
REAL ESTATE APPENDIX

**COLLIER COUNTY COASTAL STORM
RISK MANAGEMENT FEASIBILITY
STUDY**

COLLIER COUNTY, FLORIDA

APPENDIX E

JULY 2020



**U.S. Army Corps
of Engineers
Norfolk District**

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Attachments:

- Exhibit “A” Project Real Estate Map
- Exhibit “B” Non Federal Sponsor Capability Assessment
- Exhibit “C” Joint Coastal Permit

1.0 STATEMENT OF PURPOSE

This Real Estate Plan (REP) is presented in support of the Collier County, Florida Coastal Storm Risk Management Project, and describes the real estate required to implement the project. The purpose of the Real Estate Plan is to identify the lands, easements, rights-of-way, relocations, and disposals (LERRD) necessary to support construction, operation and maintenance of the proposed project elements described in the Feasibility Report, and to outline the costs and real estate considerations associated with project implementation.

This report is preliminary and written to the level of detail of the main report, other details may be added and is intended for planning purposes only. Both the final real property lines and land value estimates are subject to change even after approval of this report. There may be modifications to the plans that occur during Pre-construction, Engineering and Design (PED) phase, thus changing the final acquisition area(s) and/or administrative and land costs.

1.1 STUDY AUTHORIZATION

The study authority lies in Section 4033 of the Water Resources Development Act of 2007 (Public Law 110-114).

“The Secretary shall conduct a study to determine the feasibility of carrying out a project for hurricane and storm damage reduction and flood damage reduction in the vicinity of Vanderbilt, Park Shore, and Naples beaches, Collier County, Florida.”

Per the Assistant Secretary of the Army for Civil Works (ASA CW) memorandum dated 9 AUG 2018, Subject: Policy Guidance on Implementation of Supplemental Appropriations in the Bipartisan Budget Act of 2018, for feasibility studies (including General Reevaluation Studies), a new feasibility cost sharing agreement (FCSA) or an amendment to the existing FCSA is required to address use of Supplemental Investigations funds at 100 percent federal expense. Additionally this guidance states, studies funded by Public Law 115-123 will be undertaken in accordance with existing Civil Works policies and guidance and incorporate SMART Planning principles.

1.2 PROJECT LOCATION

The study area includes all land and water resources reasonably deemed to be within the vicinity of Vanderbilt, Park Shore, and Naples beaches and inland bay areas, as well as Marco Island, provided they are located entirely within the jurisdictional boundary of Collier County, FL. Collier County is located on the southwest coast of Florida, approximately 120 miles south of the entrance to Tampa Bay and about 100 miles north of Key West. Naples is the largest city located along the shoreline, followed by the City of Marco Island and Everglades City. Collier County is bordered by Lee and Hendry Counties to the North, Monroe County to the South, and Broward and Miami-Dade Counties to the east. The study area is comprised of two main components: the North County and Marco Island. These two areas are geographically noncontiguous and hydrologically separable, however they were formulated using the same strategy and management measures.

1.2.1 North County Area

In the North County there is a continuous Gulf-facing beach running from the county line in the north, to the Gordon River in the south. Also from north to south, there are several named inlets including Wiggins Pass, Clam Pass, Doctors Pass, and Gordon Pass. These inlets were foci for developing measures for the inland bay areas. Wiggins Pass is the hydrologic link between the Gulf of Mexico and the Cocohatchee River, the Wiggings Pass Estuarine Area, Turkey Bay, and Vanderbilt Lagoon. Clam Pass links the Gulf to Outer Clam Bay and Inner Clam Bay. Doctors Pass is hydrologically partnered with Venetian Bay. Gordon Pass is the terminus of the Gordon River and is hydrologically linked to Naples Bay, the Upper Gordon River, as well as Rock Creek. Beyond Gordon Pass in the south is a relatively undeveloped Natural area that is not included in the study area. This Natural area stretches down to Marco Island and is the Keewaydin Island reach of the Rookery Bay National Estuarine Research Reserve.

1.2.2 Marco Island Area

Marco Island is a highly developed, low-lying barrier island that also has public Gulf-facing beach along South Marco. Hideaway Beach (private) and the Tigertail Natural Area, located on the northwest side of the island, are not part of the study area. The inland bays of Marco Island, along with the adjacent Big Marco and Caxambas Passes are used almost exclusively for recreational fishing and boating and do not contain a Federal channel. Marco Island is bordered on the north, east, and south by the Rookery Bay National Estuarine Research Reserve. For the purposes of this study, the Marco Island Area also includes the surrounding communities of Isles of Capri, Goodland, and Everglades City.

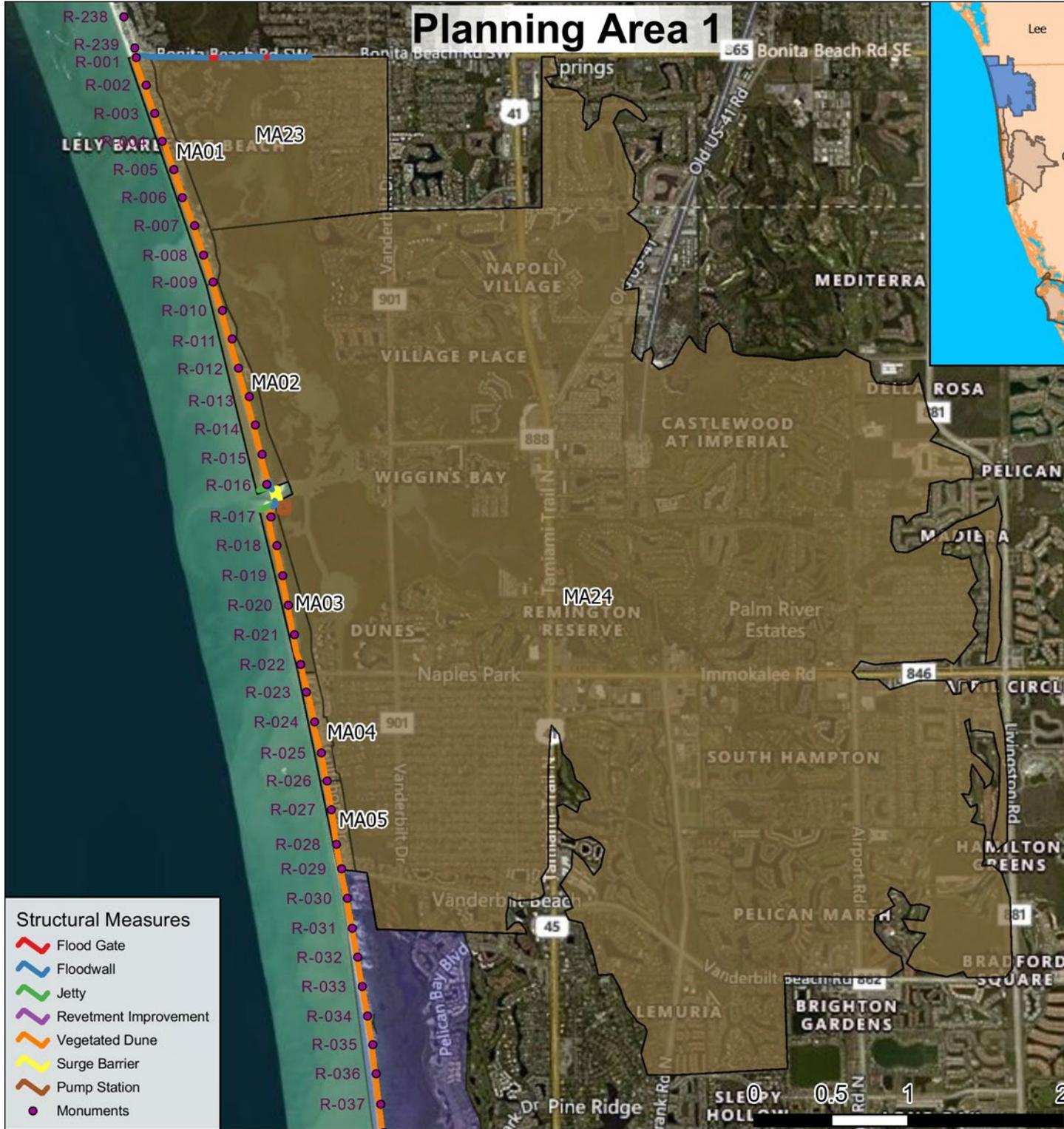
1.3 PROJECT DESCRIPTION

The Collier County Coastal Storm Risk Management (CSRSM) Study has investigated potential structural and nonstructural solutions to reduce the inherent risks of coastal storms across the County. Coastal storm risk management seeks to address coastal storm and flood risk to vulnerable populations, property, ecosystems, and infrastructure along the coast. Collier County, Florida has high levels of risk and vulnerability to coastal storms which will be exacerbated by the compound effects of sea level rise and climate change over the study period. Also of noteworthy interest, Collier County has been executing their own coastal resilience program since 1996; completing beach nourishments in 2006, 2014, and 2016. There is not an existing Federal beach nourishment project in the study area.

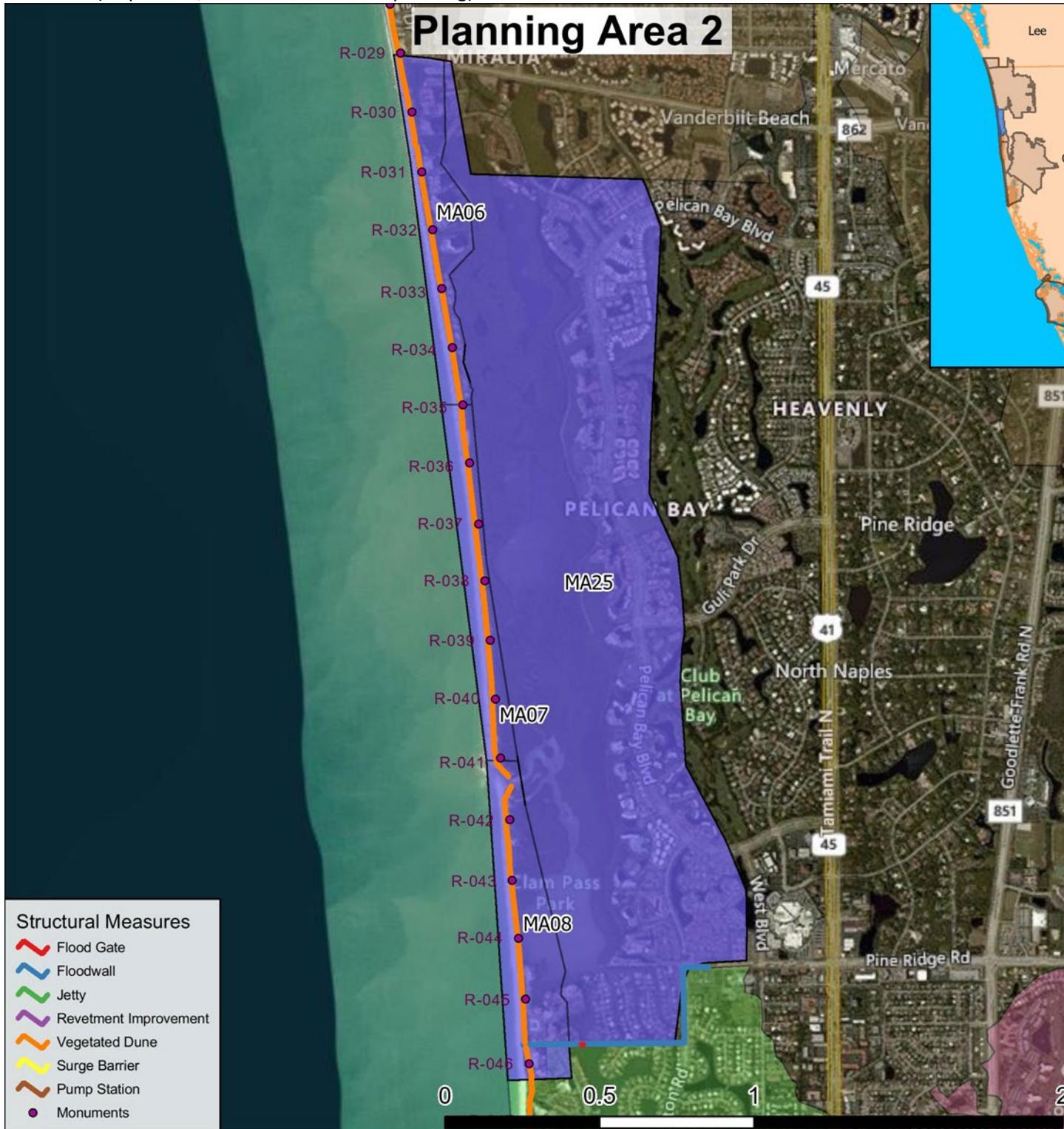
2.0 DESCRIPTION OF LANDS, EASEMENTS, RIGHT OF-WAY (LER)

Four alternative plans are being proposed in this study, these alternatives are combinations of six different planning areas. The planning areas are as follows:

