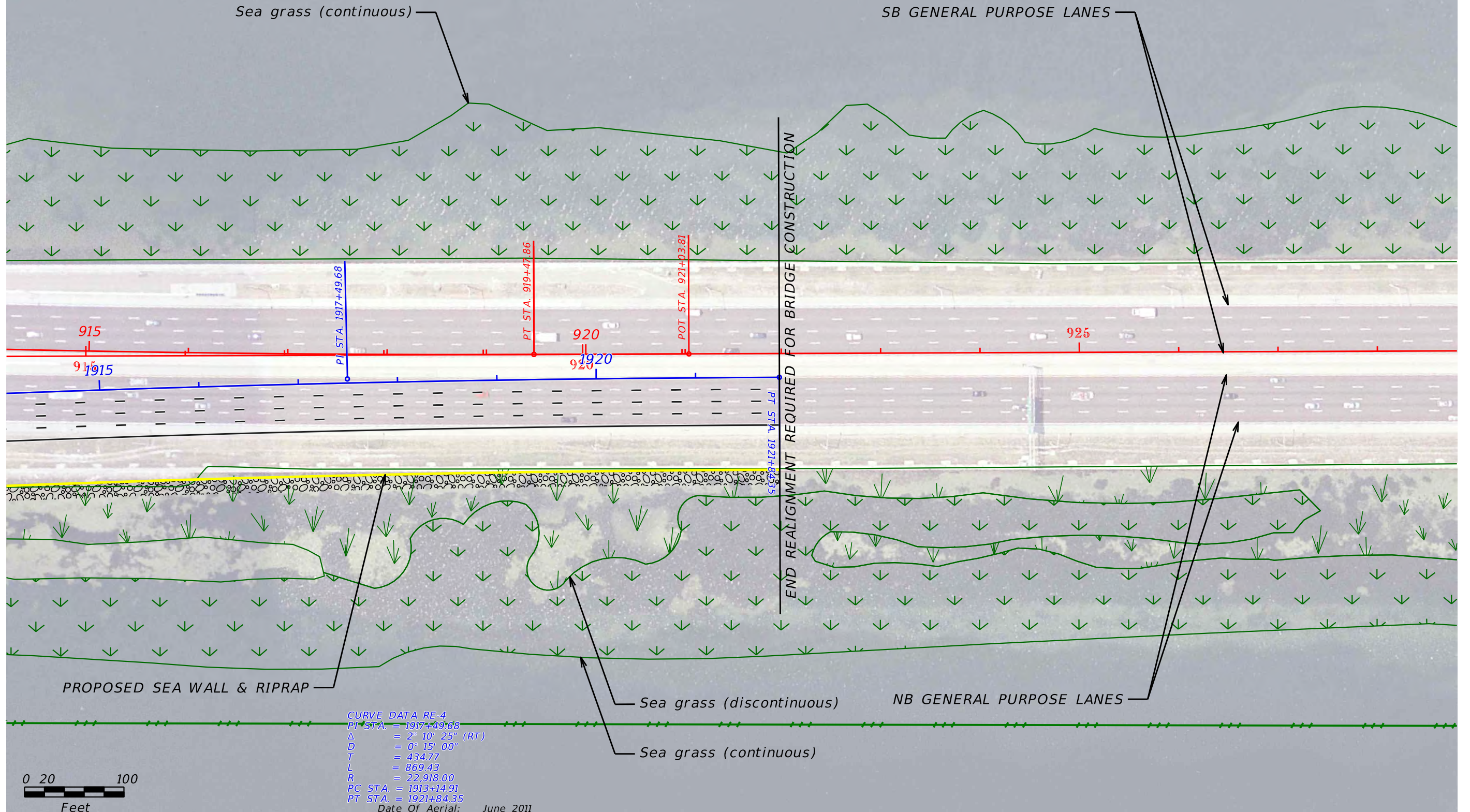
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
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I-275	PINELLAS HILLSBOROUGH	422799-1-12-04

Northbound Howard Frankland Bridge Replacement
 (I-275/S.R. 93) PD&E Study

**Bridge Replacement
 (Only)
 East Option**

SHEET NO.

RE-1-6



LEGEND

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 (I-275/S.R. 93) PD&E Study
**Bridge Replacement
 (Only)
 East Option**

SHEET NO.

RE-1-7

Bridge Replacement Option A

Appendix D

Project Photographs



Photo 1. View of bridge embankment and seawall.



Photo 2. View of bridge embankment and seawall with riprap.



Photo 3. View of terminus of bridge embankment.



Photo 4. View of bridge piers.



Photo 5. View of habitat between bridge spans.



Photo 6. View of seagrass (note darker signature in water).