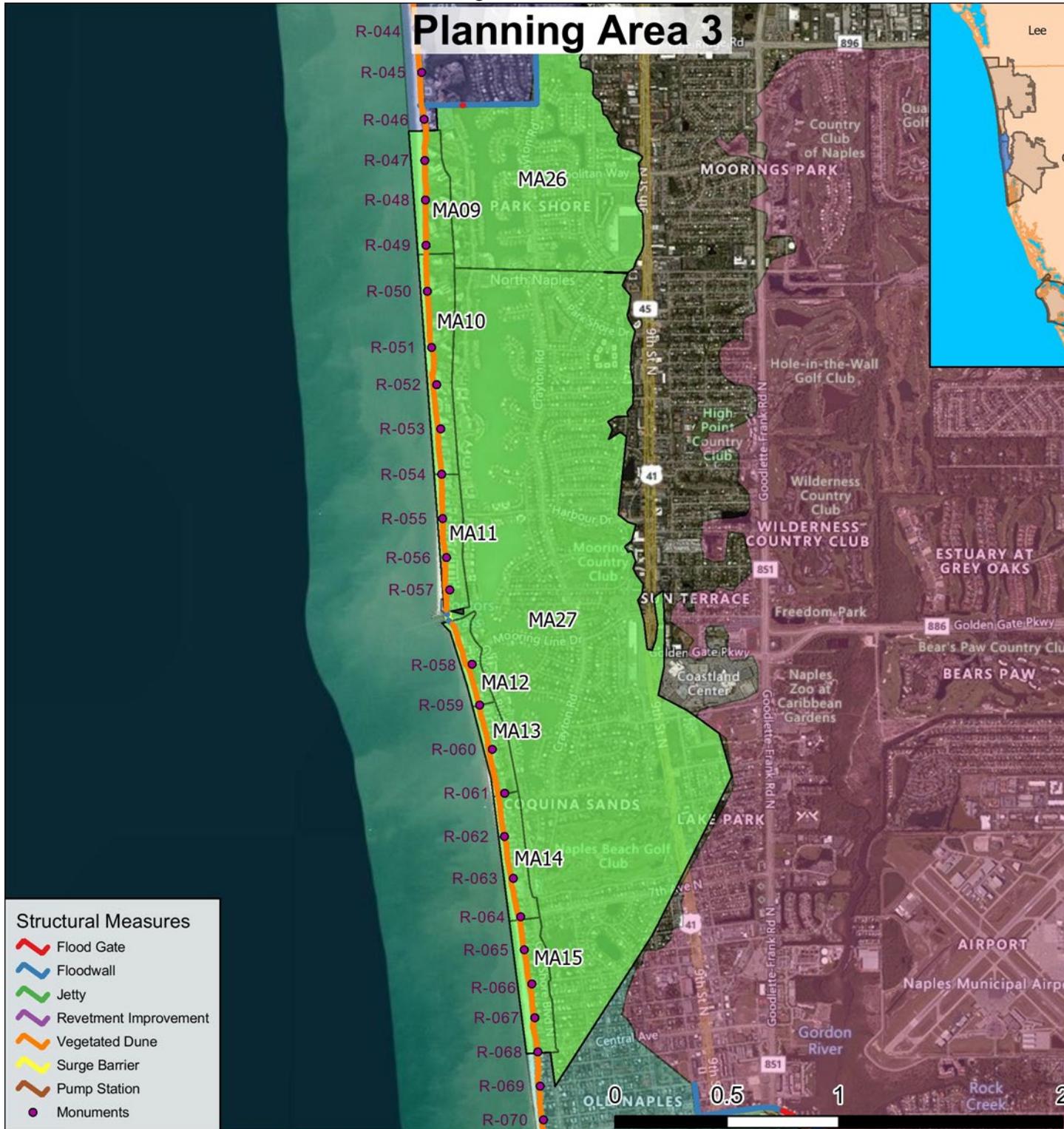
Planning Area 1: Vanderbilt Beach Berm and Dune, Wiggins Pass Beach Berm and Dune, Bonita Beach Road Floodwall and Tide Gates and Wiggins Pass Surge Barriers



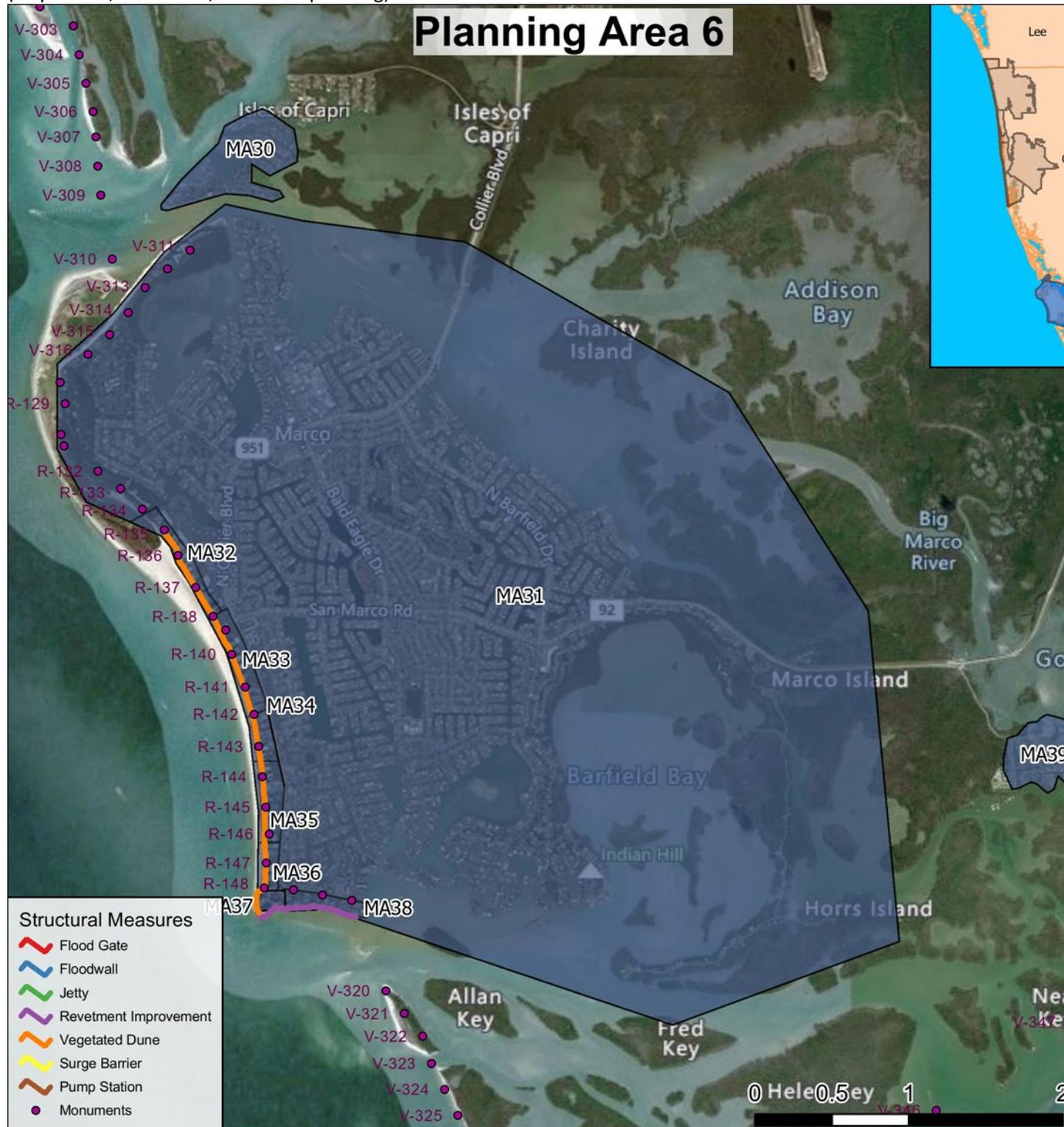
Planning Area 2: Pelican Bay Beach Berm and Dune, Clams Pass Beach Berm and Dune, Non Structural (acquisition, elevations and flood-proofing)



Planning Area 3: Park Shore Beach Berm and Dune, Naples Beach Berm and Dune, Seagate Drive Floodwall and Sluice Gate, and Doctors Pass Surge Barriers



Planning Area 6: Marco Island Beach Berm and Dune, Revetment, and Non Structural (acquisition, elevations, and flood-proofing)



ALT 1: Beach Only: This alternative is for shoreline protection for the coastline utilizing vegetated dunes. This alternative is comprised of all the Beach area within the planning areas. There are approximately 386 private land tracts that will be impacted and 27 publically owned tracts. This will require approximately 270.41 acres of Perpetual Beach Storm Damage Reduction Easements. Collier County has an existing lease for the borrow area.

ALT 2: Beach and Structural Measures. This alternative is for shoreline protection for the coastline utilizing vegetated dunes and structural measures such as floodwalls, gates, surge barriers and jetties strategically placed to protect the back-bay. There are approximately 766 private land tracts that will be impacted and 27 publically owned tracts. This will require approximately 279.16 acres of Perpetual Beach Storm Damage Reduction Easements, 26.42 acres of Flood Protection Levee Easements, 7.09 acres of Temporary Work Easements (TWAE) and 5.28 acres of Fee interest. To complete the beach dunes, Collier County has an existing lease for the borrow area.

ALT 3: Beach and Non Structural Measures. This alternative is for shoreline protection for the coastline utilizing vegetated dunes and non-structural measures such as flood-proofing, elevating and buyouts. There are approximately 29,097 privately owned land tracts that will be impacted and 27 publically owned tracts. This will require approximately 270.41 acres of Perpetual Beach Storm Damage Reduction Easements, 23,410 Right of Entries for flood-proofing and elevation, and 1,310 buyouts. To complete the beach dunes, Collier County has an existing lease for the borrow area.

ALT 4: This is a mixture of the proposed measures as well. It includes, Planning Area 1 (PA1) Beach Berm and Dune, Bonita Beach Rd. Floodwall and Tide Gates, Wiggins Pass Surge Barrier, PA3 Beach Berm and Dune, Seagate Drive Floodwall and Sluice Gates, Doctors Pass Surge Barrier, PA 5 Tamiami Trail Floodwall and Tide Gates and PA2 and PA6 Nonstructural (flood-proofing, elevation and buyouts). This will require approximately 136.12 acres of Perpetual Beach Storm Damage Reduction Easements, 26.01 acres of Flood Protection Levee Easements, 6.59 acres of Temporary Work Area Easement (TWAE), 5.28 acres of Fee Interest, 1,970 Right of Entries for flood-proofing and elevation and 130 buyouts. To complete the beach dunes, Collier County has an existing lease for the borrow area. **This Alternative is currently the Tentatively Selected Plan (TSP).**

2.1 STRUCTURAL

Planning Area 1 (PA1) includes several structural measures formulated to hydraulically isolate upland structures from the effects of coastal storms, including surge. Because of this strategy the extents of PA1 were defined through a drainage analysis, which gave the planning area its unique shape. The structural measures included are the Wiggins Pass surge barrier, Bonita Beach Road floodwall, and the two Bonita Beach Road floodgates. A higher beach dune and beach berm are also included in PA1 from the northern County line (approximately at Florida DEP range monument 1 (R1)) through Vanderbilt Beach (approximately R29).

Planning Area 3 (PA3) is the second area containing structural measures and includes the Seagate Drive floodwall and floodgate, as well as the Doctors Pass surge barrier. Additionally PA3 includes a higher beach dune and beach berm from Park Shore to Naples Beach (approximately R46-R68). Similar to PA1, the boundary for PA3 was determined through drainage analysis.

Planning Area 5 (PA) is the third area containing structural measures including the Tamiami Trail floodwall and floodgates. Like PA1 and PA3, the extents of PA5 were determined using drainage analysis. The boundary of PA5, similar to the other planning area boundaries, includes all ground elevations greater than or equal to the maximum top of wall heights for structural measures. This

ensured all structures with first floor elevations less than or equal to the design heights were included in the structure inventory, thereby providing a consistent level of risk reduction across the entire study area.

Table 1 Structural LERRD

Structure Name	Estate Required	Acres	Lands & Damages	NFS Real Estate Admin
Barefoot Beach Vegetated Dune and Berm	Perpetual Beach Storm Damage Reduction Easement	84.12	\$31,066,083	\$520,000
Vanderbilt Beach Vegetated Dune and Berm	Perpetual Beach Storm Damage Reduction Easement	9.61	\$27,291,118	\$448,000
Wiggins Pass Vegetated Dune and Berm	Perpetual Beach Storm Damage Reduction Easement	1.76	\$187,004	\$24,000
Bonita Beach Floodwall and Gates	Flood Protection Levee Perpetual Easement	5.36	\$509,823	\$140,000
Bonita Beach Floodwall and Gates	Temporary Work Area Easement	2.0	\$266,303	\$44,000
Wiggins Pass Floodwall and Jetty	Fee Interest	1.26	\$0	\$0
Wiggins Pass Floodwall and Jetty	Flood Protection Levee Perpetual Easement	8.19	\$422,041	\$8,000
Wiggins Pass Floodwall and Jetty	Temporary Work Area Easement	.39	\$0	\$0
Wiggins Pass Pump Station and Jetty	Fee Interest	2.04	\$0	\$0
Wiggins Pass Pump Station and Jetty	Temporary Work Area Easement	.01	\$0	\$0
Park Shore Beach Vegetated Dune and Berm	Perpetual Beach Storm Damage Reduction Easement	8.66	\$601,410	\$56,000
Naples Beach Vegetated Dune	Perpetual Beach Storm Damage	31.97	\$36,118,249	\$424,000

and Berm	Reduction Easement			
Doctors Pass Surge Barrier and Floodwall	Flood Protection Levee Perpetual Easement	4.34	\$129,939	\$28,000
Doctors Pass Surge Barrier and Floodwall	Temporary Work Area Easement	1.33	\$40,586	\$28,000
Doctors Pass Surge Barrier and Floodwall	Fee Interest	0.2	\$6,005	\$30,000
Seagate Floodwall and Gate	Flood Protection Levee Perpetual Easement	1.76	\$677,681	\$42,000
Seagate Floodwall and Gate	Temporary Work Area Easement	0.38	\$484,182	\$30,000
Tamiami Trails Pump Station	Fee Interest	1.78	\$2,735,926	\$30,000
Tamiami Trail and Gordon River Floodwall and Gate	Flood Protection Levee Perpetual Easement	6.36	\$8,807,831	\$354,000
Tamiami Trail and Gordon River Floodwall and gate	Temporary Work Area Easement	2.48	\$2,270,337	\$100,000

2.2 NONSTRUCTURAL

The chosen alternative currently includes the below approximate quantities of structures. The number of homes actually getting elevated depends on their eligibility and the owners voluntarily electing to raise their home. Nonresidential structure numbers are also expected to be something less than 100% participation.

- Elevations of private residences: approx. 1,350 homes
- Flood proofing businesses and critical infrastructure: approx. 620
- Acquisition (buy-outs): approx. 130

As of this writing, the actual location of these structures in the study area have not been released to the PDT for analysis nor have maps been prepared. Therefore, this is the extent of the information presently available concerning the LERRD. However, it is assumed that all properties have legal access by way of public streets or existing public right-of-way. Further, it is assumed that residential and commercial properties participating in the project will have sufficiently large sites to accommodate staging of material and equipment. For the purposes of this report, the assumption is that no further real estate rights need to be acquired for access to the properties or staging. Should additional right-of-way be necessary, a standard Temporary Work Area Easement would be acquired.

3.0 ESTATES

The Standard estates have been determined to represent the minimum real estate interest necessary from the non-Federal Sponsor to support the project are as follows:

3.1 STRUCTURAL

The NFS will need to certify availability of the following five standard USACE estates for land planned to erect the structural measures:

FEE:

The fee simple title to (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), Subject, however, to existing easements for public roads and highways, public, utilities, railroads and pipelines.

TEMPORARY WORK AREA EASEMENT:

A temporary easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for a period not to exceed 3 years, beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as a (borrow area) (work area), including the right to (borrow and/or deposit fill, spoil and waste material thereon) (move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the Collier County CSRM Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

PERPETUAL BEACH STORM DAMAGE REDUCTION EASEMENT:

A perpetual and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tract No. ___) for use by the (Project Sponsor), its representatives, agents, contractors, and assigns, to construct; preserve; patrol; operate; maintain; repair; rehabilitate; and replace; a public beach [a dune system] and other erosion control and storm damage reduction measures together with appurtenances thereto, including the right to deposit sand; to accomplish any alterations of contours on said land; to construct berms [and dunes]; to nourish and renourish periodically; to move, store and remove equipment and supplies; to erect and remove temporary structures; and to perform any other work necessary and incident to the construction, periodic renourishment and maintenance of the (Project Name), together with the right of public use and access; [to plant vegetation on said dunes and berms; to erect, maintain and remove silt screens and sand fences; to facilitate preservation of dunes and vegetation through the limitation of access to dune areas;] to trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures and obstacles within the limits of the easement (except _____); [reserving, however, to the grantor(s), (his) (her) (its) (their) (heirs), successors and assigns, the right to construct dune over walk structures in accordance with any applicable Federal, State or local laws or regulations, provided that such structures shall not violate the integrity of the dune in shape, dimension or function, and that prior approval of the plans and specifications for such structures is obtained from the (designated representative of the Project

Sponsor) and provided further that such structures are subordinate to the construction, operation, maintenance, repair, rehabilitation and replacement of the project; and further] reserving to the grantor(s), (his) (her) (its) (their) (heirs), successors and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby acquired; subject however to existing easements for public roads and highways, public utilities, railroads and pipelines.

FLOOD PROTECTION LEEVE EASEMENT:

A perpetual and assignable right and easement in (the land described in Schedule A) (Tracts Nos, ____, ____ and ____) to construct, maintain, repair, operate, patrol and replace a flood protection (levee) (floodwall)(gate closure) (sandbag closure), including all appurtenances thereto; reserving, however, to the owners, their heirs and assigns, all such rights and privileges in the land as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

RIGHT OF ENTRY FOR SURVEY AND EXPLORATION:

An assignable easement, in, on, over and across the land described in Exhibit "A" for a period of (24) twenty-four. months beginning with the date possession of the land is granted to the United States, consisting of the right of the United States, its representative, agents, contractors and assigns to enter upon said land to survey, stake out, appraise, make borings; and conduct tests and other exploratory work necessary to the design of a public works project; together with the right to trim, cut, fell, and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles as required in connection with said work; subject to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowner(s), their heirs, executors, administrators, successors and assigns, all such right, title, interest and privilege as may be used and enjoyed without interfering with or abridging the rights and easement hereby acquired.

3.2 NONSTRUCTURAL

For properties that are eligible for elevation or dry flood proofing, the NFS and the landowner will execute an agreement to serve as Right-of-Entry permitting the Government to construct, inspect, and perform Operation and Maintenance, Repair, Replacement and Rehabilitation (OMRR&R) on the Project. The NFS will record the agreement, as well as any required curative documents, subordination or release agreement(s), in the Collier County public records prior to commencement of the nonstructural improvements on the property. See Appendix G Nonstructural implementation plan for further details.

During PED, the necessary real estate rights for each of the measures will be determined, and if there is no standard estate applicable to the project, the rights required for construction will be drafted as non-standard estates (rights for residential elevations, dry flood proofing of eligible non-residential **OMRR&R** Request for Approval of a Non-Standard Estate).

The standard estates below show the current approved language used for a Right of Entry and the Fee estate to accomplish nonstructural measures.

RIGHT OF ENTRY FOR SURVEY AND EXPLORATION:

An assignable easement, in, on, over and across the land described in Exhibit "A" for a period of () months beginning with the date possession of the land is granted to the United States, consisting of the right of the United States, its representative, agents, contractors and assigns to enter upon said land to survey, stake out, appraise, make borings; and conduct tests and other exploratory work necessary to the design of a public works project; together with the right to trim, cut, fell, and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles as required in connection with said work; subject to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowner(s), their heirs, executors, administrators, successors and assigns, all such right, title, interest and privilege as may be used and enjoyed without interfering with or abridging the rights and easement hereby acquired

FEE:

The fee simple title to (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), Subject, however, to existing easements for public roads and highways, public, utilities, railroads and pipelines.

4.0 NON-STANDARD ESTATES

A Consolidated Joint Coastal Permit and Sovereign Lands Authorization for use of lands seaward of the Erosion Control Line (ECL) is required from the State of Florida. The Consolidated Joint Coastal Permit and the Sovereign Submerged Lands Authorization is considered a non-standard estate. An Example of this document is attached as Exhibit C. This will require an approval from USACE-HQ.

5.0 EXISTING FEDERAL PROJECTS THAT LIE WITHIN THE LER REQUIRED

There are no existing Federal Projects within the LER required.

6.0 NON-FEDERAL SPONSOR OWNED LANDS

Within the project footprint there are County Parks such as Clam Pass County Park, Barefoot Beach Preserve County Park and Delnor Wiggins Pass State Park. Collier County currently has a 50 year lease with the State for the purpose of managing the leased premises for the establishment and operation of a county park at the barefoot beach preserve.

7.0 NAVIGATIONAL SERVITUDE

In accordance with CECC-R Bulletin 14-05, Availability of the Navigation Servitude for Coastal Storm Damage Reduction Projects dated April 9, 2014, navigational servitude is not applicable to this project.

8.0 REAL ESTATE MAP

Please see attached Study maps Exhibit A for a delineated area of the Study footprint.

9.0 INDUCED FLOODING

There will be no flooding caused by the construction of the project.

10.0 URA RELOCATION ASSISTANCE

Public Law 91-646 applies to NFS acquisitions. The NFS has been advised of P.L. 91-646 requirements, will require additional training on the requirements, and will be required to fulfill those requirements. Pursuant to section 21 I (b) of the Act, "No payment or assistance under this title or title III of this Act shall be required to be made to any person or included as a program or Project cost under this section, if such person receives a payment required by Federal, State, or local law which is determined by the head of the Federal agency to have substantially the same purpose and effect as such payment under this section."

1. Acquisition (Buyouts):

This measure provides for purchasing a structure at the amount based on the appraised fair market value at the time and removing it from vulnerable areas by performing a subsequent demolition, and relocation of the residents. This is because acquisition was found to represent the best alternative to eliminating risks to the property and residents. Relocation benefits, based on a myriad of scenarios and qualifications of the resident's status when owning or occupying the home at the time will apply in accordance with the URA. As of this writing, it is estimated 130 structures are included in this measure.

2. Elevation:

The nonstructural measures of elevation will be undertaken solely on a voluntary basis, as such no relocation benefits are paid for voluntary measures as the act of elevating the home is in and of itself considered a benefit. Thus, it appears that no payment under PL 91-646 will be required under this Act for property owners receiving voluntary benefits under the nonstructural measures of elevation. As of this writing it is estimated 1,350 structures are included in this measure.

However, an exception to paying relocation expenses exists when there is an eligible tenant in the property, and the tenant (rather than the property owner) is displaced to accomplish the voluntary measure benefiting the property owned by a lessor. In this case, such tenants may receive relocation benefits. For purposes of this study, which is only at a 10% design level, identifying which properties have tenants went beyond the scope. However an estimated 30% of the housing units are tenant occupied, an \$18,000 per structure relocation benefit is in the cost estimate based on three month's hotel living expenses. Planners applied this figure to each structure to account for an array of unknowable contingencies as explained further below.

Eligible tenants temporarily relocating are reimbursed for the cost of temporary alternate housing, meals and incidentals (such as laundry services), and the fees for disconnection and connection of utilities at the temporary residence. Alternate housing could be hotels or apartments, depending upon availability in the community. All temporary housing costs require advance approval by the NFS after first obtaining the prior written approval of USACE. General Services Administration per diem rates are the basis of allowable hotel reimbursement. Apartment costs are on market rents. All conditions of temporary relocation must be reasonable. The NFS should return the tenant to his or her previous unit before one year's time. Any residential tenant who temporarily relocated for more than one year must be offered permanent relocation assistance, which may not be reduced by the amount of any temporary relocation assistance previously provided.

At a minimum, tenants shall be provided the following: reimbursement for all reasonable out-of-pocket expenses incurred in connection with the temporary relocation, including the cost of moving to and from the temporarily occupied housing, and any increase in monthly rent or utility costs at such housing. Tenants are entitled to receive relocation advisory services as well, including reasonable advance written notice of the following:

- Address of the suitable decent, safe, and sanitary dwelling to be made available for the temporary period;
- Terms and conditions under which the tenant may lease and occupy a suitable decent, safe and sanitary dwelling in the building/complex upon completion of the project; and
- Provisions of reimbursement for all reasonable out of pocket expenses incurred in connection with the temporary relocation as noted above.
- In addition to relocation advisory services, displaced tenants may be eligible for other relocation assistance including relocation payments for moving expenses and replacement housing payments for the increased costs of renting or purchasing a comparable replacement dwelling.

Another noteworthy exception to the relocation benefit payment for voluntary participants related to elevation occurs when the cost exceeds the value of the property itself. In this case, planners assumed the property owner would be “bought out” rather than incurring the cost of elevation. If relocations are required, the NFS will proceed in accordance with the P.L.91-646 and will receive LERRD crediting as appropriate. The financial contingency for this scenario, which also will not be known until the execution phase of the project, is accounted for with the \$18,000 relocation benefit applied to every structure deemed eligible for elevation. If relocations are required, the NFS will proceed in accordance with the P.L.91-646 and will receive LERRD crediting as appropriate.

3. Flood proofing of Non-Residential Structures:

Dry flood proofing involves sealing flood prone structures from water with door and window barriers, small-scale rapid deployable floodwalls, or sealants. Flood proofing is limited to non-residential structures, such as commercial buildings and critical infrastructure. As of this writing, it is estimated 620 structures are included in this measure.

Planners assumed that for this measure no requirements for temporary relocation apply. In the event that relocations are required, in accordance with 49 CFR Part 24 (Subpart A, Section 24.2(a)(9)(ii)(D), property owner/occupants of non-residential structures who willingly participate in the program are not considered displaced, and therefore are not entitled to receive relocations assistance benefits. Additionally, businesses will not receive benefits for temporary loss of operation during construction. Business owners who are tenants of the structure, and who must relocate temporarily during construction, could receive relocation assistance advisory services and moving expenses, in accordance with 49 CFR Part 24.

11.0 MINERALS AND TIMBER

There are no known outstanding mineral or timber interests or active mining operations in the project area that may affect implementation or operation of the project.

12.0 ZONING

Florida Statute, Section 161-191, Vesting of Title of Lands, states that title to all lands seaward of the Erosion Control Line (ECL) shall be vested to the state by right of its sovereignty. The lands landward of the ECL remain vested to the upland owner. A Survey and Legal Descriptions have been completed to establish the Florida Statute ECL between the state sovereign lands and the adjacent upland property. The State of Florida will issue a Permit to the County for use of the sovereign lands. The use of a permit instead of acquiring an estate for the lands, is a deviation of policy and will require approval from USACE-HQ.

13.0 HAZARDOUS, TOXIC and RADIOACTIVE WASTE (HTRW)

There are no known HTRW materials at this time that would affect the implementation or operation of the project. The residential structures proposed for raising will be inspected to determine the presence of any HTRW; such as asbestos or lead paints. If HTRW materials are encountered, those materials would need to be mitigated/removed prior to house-raising work commencing.

14.0 FACILITY AND UTILITY RELOCATIONS

At this time it is unknown if any facility and/or utility relocations will be required. However, with the placement of the floodwalls along Bonita Beach Road, Seagate Drive and Tamiami Trail it is a reasonable assumption to conclude that there will be utility relocations. This was discussed in the Cost and Schedule Risk Analysis (CSRA) and reflected in the Risk Register. This is based on limited information. A conservative estimate of \$5 Million has been made to cover the assumed relocation costs. This will be updated once more information is available.

All costs, including the administrative costs, associated with public facility and utility relocations, during this 10% design phase are considered preliminary and tentative. These estimated administrative costs will be reassessed as the design is refined, and more detail is available. Further, contingency has been set at 30% of total Project costs, which is considered to be sufficient and available for additional relocation costs.

This study complies with Real Estate Policy Guidance Letter No. 31 (PGL31), dated 1 January 2013 as of the 10% design level. In accordance with PGL31, at the 35% design phase, a real estate assessment will be conducted, and it will address whether identified utilities/facilities are generally of the type eligible for compensation under the substitute facilities doctrine and will also take into account data or evidence that demonstrates that an owner has been identified with a compensable interest in the affected property. The compensability of all utilities that are impacted by the various measures will need to be determined prior to construction, after being identified in the PED phase. An additional cost estimate to relocate the utilities and facilities in the TSP footprint will be completed when the Study is at the 35% design phase in accordance with PGL 31.

“ANY CONCLUSION OR CATEGORIZTION CONTAINED IN THIS REAL ESTATE PLAN, OR ELSEWHERE IN THIS PROJECT REPORT, THAT AN ITEM IS A UTILITY OR FACILILTY RELOCATION TO BE PERFORMED BY THE

NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESOSNSIBILITIES IS PRELIMINARY ONLY. THE GOVERNMENT WILL MAKE A FINAL DETERMINAATION OF THE RELOACTIONS NECESSARY FOR THE CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PROJECT AFTER FURTHER ANALYSIS AND COMPLETION AND APPROVAL OF FINAL ATTORNEY’S OPNIONS OF COMPENSABILITY FOR EACH OF THE IMPACTED UTILITIES AND FACILITIES.”

15.0 LANDOWNER VIEWS AND PUBLIC OPPOSITION

There will be public opposition regarding certain measures

16.0 OUTSTANDING THIRD PARTY INTERESTS

There are no known outstanding third party interests in the project area. However, all property interests acquired in support of the proposed project must take priority over any third party interests that could defeat or impair the NFS’ title to the property or interfere with construction, operation and maintenance of the project.

17.0 RISKS ASSOCIATED WITH ADVANCED LAND ACQUISITION

The NFS has been advised of the risks associated with advance land acquisition activities.

Risks associated with advanced land acquisition include, but are not limited to, the following:

- Congress may not appropriate funds to construct the proposed project.
- The proposed project may otherwise not be funded or approved for construction.
- A PPA mutually agreeable to the non-Federal sponsor and the Government may not be executed and implemented.
- The non-Federal sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws, or regulations including liability arising out of Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as amended.
- The non-Federal sponsor may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the project.
- The non-Federal sponsor may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under Public Law 91-646, as well as, the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after the PPA execution and the Government’s notice to commence acquisition; and performance of LERRD.
- The non-Federal sponsor may incur costs or expenses in connection with its decision to acquire real estate interest and/or perform LERRD in advance of the executed PPA and the Government’s notice to proceed which may not be creditable under the provisions of Public Law 99-662 or the PPA.

18.0 ACQUISITION RISKS

Acquisitions for any project can pose a risk for the project. The County has completed the Capability Assessment and has the ability to condemn. If the NFS is unwilling to use eminent domain, then there is a risk to the project. However, in the Capability Assessment, the NFS stated that although they have quick take and eminent domain authority, that they would prefer to seek alternatives. There are portions of the project for which pose a significant risk as they are currently privately owned. Obtaining the perpetual easements required would require public access on these private owned sections. If the owners are unwilling to sell/provide a perpetual easement for the beach, the County will need to condemn this section of beach or pay 100% of the project costs associated with that portion of the project area where easements cannot be obtained. Currently, they are still part of the plan as the County has indicated that they will obtain the necessary easements. The benefits of including this area and/or the assessment of impacts for this area are still being studied

19.0 ACQUISITION SCHEDULE

The proposed Project is currently in the feasibility stage. The acquisition of all property rights and interests, including fee and acquisition through negotiation and condemnation, will be accomplished over several years and will be completed in advance of contracting for construction. The NFS will officially initiate real estate acquisition activities after final execution of the PPA. The following estimated acquisition schedule indicates the length of time required for each step in the standard acquisition process.

Real Estate Acquisition Schedule

Project Partnership Agreement for Construction	Start Date
Maps to Sponsor	Within 2 weeks of start date
Plat and Owner Verification	Within 6 months of sponsor map receipt
Appraisal of Property	Within 9 months weeks of plats
Review Value Estimates	Within 6 months of Estimate receipt
Negotiations	Within 6 months after Value Estimate
Closings	Within 2 months of Negotiations
Possession	Within 1 day of closing
Certification of Chief of Real Estate	Within 4 weeks of possession
Total for Process	2 Years 5 Month
<i>Condemnation/Eminent Domain</i>	<i>Within 1 year of failure of negotiations</i>

20. BASELINE COST ESTIMATED FOR REAL ESTATE (BCERE)

Incidental administrative costs associated with the acquisition of real property interests include, but are not limited to the following: appraisals, surveys, mapping, title/escrow services, negotiations, attorney's services (closings, and final title assemblies), etc.

The following cost estimates reflect the various real estate components involved in the acquisition process reflecting land values as of December 16, 2019 using the county tax assessor information. These costs have not yet been reviewed by a USACE Appraiser.

BASELINE COST ESTIMATE FOR REAL ESTATE					
Estates	Acres	Lands & Damages (LERRD)	NFS Real Estate Admin	Federal Real Estate Review & Assistance	Total Costs
TWAE	6.59	\$3,061,408	\$202,000	\$20,000	\$3,283,408
Flood Protection Levee Perpetual Easement	26.01	\$10,547,315	\$572,000	\$50,000	11,169,315
Perpetual Beach Storm Damage Reduction Easement	136.12	\$95,263,864	\$1,472,000	\$100,000	\$96,835,864
Fee Interest	5.28	\$2,741,931	\$80,000	\$30,000	\$2,851,931
Acquisition/ Buyouts		\$27,218,429	\$21,000,000	\$1,274,280	\$49,492,709
Flood proofing	-	\$0	\$600,000	\$15,000	\$615,000
Elevation	-	\$0	\$9,900,000	\$38,000	\$9,938,000
<i>NFS Cost Subtotal</i>	-	\$138,832,947	\$33,826,000	\$1,527,280	\$174,186,227
<i>NFS Cost Total (LERRD+ NFS Admin)</i>			\$172,658,947		
Federal Review & Assistance Cost Total			\$1,527,280		
TOTAL PROJECT REAL ESTATE COSTS (Total NFS Cost + Total Federal Cost)					\$174,186,227

21 RECOMMENDATION

This report has been prepared in accordance with Corps of Engineers Regulation 405-1-12, Chapter 12. Recommend approval of this draft Real Estate Plan, that includes preliminary estimates of impacts, potential required property rights and interests, and a cost estimate based on identified limitations, factors, and assumptions as identified to the extent practicable at this time, be accepted for the purposes herein.

Prepared by:

Alicia Barrette
Realty Specialist
Acquisition, Management
And Disposal Branch

Date

Approved by:

Donna L. Carrier-Tal, Esq.
Chief, Real Estate Office
Real Estate Contracting Officer

Date

Legal Sufficiency:

Todd Waldman
Office of Counsel

Date

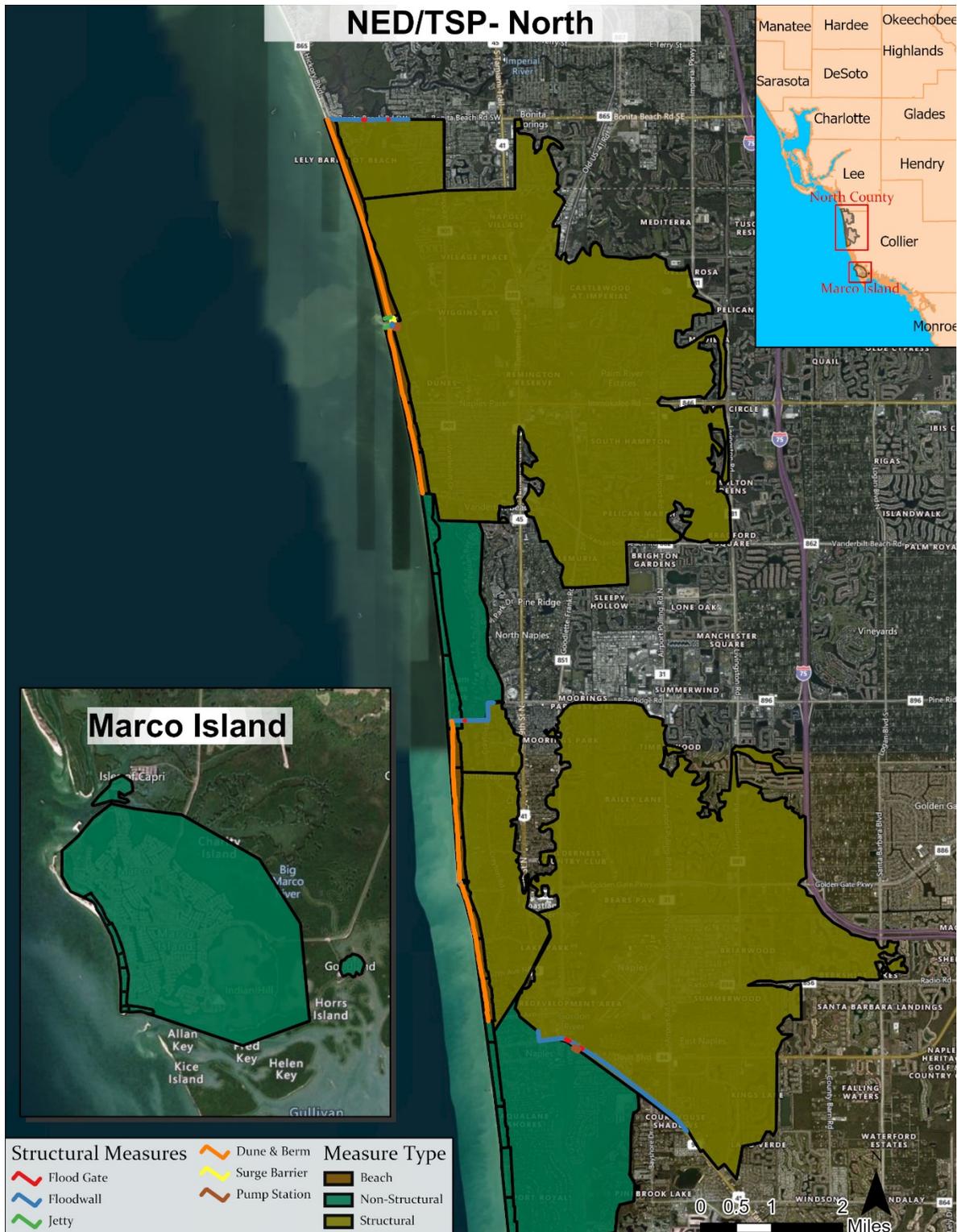


EXHIBIT "A"

EXHIBIT "B"

ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes?
(yes/no)

- IT WOULD BE BENEFICIAL TO INCLUDE A REFERENCE TO THE STATUTORY CITATION PROVIDING FOR THESE POWERS.

Yes. Collier County's legal authority to acquire and hold title to real property is found in Ch. 125, Fla. Stat.

- b. Does the sponsor have the power of eminent domain for this project?
(yes/no)

- NEED TO BE SPECIFIC, E.G., IF THIS IS AN ECOSYSTEM RESTORATION PROJECT, CAN THE NFS CONDEMN FOR ER PURPOSES? ANY NFS LIMITATIONS ON EMINENT DOMAIN THAT MAY AFFECT IMPLEMENTATION OF THE PROJECT SHOULD BE IDENTIFIED HERE OR IN THE BODY OF THE REP.

Yes. Collier County has the power of eminent domain found in Ch. 73 and 74, Fla. Stat.; however the County would seek alternatives prior to using eminent domain to acquire any needed private property.

- c. Does the sponsor have "quick-take" authority for this project? (yes/no)

- IF NOT, HAVE YOU RESEARCHED THE STATE PROCESS TO UNDERSTAND HOW LONG IT MAY TAKE FOR THE NFS TO OBTAIN TITLE AND POSSESSION? EXPLAIN.
- IF YES, DESCRIBE THE AUTHORITY IN TERMS OF HOW QUICK IT IS EXPECTED TO BE.

Yes. Collier County has "quick-take" authority found in Ch. 74, Fla. Stat. As discussed above, the County would seek alternatives to eminent domain for this project.

- d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? (yes/no)

- IF YES, FURTHER EXPLANATION OF THE NFS AUTHORITY TO ACQUIRE AND HOLD TITLE TO LANDS OUTSIDE THEIR POLITICAL BOUNDARY IS NEEDED OR ALTERNATIVELY, IF A SECOND NFS IS NEEDED, THIS TOO MUST BE ADDRESSED HERE OR IN THE REP NARRATIVE.

Yes, the land is generally within Collier County although there may be some land within the City of Naples or the City of Marco Island. Collier County would seek to work with these municipalities and has a solid work history with these municipalities on beach related projects.

- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? (yes/no)

- IF YES, EXPLANATION ON HOW THESE LANDS/INTERESTS WILL BE ACQUIRED FOR THE PROJECT IS NECESSARY. E.G., IF A CITY IS THE NFS, BUT STATE LANDS ARE NEEDED FOR THE PROJECT, THE CITY CANNOT CONDEMN THE STATE. USUALLY

THIS RESULTS IN A NON-STANDARD ESTATE OR THE NEED TO ENGAGE USACE IN ACQUIRING THE LANDS.

- MAKE SURE ALL LIMITATIONS OF THE NFS ARE CONSIDERED. E.G., CAN THE NFS CONDEMN AN ACTIVE RAILROAD? THOROUGH RESEARCH IS NEEDED FOR THE TYPES OF OWNERS IMPACTED BY THE PROPOSED PROJECT.

Unknown at this time. As discussed above, Collier County has the power of eminent domain, however the County would seek alternatives to eminent domain for this project. The County would work with the municipalities or the State of Florida as the County may not use eminent domain for municipal or state land.

II. Human Resource Requirements:

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? (yes/no)

- REMEMBER THAT 91-646 IS NOT JUST ABOUT THE PROVISION OF RELOCATION ASSISTANCE BENEFITS, BUT IT ALSO CONTAINS A PROCEDURAL SECTION THAT MUST BE FOLLOWED FOR LAND ACQUISITION NEEDED FOR A FEDERAL PROJECT. E.G., OWNERS MUST BE INFORMED OF THE INTEREST TO BE ACQUIRED AND ITS MARKET VALUE AND SIGN A WAIVER BEFORE A DONATION CAN BE ACCOMPLISHED BY A NFS. DISCUSSION OF THE NFS TECHNICAL KNOWLEDGE HERE OR IN THE REP WOULD BE HELPFUL TO THE PROJECT REVIEWERS.

Yes.

- b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? (yes/no)

- BRIEFLY DESCRIBE THE TRAINING PLAN.

No training plan has been developed at this time. The plan will be developed as soon as necessary either working with the USACE and/or a consultant as needed.

- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? (yes/no)

- DESCRIBE THEIR EXPERIENCE, PARTICULARLY WITH LAND ACQUISITION FOR FEDERAL PROJECTS; DEVIL IS IN THE DETAILS OF THE PRODUCTS AND WE SHOULD NOT UNDERESTIMATE THE AMOUNT OF HELP AND REVIEW AND REVISION THAT MAY BE NEEDED BEFORE A NFS COMPLETES THE LAND ACQUISITION IN ACCORDANCE WITH OUR REQUIREMENTS; PROPER ANALYSIS HERE ENABLES TO BETTER ESTIMATE NFS AND FEDERAL COSTS AND CREATE A BETTER DETAILED SCHEDULE FOR NFS ACQUISITION, USACE REVIEW AND CERTIFICATION, AND FOR LERRD CREDITING.

Collier County's real estate department has extensive acquisition experience however the department has not worked on any acquisitions with the Federal Govt.

- d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? (yes/no)

- IS THERE SPECIALIZED REAL ESTATE STAFF THAT ACQUIRES LAND ALL THE TIME FOR THE NFS, OR IS THERE A PART-TIME MAYOR AND SOLICITOR THAT HAVE A GREAT DEAL OF OTHER PRIORITIES WHO WILL BE ACCOMPLISHING THE WORK? ELABORATE BEYOND THE YES OR NO ANSWER.

Yes.

- e. Can the sponsor obtain contractor support, if required in a timely fashion? (yes/no)

- ELABORATE ON WHETHER A CONTRACTOR IS ALREADY IN PLACE OR TIME WILL

BE NEEDED TO OBTAIN A CONTRACTOR AFTER PPA EXECUTION.

Yes.

- f. Will the sponsor likely request USACE assistance in acquiring real estate? (yes/no) (If "yes," provide description)

- REMEMBER THAT USACE LAND ACQUISITION ON BEHALF OF A NFS USUALLY REQUIRES EXECUTION OF AN MOA WITH THE DETAILED SCOPE AND COST OF THE WORK TO BE DONE.

Yes.

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? (yes/no)

- IF NO, EXPLAIN ANY IMPACTS.

Yes.

- b. Has the sponsor approved the project/real estate schedule/milestones? (yes/no)

- REVIEWERS ARE LOOKING FOR REASONABLE AND LOGICAL SCHEDULES THAT HAVE BEEN COORDINATED WITH THE NFS AND PREFERABLY DISCUSSED IN DETAIL BY DISTRICT REAL ESTATE PERSONNEL WITH THE NFS PERSONNEL WHO WILL CONDUCT THE EFFORT. REAL ESTATE SCHEDULES AGREED UPON BETWEEN TWO PM'S, WITHOUT SIGNIFICANT REALTY SPECIALIST INPUT, ARE OFTEN UNATTAINABLE AND LEAD TO UNREALISTIC EXPECTATIONS. DURING REPORT PREPARATION, PUT LOTS OF EFFORT INTO DISCUSSING WITH THE NFS REAL ESTATE PERSONNEL THE DETAILED LAND ACQUISITION PROCESS THAT WILL BE REQUIRED FOR YOUR PROJECT AND THE PRODUCTS YOU WILL NEED FROM THE NFS FOR CERTIFICATION.
- NO IS NOT AN ACCEPTABLE ANSWER. WE CANNOT PUSH FORWARD A DECISION DOCUMENT WITH A SCHEDULE AND COST ESTIMATE FOR NFS ITEMS OF RESPONSIBILITY WHEN THEY HAVE NOT SEEN IT, HAD INPUT OR CONCURRED WITH IT.
- AGAIN, IT IS IMPERATIVE THAT REAL ESTATE PERSONNEL FROM THE NFS ARE INVOLVED. A SCHEDULE COMMITTED TO BY A PM WITHOUT THE TECHNICAL INPUT WILL ALMOST NEVER BE REALISTIC OR FULLY INFORMED.

Once milestones are received by Collier County they will be timely reviewed and a plan developed.

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? (yes/no/not applicable)

- IF YES, DESCRIBE.

Not applicable.

- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. (If sponsor is believed to be "insufficiently capable," provide explanation)

Highly capable.

APPENDIX 12-E

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? (yes/no)
- b. Does the sponsor concur with this assessment? (yes/no) (If "no," provide explanation)

Prepared by:

[typed name]
[title]

Reviewed and approved by:

[typed name]
Chief, Real Estate Division

EXHIBIT "C" example document



Florida Department of Environmental Protection

BBob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-240

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

CONSOLIDATED MAJOR MODIFICATION TO A JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:

Collier County Board of County Commissioners
Attn: J. Gary McAlpin, P.E.
2800 North Horseshoe Drive
Naples, FL 34104

PERMIT INFORMATION:

Permit Number: 0331817-004-JM

Project Name: Collier County Nourishment

County: Collier

AGENT:

APTIM
Attn: Tara Brenner, P.E.
2481 N.W. Boca Raton Boulevard
Boca Raton, FL 33431

Issuance Date: October 2, 2015

Expiration Date: October 2, 2030

REGULATORY AUTHORIZATION:

This major modification to Permit No. 0331817-001-JC is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department of Environmental Protection (Department) and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity. This major modification, hereafter referred to as Permit No. 0331817-004-JM, supersedes Permit No. 0331817-001-JC. Changes to Permit No. 0331817-001-JC are shown as ~~strike throughs~~ (deletions) or underlines (additions).

PROJECT DESCRIPTION:

The project is to periodically nourish roughly 98.7 miles of Collier County beaches at Vanderbilt Beach/Pelican Bay, Park Shore (including the extended area between R-43+500 to R-42, known as the Clam Pass Park Placement Area) and Naples using sand from the T1 offshore borrow area, the Doctor's Pass Dredging Complex (ebb shoal, entrance channel, flood shoal and side channels), and upland sand sources (Immokalee Mine, Witherspoon Mine and Lake Wales Mine).

The filled beach berm of the Clam Pass Park Placement Area will have a surface elevation not to exceed +5.0 feet North American Vertical Datum (NAVD) and a foreshore slope of 1:10 (vertical:horizontal). The fill template may include a dune, with crest elevations not to

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Collier County Nourishment
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exceed +6.5 feet NAVD, and a seaward slope of 1:5 (vertical:horizontal). Nourishment events that include the Clam Pass Park Placement Area shall occur at intervals of at least three years.

The filled beach berm at Vanderbilt Beach/Pelican Bay, Park Shore and Naples will have a surface elevation of +3.0 feet ~~North American Vertical Datum (NAVD)~~ and a foreshore slope of 1:10~~5~~ (vertical:horizontal). The fill template may include a turtle-friendly stepped berm with upper berm dune, with crest elevations of either +4.3 or +5.0 feet NAVD, and a seaward slope of 1:5 (vertical:horizontal).

Vegetation planting and dune maintenance will also be conducted on an as-needed basis. Material dredged from the Doctor’s Pass Dredging Complex may be placed between R-58 and R-79. The filled beach berm will have a surface elevation of +3.00 feet NAVD and a foreshore slope of 1:15 (vertical:horizontal). Material dredged from the Doctor’s Pass Dredging Complex may also be placed in the nearshore disposal area, with a crest elevation of -3.3 feet NAVD and placed landward of the -10 foot NAVD depth contour. The specification for the Doctor’s Pass Dredging Complex shall not exceed the following:

Location	*Max. Allowable Dredge Depth (feet in NAVD)	Baseline Station Channel Cut
Settling Basin/Entrance Channel	-15.3	EC3+20
Entrance Channel	-10.3	EC9+13
Entrance Channel	-9.3	EC13+68
Turning Basin	-9.3	E8+56
South Channel	-8.3	E5+71
West Channel	-9.3	W1+17
West Channel	-8.3	W5+77
East Channel	-8.3	E13+73

~~The activity includes consideration of an application for a 15-year sovereign submerged lands easement, Easement No. 41851, containing approximately 14.1 acres for the Doctor’s Pass Dredging Complex.~~

PROJECT LOCATION:

The nourishment will extend from DEP range monuments R-22+300 to R-37 at Vanderbilt Beach/Pelican Bay, from R42 to R43+500 at Clam Pass Park, from R-43+500 to R-54+400 at Park Shore, and from Doctor’s Pass to R-79 at Naples. The nearshore disposal area extends from R-60 to R-61+800. The Doctor’s Pass Dredging Complex is located between R-57 and R-58. These activities are located in Collier County, Sections 04, 09, and 16, in Townships 50 South, Range 25 East; Sections 05, 08, 16, 21, 28, and 33, in Townships 49 South, Range 25 East; and Sections 20, 29, and 32, in Townships 48 South, Range 25 East, within Doctor’s Pass or the Gulf of Mexico, Class III waters. The T1 offshore borrow area is located in federal waters.

PROPRIETARY AUTHORIZATION:

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated, to the Department, the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21 and Section 62-330.075, F.A.C., and the policies of the Board of Trustees.

The Department has determined that the beach nourishment activity qualifies for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby granted, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

As staff to the Board of Trustees, the Department has also determined that the dredging activity within Doctor's Pass Dredging Complex requires a public easement for the use of those lands, pursuant to Chapter 253.77, F.S. The Department intends to issue the public easement subject to the conditions outlined in the previously issued *Consolidated Intent to Issue* and in the Recommended Proprietary Action (entitled *Delegation of Authority*).

Under Permit No. 0331817-001-JC the Department determined that, pursuant to Chapter 253.77, F.S., the Permittee would require a public easement for the use of the Doctor's Pass Dredging Complex for 15 years. The Department issued the public easement, subject to the conditions outlined in the previously issued *Consolidated Intent to Issue* for Permit No. 0331817-001-JC and in the associated Recommended Proprietary Action (entitled *Delegation of Authority*). That public Easement (BOT No. 110239145 and Easement No. 41851) will now correspond to Permit No.0331817-004-JM.

COASTAL ZONE MANAGEMENT:

This permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

WATER QUALITY CERTIFICATION:

This permit constitutes certification of compliance with state water quality standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C. 1341.

OTHER PERMITS:

Authorization from the Department does not relieve you from the responsibility of obtaining other permits (Federal, State, or local) that may be required for the project. When the Department received your permit application, a copy was sent to the U.S. Army Corps of

Engineers (Corps) for review. The Corps will issue their authorization directly to you, or contact you if additional information is needed. If you have not heard from the Corps within 30 days from the date that your application was received by the Department, contact the nearest Corps regulatory office for status and further information. Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.

AGENCY ACTION:

The above named Permittee is hereby authorized to construct the work that is outlined in the Project Description and Project Location of this permit and as shown on the approved permit drawings, plans and other documents attached hereto. This agency action is based on the information submitted to the Department as part of the permit application, and adherence with the final details of that proposal shall be a requirement of the permit. **This permit and authorization to use sovereign submerged lands are subject to the General Conditions, General Consent Conditions and Specific Conditions, which are a binding part of this permit and authorization.** Both the Permittee and their Contractor are responsible for reading and understanding this permit (including the permit conditions and the approved permit drawings) prior to commencing the authorized activities, and for ensuring that the work is conducted in conformance with all the terms, conditions and drawings.

GENERAL CONDITIONS:

1. ~~All activities authorized by this permit shall be implemented as set forth in the plans and specifications approved as a part of this permit, and all conditions and requirements of this permit. The permittee shall notify the Department in writing of any anticipated deviation from the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to section 62B-49.008, Florida Administrative Code.~~
2. ~~If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.~~
3. ~~This permit does not eliminate the necessity to obtain any other applicable licenses or permits that may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project that are not addressed in this permit.~~
4. ~~This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land~~

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~~of Florida seaward of the mean high water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.~~

- ~~5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.~~
- ~~6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.~~
- ~~7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted activity. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.~~
- ~~8. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.~~
- ~~9. At least forty eight (48) hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer) and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.~~
- ~~10. If historic or archaeological artifacts, such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the permittee shall immediately stop all activities in the immediate area that disturb the soil in the immediate locale and notify the State Historic Preservation Officer and the Bureau~~

~~of Beaches and Coastal Systems (JCP Compliance Officer). In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.02, F.S.~~

11. ~~Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beach and Coastal Systems (JCP Compliance Officer) and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specifications, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on two paper copies and one electronic copy of as-built drawings submitted to the Bureau of Beaches and Coastal Systems (JCP Compliance Officer).~~
 1. All activities authorized by this permit shall be implemented as set forth in the project description, permit drawings, plans and specifications approved as a part of this permit, and all conditions and requirements of this permit. The Permittee shall notify the Department in writing of any anticipated deviation from the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to Rule 62B-49.008, F.A.C.
 2. If, for any reason, the Permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; and, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.
 3. This permit does not eliminate the necessity to obtain any other applicable licenses or permits that may be required by federal, state, local or special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project that are not addressed in this permit.
 4. Pursuant to Sections 253.77 and 373.422, F.S., prior to conducting any works or other activities on state-owned submerged lands, or other lands of the state, title to which is vested in the Board of Trustees, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires

formal execution by the Board of Trustees shall not be considered received until it has been fully executed.

5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.
6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.
7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted activity. The Permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
8. The Permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
9. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall electronically submit to the Department, by email at JCPCCompliance@dep.state.fl.us, and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.
10. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, shipwreck remains or anchors, dugout canoes or other physical remains that could be associated with Native American cultures, or early Colonial or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The Permittee, or other designee, shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at (850)245-6333 or (800)847-7278, as well as the appropriate permitting agency office. Project activities shall not resume without verbal and/or written authorization from the Division

of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, F.S.

11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the Permittee shall electronically submit to the Department, by email at JCPCCompliance@dep.state.fl.us, and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specifications, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on as-built drawings electronically submitted to the Department, by email at JCPCCompliance@dep.state.fl.us.

GENERAL CONSENT CONDITIONS:

1. Authorizations are valid only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use shall constitute a violation. Violation of the authorization shall result in suspension or revocation of the grantee's use of the sovereignty submerged land unless cured to the satisfaction of the Board.
2. Authorizations convey no title to sovereignty submerged land or water column, nor do they constitute recognition or acknowledgment of any other person's title to such land or water.
3. Authorizations may be modified, suspended or revoked in accordance with their terms or the remedies provided in Sections 253.04 and 258.46, F.S., or Chapter 18-14, F.A.C.
4. Structures or activities shall be constructed and used to avoid or minimize adverse impacts to sovereignty submerged lands and resources.
5. Construction, use or operation of the structure or activity shall not adversely affect any species that is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004 and 68A-27.005, F.A.C.
6. Structures or activities shall not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity shall be modified in accordance with the court's decision.
7. Structures or activities shall not create a navigational hazard.

8. Structures shall be maintained in a functional condition and shall be repaired or removed if they become dilapidated to such an extent that they are no longer functional. This shall not be construed to prohibit the repair or replacement subject to the provisions of Rule 18-21.005, F.A.C., within one year, of a structure damaged in a discrete event such as a storm, flood, accident or fire.
9. Structures or activities shall be constructed, operated and maintained solely for water dependent purposes, or for non-water dependent activities authorized under paragraph 18-21.004(1)(f), F.A.C., or any other applicable law.

SPECIFIC CONDITIONS:

1. No work shall be conducted under this permit until the Permittee has received a written **Notice To Proceed** from the Department for **each** event. At least 30 days prior to the requested date of issuance of the notice to proceed, the Permittee shall submit a written request for a Notice to Proceed, along with the following items for review and approval by the JCP Compliance Officer at JCPCCompliance@dep.state.fl.us:
 - a. An electronic copy of detailed *final construction plans and specifications* for all authorized activities. The plans and specifications must be consistent with the project description of this permit and the attached permit drawings, and shall also be certified by a professional engineer (P.E.), who is registered in the State of Florida. The Permittee shall point out any deviations from the Project Description of this permit (as stated above), the approved permit drawings, monitoring plans (attached to this permit), and/or any significant changes that would require a permit modification. The plans and specifications shall include a description of the dredging and construction methods to be utilized and drawings and surveys that show all biological resources and work spaces (e.g., anchoring areas, pipeline corridors, staging areas, boat access corridors, etc.) to be used for this project.

For nourishment events that include placement within the Clam Pass Park Placement Area (R-43+500 to R-42), the final plans and specifications shall depict a reduced fill template from what is authorized under the Clam Pass Maintenance Dredging Permit (Permit No. 0296087-001-JC). The reduced template shall illustrate that there is adequate space available for placement of material dredged from Clam Pass.

- b. *Project performance as designed.* The avoidance of impacts to nearshore hardbottom are based on an engineering analysis of the incremental and cumulative volumes of fill material to be placed within discreet segments of the project area. Prior to each nourishment event, the Permittee shall provide a summary of beach fill placement volumes and locations for the previous events and the proposed event. If this information indicates the incremental and cumulative volumes of fill material exceed the volumes proposed in the

engineering analysis submitted with the permit application, then the Permittee shall include a request for permit modification, and submit updated engineering analysis to demonstrate the expected effects of the project.

- c. Documentation that the **public easement** has been executed to the satisfaction of the Department;
- d. ***Turbidity monitoring qualifications.*** In order to assure that turbidity levels do not exceed the compliance standards established in this permit, construction at the project site shall be monitored closely by an independent third party with formal training in water quality monitoring and professional experience in turbidity monitoring for coastal construction projects. Also, an individual familiar with beach construction techniques and turbidity monitoring shall be present at all times when fill material is discharged on the beach. This individual shall have authority to alter construction techniques or shut down the dredging or beach construction operations if turbidity levels exceed the compliance standards established in this permit. The names and qualifications of those individuals performing these functions, along with 24-hour contact information, shall be submitted for approval. The Documentation shall show that the person(s) who will be conducting the turbidity monitoring meets the following requirements:
 - i. Is independent of the construction contractor(s);
 - ii. Has formal training in water quality monitoring; and
 - iii. Has professional experience in monitoring turbidity for coastal construction projects.
- e. A ***scope of work*** for the turbidity monitoring to ensure that the right equipment is available to conduct the monitoring correctly at any location, and under any conditions; and
- f. A final ***Environmental Protection Plan*** (EPP) for nesting marine turtles and nesting seabirds and shorebirds (shorebirds) onsite during construction. Please note that Specific Condition 5, below, indicates that at least one week prior to the pre-construction conference, a copy of the EPP shall also be sent to the FWC Regional Species Conservation Biologist at: <http://www.myfwc.com/shorebirds>, MarineTurtle@myfwc.com.
- g. ***Biological Monitoring Qualifications.*** Biological monitoring qualifications of firms and their staff shall be submitted to the JCP Compliance Officer for review and approval. If additional monitoring team(s) are subcontracted, or new staff are added to the monitoring team, proposed changes and qualifications shall be submitted to the JCP Compliance Officer for review at least 30 days prior to a

monitoring event. The Permittee's selected biological monitoring firm is fully responsible for training of new staff members and subcontractors, as well as the QA/QC verification of their work;

- h. ***Any Updates and Changes to Approved Biological Monitoring Plans (Hardbottom and Seagrass).*** This shall include all transect location data, monitoring methods, as well as monitoring and reporting timelines, subject to review and approval by the Department.
 - i. ***A Baseline Nearshore Hardbottom Pre-Construction Submerged Aquatic Vegetation Survey.*** ~~For construction events where maintenance dredging of Doctor's Pass will occur, a full pre-construction (baseline) seagrass survey shall be completed. and~~ Written confirmation of completion of the survey, along with the raw data, shall be submitted to the JCP Compliance Officer Department prior to the issuance of the Notice to Proceed. This survey shall comply with and meet the requirements of the applicable Approved Seagrass Biological Monitoring Plans.
 - j. ~~For construction events where dune planting will occur, a detailed Dune Planting Plan, if dune restoration or maintenance is occurring, that which outlines the plant species, spacing of planting units, monitoring details and any other relevant information, shall be submitted.~~
 - k. ***Clam Pass Hardbottom Edge Survey.*** Prior to the first construction event involving sand placement within the Clam Pass Park Placement Area, a figure depicting the current position of the nearshore hardbottom edge in the vicinity of Clam Pass (R-41.5 to R- 43.5) shall be submitted. The hardbottom edge depicted in this figure shall be based on *in situ* diver delineation of the nearshore hardbottom edge. The figure shall also include the position of the permitted equilibrium toe-of-fill (ETOF) for Clam Pass.
2. All reports or notices relating to this permit shall be electronically submitted to the Department's JCP Compliance Officer (e-mail address: JCPCCompliance@dep.state.fl.us) unless otherwise specified in the specific conditions of this permit.
 3. The Permittee shall not store or stockpile tools, equipment, materials, etc., within littoral zones or elsewhere within surface waters of the state without prior written approval from the Department. Storage, stockpiling or access of equipment on, in, over or through beds of submerged aquatic vegetation, wetlands or hardbottom is prohibited unless it occurs within a work area or ingress/egress corridor that is specifically approved by this permit. Anchoring or spudding of vessels and barges within beds of aquatic vegetation or hardbottom is also prohibited.

4. The Permittee shall not conduct project operations or store project-related equipment in, on or over dunes, or otherwise impact dune vegetation, outside the approved staging, beach access and dune restoration areas designated in the permit drawings.
5. **Pre-Construction Conference.** Prior to each construction event, ~~the~~ Permittee shall conduct a pre-construction conference to review the specific conditions and monitoring requirements of this permit with the Permittee's contractors, the engineer of record, those responsible for turbidity monitoring and the JCP Compliance Officer (or designated alternate), the Marine Turtle Monitor (Marine Turtle Permit Holder), the Bird Monitors, and staff representatives of the Florida Fish and Wildlife Conservation Commission (FWC) prior to each construction event. In order to ensure that appropriate representatives are available, at least twenty-one (21) business days prior to the intended commencement date for the permitted construction, the Permittee is advised to contact the Department, and the other agency representatives listed below:

JCP Compliance Officer
e-mail: JCPCCompliance@dep.state.fl.us

FWC Imperiled Species Management Section
Florida Fish & Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600
phone: (850) 922-4330
fax: (850) 921-4369 or email: marineturtle@myfwc.com

FWC Regional Species Conservation Biologist
Contact list: <http://myfwc.com/conservation/you-serve/wildlife/shorebirds/>

The Permittee is also advised to schedule the pre-construction conference at least a week prior to the intended commencement date. At least seven (7) business days in advance of the pre-construction conference, the Permittee shall provide written notification, advising the participants of the **agreed-upon** date, time and location of the meeting, and also provide a meeting agenda and a teleconference number.

Also, within a week prior to the pre-construction conference, the Permittee/Contractor shall submit a draft of the Environmental Protection Plan (EPP) for review and comment to the FWC. The EPP shall include site-specific details of protected species monitoring and other conservation measures to be discussed by the Permittee during the pre-construction conference. The final EPP shall be submitted to FWC prior to construction.

6. When discharging slurried sand onto the beach from a pipeline, the Permittee shall employ best management practices (BMPs) to reduce turbidity. At a minimum, these BMPs shall include the following:

- a. Use of shore-parallel sand dike to promote settlement of suspended sediment on the beach before return water from the dredged discharge reenters the Gulf of Mexico; and
 - b. A minimum set-back of 50 feet from open water, or at the landward end of the beach berm (without disturbing the dune), whichever is less, for the pipeline discharge location.
7. The terms, conditions and provisions of the required easement shall be met.

Marine Imperiled Species Protection

~~7. **Pre-Construction Conference.**~~

- ~~a. The Permittee shall hold a pre-construction conference between the contractors, the engineer, the Marine Turtle Monitor/permit holder, Bird Monitors, and staff representatives of the Florida Fish and Conservation Commission (FWC). This Pre-Construction Conference may be held in conjunction with the Pre-Construction Conference required in **Specific Condition 5 above**. The purpose of this portion of the meeting is to ensure that the Permittee/Contractor fully understands the wildlife protection measures and site-specific measures that need to be taken before, during, and after construction. The notification of the pre-construction conference shall be sent at least seven (7) business days before the date of that meeting to the FWC Regional Species Conservation Biologist at: <http://www.myfwc.com/shorebirds>, MarineTurtle@myfwc.com, and the JCP Compliance Officer.~~
 - ~~b. The Permittee/Contractor's Environmental Protection Plan (EPP) shall include details of monitoring for nesting marine turtles and nesting seabirds and shorebirds (shorebirds) onsite during construction. A draft EPP shall be submitted for review and comment to the FWC a minimum of seven (7) business days prior to the pre-construction conference. The final EPP shall be submitted to FWC prior to construction.~~
8. **In-water Activity.** The Permittee shall adhere to the following requirements following conditions shall be followed for all in-water activity:
- a. All personnel associated with the project shall be instructed about the presence of marine turtles and manatees, and the need to avoid collisions with (and injury to) these protected marine species. The Permittee/Contractor shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees or marine turtles, which are protected under the Endangered Species Act, the Marine Mammal Protection Act, the Marine Turtle Protection 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, if used, shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee or marine turtle movement.
 - d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatees. All in-water operations, including vessels, shall be shutdown if a marine turtle or manatee comes within 50 feet of the operation. Activities shall not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.
 - e. Any collision with, or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Any collision with, and/or injury to a marine turtle should also be reported immediately to the Sea Turtle Stranding and Salvage Network (STSSN) at SeaTurtleStranding@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 shall be used. One sign which reads "Caution Boaters - Watch for Manatees" shall be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations shall be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatees. Questions concerning these signs can be sent to ImperiledSpecies@myFWC.com.
9. **Hopper Dredging.** In the event a hopper dredge is utilized, the following requirements shall be met:
- a. Handling of captured marine turtles during hopper dredging activities shall be conducted only by persons with prior experience and training in these activities, and who are duly authorized to conduct such activities through a valid Marine Turtle Permit issued by the FWC, pursuant to Chapter 68E-1, F.A.C. such as a

~~National Marine Fisheries Service (NMFS)-approved sea turtle observer, or by persons who have submitted documentation to the Permittee of meeting the FWC Marine Turtle Conservation Guidelines specific to stranding activities. The Permittee shall forward documentation to FWC for review, concurrent with the submission of the contractor's Environmental Protection Plan. The Permittee, or their designee that transport live or dead marine turtles or marine turtle parts into, out of, or within, the state of Florida, shall notify FWC in writing specifying the number, species of turtle, type of specimen, and the destination after transport is complete. Before transport, if the turtle is believed to be alive, the Permittee or their designee shall coordinate with FWC to determine the appropriate facility to receive live sea turtles for rehabilitation. When transporting marine turtles, the Permittee or their designee shall abide by the State of Florida's FWC Marine Turtle Conservation Guidelines located at:~~

~~<http://www.myfwc.com/wildlifehabitats/managed/sea-turtles/conservation-guidelines>.~~

- b. In order to minimize impingement or entrainment of marine turtles within the water column, dredging pumps shall be disengaged by the operator, or the draghead bypass valve shall be open and in use when the dragheads are not firmly on the bottom. This precaution is especially important during the cleanup phase of dredging operations
 - c. A state-of-the-art rigid deflector draghead shall be used on all hopper dredges at all times of the year.
 - d. The STSSN Coordinator shall be notified at 1-904-573-3930 or via the e-mail Allen.Foley@myfwc.com indicating the start-up and completion of hopper dredging operations. In the event of capturing or recovering marine turtles or marine turtle parts, the STSSN shall be contacted at seaturtlestranding@myfwc.com.
10. **Trawling.** If relocation trawling or non-capture trawling for marine turtles is required as per applicable National Marine Fisheries Service (NMFS) Biological Opinions and Incidental Take authorizations, the following is required:
- a. Any activity involving the use of nets to harass and/or to capture and handle marine turtles in Florida waters requires a Marine Turtle Permit from FWC prior to construction.
 - b. The Permittee or their contractor shall e-mail MTP@MyFWC.com weekly reports to the FWC's Imperiled Species Management Section on Friday of each week that trawling is conducted in Florida waters. These weekly reports shall include the species and number of turtles captured in Florida waters, their general health, and the release information. **A summary of all trawling activity (including non-**

~~capture trawling) the following information shall be submitted to MTP@MyFWC.com by January 15 of the following year, or at the end of the project. The summary shall be provided on the (using FWC-provided Excel spreadsheet (available at <http://myfwc.com/media/3333816/Trawl-Report-Template.pdf>); and shall list all trawling activity (including non-capture trawling); all turtles captured in Florida waters (including all measurements); the location of captures (latitude and longitude (in decimal degrees), of captures and the location of tow start-stop points (latitude and longitude in decimal degrees); and times for the start-stop points of the tows (including those tows on which no turtles are captured). The summary shall be submitted by January 15 of the following year or at the end of the project.~~

11. **Beach Related Activities.** The Permittee shall adhere to the following requirements for all beach-related activities:
 - a. *Beach Driving.* All vehicles shall be operated in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/>). Specifically, the vehicle shall be operated at <6 mph and run at or below the high-tide line. All personnel associated with the project shall be instructed about the potential presence of shorebirds and marine turtles and the need to avoid Take of (including disturbance to) these protected species.
 - b. *Beach Maintenance.* All debris, including derelict concrete, metal, and coastal armoring material, shall be removed from the beach to the maximum extent practicable prior to any placement of construction material on the beach placement. If debris removal activities will take place during shorebird or marine turtle nesting seasons, the work shall be conducted during daylight hours only, and shall not commence until completion of daily shorebird or marine turtle surveys each day. If flightless shorebird young are present within or adjacent to the work zone or equipment travel corridor, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young. It is the Permittee's responsibility to have their Contractor ensure that no chicks are in the path of the moving vehicle, and that the equipment leaves no tracks capable of trapping flightless chicks. All excavations and temporary alteration of beach topography shall be filled or leveled to the natural beach profile prior to 9:00 p.m. each day. The beach surface shall be inspected subsequent to completion of the project, and all tracks or impressions left by construction equipment on the beach shall be removed.
 - c. *Equipment Storage and Placement.* Staging areas for construction equipment shall be located off the beach, if off-beach staging areas are available. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to shorebird and marine turtle nesting and hatching activities. In

addition, all construction pipes that are placed on the beach shall be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system. Pipes placed parallel to the dune shall be 5 to 10 feet away from the toe of the dune. Temporary storage of pipes shall be off the beach to the maximum extent possible. If it will be necessary to extend construction pipes past a known shorebird nesting site, or over-wintering area for piping plovers, then whenever possible those pipes shall be placed landward of the site before birds are active in that area. No pipe or sand shall be placed seaward of a shorebird nesting site during the shorebird nesting season.

12. **Shorebird Protection Conditions.** Shorebird surveys shall be conducted by trained, dedicated individuals (Bird Monitor) with proven shorebird identification skills and avian survey experience. The Permittee shall comply with the following shorebird monitoring requirements:

- a. *Selection of Bird Monitors.* A list of Bird Monitors (with their contact information, summary of qualifications including bird identification skills, and avian survey experience) shall be provided to the FWC. This information shall be submitted to the FWC Regional Biologist (see contact information available at: <http://www.myfwc.com/shorebirds> prior to any construction or shorebird surveys for review and consultation. If properly trained, a Marine Turtle Permit Holder may serve concurrently as the Shorebird Monitor. Bird Monitors shall meet the following minimum qualifications.
 - i. Ability to identify all species of beach-nesting birds that nest in the project area by sight and sound.
 - ii. Ability to identify breeding/territorial behaviors and find nests of shorebirds and seabirds that occur in the project area.
 - iii. Ability to identify habitats preferred by shorebirds and seabirds nesting in the project area.
 - iv. Completed full introductory course training (online or webinar) on the *Breeding Bird Protocol for Florida's Seabirds and Shorebirds*, including training in data entry. Training resources can be found on the Florida Shorebird Database website (<https://public.myfwc.com/crossdoi/shorebirds/index.aspx>).
 - v. Familiar with FWC beach driving guidelines: www.myfwc.com/conservation/you-serve/wildlife/beach-driving.

- vi. Annually completes refresher course training (online or webinar) for the *Breeding Bird Protocol for Florida's Seabirds and Shorebirds*, including training in data entry.
 - vii. Previously participated in beach-nesting bird surveys associated with FWC, Audubon, or the U.S. Fish and Wildlife Service (FWS) in Florida (please provide references).
 - viii. Experience posting shorebird nesting data consistent with Florida Shorebird Alliance (FSD) Guidelines at <http://flshorebirdalliance.org/resources/instructions-manuals.aspx>.
 - ix. Registered contributor to the Florida Shorebird Database.
- b. The Bird Monitor(s) shall review and become familiar with the general information on the FWC's Florida Shorebird Database (FSD) website www.FLShorebirdDatabase.org. They shall use the data-collection protocol and implement data-entry procedures as outlined in that website. An outline of data to be collected, including downloadable field data sheets, is available on the website.
 - c. Breeding season varies by species and region. Most species have completed the breeding cycle by September 1, but flightless young may be present through September. The following dates are based on the best available information regarding ranges and habitat use by species for this project: ~~March~~ February 15 – September 1.
 - d. Surveys during the breeding season shall begin on the first day of the breeding season, or 10 days before any site work begins, whichever is later. Surveys shall be conducted through August 31, or until all breeding activity has concluded, whichever is later. However, if construction is completed before the end of the shorebird breeding season, weekly shorebird surveys shall be conducted until all nesting activity has concluded. If no nesting has been initiated on site prior to July 15, nesting surveys may be concluded on or after that date.
 - e. During the breeding season, the Bird Monitor(s) shall survey all potential beach-nesting bird habitats that may be affected by construction or pre-construction activities. The Bird Monitor(s) shall establish one or more shorebird survey routes in the FSD website to cover these areas.
 - f. During the pre-construction and construction phases of the project, the Bird Monitor(s) shall complete surveys on a daily basis to detect breeding activity and the presence of flightless chicks before (1) equipment is moved to the area, (2) vehicles are operated in the area, or (3) any other activities occur that have the potential to disrupt breeding behavior or cause harm to the birds or their eggs or

young. Once construction is completed, and all personnel and equipment have been removed from the beach, surveys may be conducted at weekly intervals. If no nesting has been initiated on site prior to July 15, surveys may be concluded on or after that date.

- g. The Bird Monitor(s) shall survey the project area by walking and looking for evidence of (1) shorebirds exhibiting breeding behavior, (2) shorebird chicks, or (3) shorebird juveniles, as outlined in the FSD's Breeding Bird Protocol for Shorebirds and Seabirds. The Bird Monitor(s) shall use binoculars for these surveys.
 - h. If an ATV or other vehicle is needed to cover large project areas, operators shall adhere to the FWC's Best Management Practices for Operating Vehicles on the Beach <http://myfwc.com/conservation/you-serve/wildlife/beach-driving>. Specifically, the vehicle shall be operated at a speed under 6 mph and only on beaches at or below the high-tide line. The Bird Monitor(s) shall stop at no greater than 200-meter intervals to look for breeding activity.
 - i. Once the Bird Monitor(s) confirms that birds are breeding, as evidenced by the presence of a scrape, eggs, or young, the Bird Monitor(s) shall notify the FWC Regional Species Conservation Biologist (see the attached FWC contact information exhibit) within 24 hours. The Bird Monitor(s) shall report all breeding activity to the FSD website within one week of data collection.
13. **Shorebird Buffer Zones and Travel Corridors.** The Bird Monitor(s) shall establish a disturbance-free buffer zone around any location within the project area where shorebirds have been engaged in breeding behavior, including territory defense. The FWC considers a 300-foot-wide buffer to be adequate, based on published studies; however, a smaller, site-specific buffer may be established if approved by the FWC Regional Species Conservation Biologist (contact information available at: <http://www.myfwc.com/shorebirds>). All sources of human disturbance (including pedestrians, pets, and vehicles) shall be prohibited in the buffer zone.
- a. The Bird Monitor(s) shall keep breeding sites under sufficient surveillance to determine if birds appear agitated or disturbed by construction or other activities in adjacent areas. If birds do appear to be agitated or disturbed by these activities, then the Bird Monitor(s) shall widen the buffer zone immediately to a sufficient size to protect breeding birds.
 - b. The Bird Monitor(s) shall ensure that reasonable and traditional pedestrian access is not blocked in situations where breeding birds will tolerate pedestrian traffic. This is generally the case with lateral movement of beach-goers walking parallel to the beach at or below the highest tide line. Pedestrian traffic may also be tolerated when breeding was initiated within 300 feet of an established beach

access pathway. The Bird Monitor(s) shall work with the FWC Regional Species Conservation Biologist to determine if pedestrian access can be accommodated without compromising nesting success.

- c. The Bird Monitor(s) shall ensure that the perimeters of designated buffer zones are marked with posts, twine, and signs stating “Do Not Enter, Important Nesting Area” or similar language. The signs shall include the name and a phone number of the entity responsible for posting. Posts shall not be higher than 3 feet once installed. “Symbolic fencing” (i.e., twine, string, or rope) shall be placed between all posts and shall be clearly visible to pedestrians. In areas where marine turtles nest, the ropes shall be at least 2.5 feet above the ground. If pedestrian pathways are approved by the FWC Regional Species Conservation Biologist within the 300-foot buffer zone, these shall be clearly marked. The Bird Monitor(s) shall ensure that the posting is maintained in good repair until breeding is completed or terminated. Although solitary nesters may leave the buffer zone with their chicks, the posted area continues to provide a potential refuge for the family until breeding is complete. Breeding is not considered to be completed until all chicks have fledged.
- d. The Bird Monitor(s) shall ensure that no construction activities, pedestrians, moving vehicles, or stockpiled equipment are allowed within the buffer area.
- e. The Bird Monitor(s) shall designate and mark travel corridors outside the buffer areas so as not to cause disturbance to breeding birds. Heavy equipment, other vehicles, or pedestrians may go past breeding areas in these corridors. However, other activities such as stopping or turning heavy equipment and vehicles shall be prohibited within the designated travel corridors adjacent to the breeding site.
- ~~fe.~~ When If flightless shorebird chicks are present within or adjacent to equipment travel corridors, a Shorebird Monitor shall be present during the operation to ensure that the equipment does not operate within 300 feet of the flightless chicks ~~movement of vehicles shall be adequately monitored by the Bird Monitor, who shall advise the contractor (whose responsibility it is to. It is the Permittee’s responsibility to have their contractor ensure that no chicks are in the path of the moving vehicles), that chicks are not separated from the family unit, and that vehicles leave no tracks capable of trapping flightless chicks. The Bird Monitor shall conduct a shorebird education and identification program with the Contractor to ensure protection of precocial (mobile) chicks.~~
- gf. The FWC recommends that some activity in the travel corridor is maintained on a daily basis in order to discourage birds from nesting within the travel corridor. These activities shall not be allowed to disturb shorebirds nesting on site or interfere with marine turtle nesting, especially if the corridors are established

before construction has started.

- hg. *Notification.* If the Bird Monitor(s) find that shorebirds are breeding within the project area, he or she shall ensure that an informational bulletin board is placed and maintained in the construction staging area. This bulletin board shall display the location map of the construction site, depict the location(s) of the bird breeding areas, and include a clearly visible warning stating: “NESTING BIRDS ARE PROTECTED BY LAW INCLUDING THE FLORIDA ENDANGERED AND THREATENED SPECIES ACT AND THE STATE AND FEDERAL MIGRATORY BIRD ACTS”.

14. Marine Turtle Nest Surveys and Relocation.

- a. For sand placement during the period of peak marine turtle egg laying and egg hatching (April 15 – November 15), daily early morning (~~before 9 a.m.~~) surveys shall be conducted, and eggs shall be relocated per the requirements below until completion of sand placement. **Note:** marine turtle monitors shall not enter posted shorebird buffer areas to conduct monitoring or to relocate nests, unless authorized by FWC Staff to do so. Monitoring and reporting shall continue throughout the nesting season, and shall be conducted according to the Post-Construction Monitoring and Reporting Marine Turtle Protection Conditions included in this document.
- b. *Marine Turtle Monitors:* Nesting surveys and egg relocations shall only be conducted by persons with prior experience and training in these activities and who are duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to Chapter 68E-1, F.A.C. Please contact FWC’s Marine Turtle Management Program in Tequesta at MTP@myfwc.com for information on the permit holder in the project area. It is the responsibility of the Permittee to ensure that nesting surveys are completed by the authorized Marine Turtle Permit Holder. Nesting surveys shall be conducted daily beginning no earlier than sunrise between sunrise and 9 a.m.
- c. Sand placement is allowed during April 15 through November 15, provided the following requirements are met:
- i. Daily Nesting surveys shall be initiated 65 days prior to sand placement activities, or by the beginning of the period of peak marine turtle egg laying and egg hatching (April 15 – November 15), whichever is later.
 - ii. Daily Nesting surveys shall continue ~~daily~~ through the end of the project, or November 30~~15~~, or until two weeks after the last crawl in the project area, whichever is earlier.

- iii. After the sand placement is completed, marine turtle nest monitoring and reporting shall continue throughout the nesting season, and shall be conducted according to the *Post-Construction Monitoring and Reporting of Marine Turtle Nesting* requirements in Specific Conditions 21 and 22.

 - d. If nests are laid in areas where they may be affected by sand placement activities, eggs shall be relocated per the requirements listed in these conditions. ~~Monitoring shall resume for the following nesting seasons according to Post-construction Monitoring and Reporting Marine Turtle Protection Conditions that are included in this document.~~
 - id. Only those nests in the area where sand placement will occur, shall be relocated. Nest relocation shall not occur upon completion of sand placement. Nests requiring relocation shall be moved no later than 9:00 a.m., the morning following deposition, to a nearby self-release beach site in a secure setting, where artificial lighting would not interfere with hatchling orientation. Relocated nests shall not be placed in organized groupings. Relocated nests shall be randomly staggered along the length and width of the beach, in settings that are not expected to experience any of the following: daily inundation by high tides, that are not known to routinely experience severe erosion and egg loss, or illumination by artificial lighting. Nest relocations in association with construction activities shall cease when sand placement activities no longer threaten nests.

 - iiie. Nests deposited within areas where construction activities have ceased, or will not occur for 65 days, or nests laid in the nourished berm prior to tilling, shall be marked and left in place. The turtle permit holder shall install an on-beach marker at the nest site and/or a secondary marker at a point as far landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. No activity shall occur within this area, nor shall any activities occur that could result in impacts to the nest. Nest sites shall be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the project activity.
15. **Marine Turtle or Nest Encounters.** Upon locating a dead or injured marine turtle adult, hatchling or egg that may have been harmed or destroyed as a direct or indirect result of the project, the Permittee shall notify FWC Wildlife Alert at 1-888-404-FWCC (3922). Care shall be taken in handling injured marine turtles or eggs to ensure effective treatment or disposition, and in handling dead specimens to preserve biological materials in the best possible state for later analysis. If a marine turtle nest is excavated during construction activities, but not as part of the authorized nest relocation process outlined in these specific conditions, the permitted person responsible for egg relocation for the project shall be notified immediately so the eggs can be moved to a suitable relocation site.

16. **Project Lighting.** Direct lighting of the beach and nearshore waters during the period of peak marine turtle egg laying and egg hatching (~~April 15 – November 15~~~~May 1 – October 31~~) shall be limited to the immediate construction area, and shall comply with safety requirements. Lighting on offshore or onshore equipment shall be minimized through reduction, shielding, lowering and appropriate placement to avoid excessive illumination of the water’s surface and nesting beach while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of lighting equipment shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect marine turtles. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area (Figure 1 below).

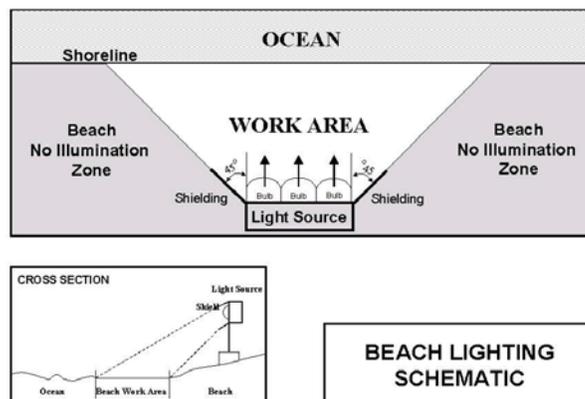


Figure. 1

17. **Fill Restrictions.** During the period of peak marine turtle egg laying and egg hatching (April 15 – November 15), the contractor shall not extend the beach fill more than 500 feet along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. An exception to this may occur if there is permitted marine turtle monitor present on-site to ensure no nesting and hatching marine turtles are present within the extended work area. If the 500 feet is not feasible for the project, an agreed upon distance shall be established during the preconstruction meeting. Once the beach has been cleared, and the necessary nest relocations have been completed, the contractor shall be allowed to proceed with the placement of fill during daylight hours until dusk, at which time the 500-foot length limitation shall apply.
18. **Compaction Sampling.** Sand compaction shall be monitored in the area of sand placement immediately after completion of the nourishment event, and two weeks prior to marine turtle nesting season ~~May 1st~~, for three (3) subsequent years and shall be monitored in accordance with a protocol agreed to by the FWC and the Permittee. The

requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed material no longer remains on the beach. At a minimum, the protocol provided under Specific Conditions 18 a. and 18 b. below shall be followed. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area shall be tilled immediately prior to the date listed above. If values exceeding 500 psi are distributed throughout the project area, but in no case do those values exist at two adjacent stations at the same depth, then the Permittee shall consult with the FWC to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling shall not be required.

- a. Compaction sampling stations shall be located at 500-foot intervals along the project area. One station shall be at the seaward edge of the dune/bulkhead line (when material is placed in this area), and one station shall be midway between the dune line and the high water line (normal wrack line).
 - b. At each station, the cone penetrometer shall be pushed to depths of 6, 12 and 18 inches three times (i.e., three replicates at each depth). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lie over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final 6 averaged compaction values.
 - c. No compaction sampling shall occur within 300 feet of any shorebird nest.
 - d. Any vehicles operated on the beach in association with compaction surveys shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach <http://myfwc.com/conservation/you-serve/wildlife/beach-driving/>.
19. **Tilling Requirements.** If tilling is required, as specified above, the area shall be tilled to a depth of ~~24~~³⁶ inches. All tilling activity shall be completed prior to the marine turtle nesting season. If tilling occurs during shorebird nesting season, shorebird surveys shall be required prior to tilling per the Shorebird Conditions included within this document. It is the responsibility of the contractor (and ultimately the Permittee) to avoid tilling, scarp removal, or dune vegetation planting in areas where nesting birds are present. Each pass of the tilling equipment shall be overlapped to allow thorough and even tilling. If the project is completed during the marine turtle nesting season, tilling shall not be performed in areas where nests have been left in place or relocated. If compaction

measurements are taken, a report on the results of the compaction monitoring shall be submitted electronically to FWC at marineturtle@myfwc.com prior to any tilling actions being taken.

- a. No tilling shall occur within 300 feet of any shorebird nest.
 - b. ~~When~~ If flightless chicks are present within or adjacent to the work zone or travel corridors, a Bird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young. movement of vehicles shall be adequately monitored by the Bird Monitor, who shall advise the contractor (whose responsibility it is to ensure no chicks are in the path of the moving vehicles), that chicks are not separated from the family unit, and that vehicles leave no tracks capable of trapping flightless chicks. The Bird Monitor shall conduct a shorebird education and identification program with the Contractor to ensure protection of precocial (mobile) chicks.
 - c. A relatively even surface, with no deep ruts or furrows, shall be created during tilling. To do this, chain-linked fencing or other material shall be dragged over those areas as necessary after tilling.
 - d. Tilling shall occur landward of the wrack line and shall avoid all naturally vegetated areas that are at least 3 square feet in size, as well as any planted areas that have been authorized by the Department. by maintaining a minimum A three (3) foot wide No-Tilling buffer shall be maintained around the vegetated areas. The slope between the mean high water line and the mean low water line shall be maintained in such a manner as to approximate natural slopes.
 - e. Any vehicles operated on the beach in association with tilling shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach <http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/>.
20. **Escarpment Surveys.** Visual surveys for escarpments along the project area shall be made immediately after completion of sand placement, and during the period from March 15 to April 15, for three (3) subsequent years if placed sand still remains on the beach. Escarpments that interfere with marine turtle nesting or that exceed 18 inches in height for a distance of at least 100 feet shall be leveled and the beach profile shall be reconfigured to minimize scarp formation by April 15. Any escarpment removal shall be reported by location to FWC, with a copy sent to the JCP Compliance Officer. If the project is completed during the marine turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. The Permittee shall contact FWC immediately if subsequent reformation of escarpments occurs during the nesting and hatching season, and the escarpments interfere with marine turtle nesting or exceed 18 inches in height for a

distance of 100 feet. The FWC would then determine the appropriate action to be taken. If FWC determines that escarpment leveling is required during the nesting or hatching season, the FWC will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken shall be submitted electronically to marineturtle@myfwc.com, along with the annual summary of marine turtle monitoring, as described in Specific Conditions 21 and 22 below. If escarpment removal occurs during shorebird breeding season, shorebird surveys shall be required prior to removal per the Shorebird Conditions included within this document. **NOTE:** Out-year escarpment monitoring and remediation are not required if placed material no longer remains on the dry beach.

- a. No heavy equipment shall operate within 300 feet of any shorebird nest.
- b. ~~When~~ If flightless chicks are present within or adjacent to the work zone or travel corridors, a Shorebird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young. ~~movement of vehicles shall be adequately monitored by the Bird Monitor, who shall advise the contractor (whose responsibility it is to ensure no chicks are in the path of the moving vehicles), that chicks are not separated from the family unit, and that vehicles leave no tracks capable of trapping flightless chicks. The Bird Monitor shall conduct a shorebird education and identification program with the Contractor to ensure protection of precocial (mobile) chicks.~~
- c. Any vehicles operated on the beach in association with escarpment surveys or removal shall operate in accordance with the FWC's Best Management Practices for Operating Vehicles on the Beach (<http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/>).

21. Post-construction Wildlife Conditions, Monitoring and Reporting.

- a. *Shorebirds:* If beach cleaning will occur on the nourished beach, a minimum of 30% of the biotic material within the wrack line shall be left on the beach post-cleaning. The biotic material shall be left at the strand line, in a natural configuration, to ensure that the nourished beach re-establishes its function as foraging habitat for shorebirds. This shall occur for as long as the placed sand remains on the beach.
- b. *Marine Turtles:* Reports on all marine turtle nesting activity shall be provided for the initial period of peak marine turtle egg laying and egg hatching (April 15 – November ~~30~~15) and for up to two additional nesting seasons as follows:
 - i. For the remainder of the nesting season immediately following construction, and the following year, the number and type of emergences (nests or false

crawls) shall be reported per species in accordance with **Table 1 below**. An additional year of nesting surveys may be required if nesting success for any species on the nourished beach is less than 40%.

- ii. For the remainder of the nesting season immediately following construction, reproductive success shall be reported per species in accordance with **Table 1 below**. Reproductive success shall be reported for all loggerhead, Kemp's ridley, green and leatherback nests.
- iii. If the documented reproductive success ~~documented by~~ for each species meets or exceeds required criteria (outlined in Table 1 below) ~~for each species~~, monitoring for reproductive success shall be recommended, but not required for the second year post-construction.
- iv. Monitoring of nesting activity in the seasons following construction shall include daily surveys and any additional measures authorized by the FWC. Summaries shall include all crawl activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any) by species, project name, applicable project permit numbers, and the dates of construction.
- v. *Lighting Surveys*. Two lighting surveys shall be conducted of all artificial lighting visible from the nourished berm. The first survey shall be conducted between May 1st and May 15th of the first nesting season following construction, or immediately after placement if construction is not completed until after May 15th. ~~A~~ The second survey shall be conducted between July 15 and August 1. The survey shall be conducted from the top of the foreshore slope (i.e., the seaward edge of the filled berm before it slopes into the water), facing landward. ~~by the Permittee and shall include a landward view from the seaward most extent of the new beach profile.~~ The survey shall follow standard techniques for such a survey and include number and type of visible lights, location of lights and photo documentation. For each visible light source, the Permittee shall document that the property owner(s) ~~has~~ has been notified of the problem light, and has been provided with recommendations for correcting the light. Recommendations shall be in accordance with local lighting ordinances, and a report summarizing all visible lights shall be forwarded to local code enforcement, or if no lighting ordinances exist, the recommendation shall be that no lights, or light sources or glow shall be visible from the newly elevated beach. A report summarizing all lights visible shall be submitted to FWC Imperiled Species Management Section at marineturtle@myfwc.com and **copied to** JCPCCompliance@dep.state.fl.us by the 1st of the month following survey. A summary report documenting what corrective actions or local enforcement actions have been taken shall also be submitted by

December 15 of that year. After the annual report is completed, the Permittee shall set up a meeting shall be set up with the Permittee, county or municipality, and FWC to discuss the survey report, as well as any documented marine turtle disorientations in or adjacent to the project area.

22. Data shall be reported for the nourished areas in accordance with the Table 1 below and shall include number of nests that were lost to erosion or were washed out. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets) to the FWC Imperiled Species Management Section at marineturtle@myfwc.com and copied to JCPCCompliance@dep.state.fl.us. All summaries shall be submitted by January 15 of the following year. The FWC Excel spreadsheet is available upon request from marineturtle@myfwc.com.

Table 1. Marine Turtle Monitoring for Beach Placement of Material

Metric	Duration	Variable	Criterion
Nesting Success	Year of in season construction, two years post construction if placed sand remains on beach and variable does not meet criterion based on previous year. ^{+and-2}	Number of nests and non-nesting events.	40% or greater.
Hatching Success	Year of in season construction. And one year post construction if placed sand remains on beach and variable does not meet success criterion based on previous year. ^{+and-2}	Number of hatchlings by species to hatch from egg.	60 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).
Emergence Success	Year of in season construction and one year post construction if placed sand remains on beach and variable does not meet success criterion based on previous year. ^{+and-2}	Number of hatchlings by species to emerge from nest onto beach.	80 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).
Disorientation	Year of in season construction and two years post construction if placed sand remains on the beach. ^{+and-2}	Number of nests and individuals that misorient or disorient.	http://myfwc.com/media/418153/Seaturtle_Guidelines_A_LDIR_Directions.pdf

Metric	Duration	Variable	Criterion
Lighting Surveys	Two surveys the year following construction, one survey between May 1 and May 15 and second survey between July 15 and August 1. ¹ and ²	Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made.	Lighting survey and meeting resulting with plan for reduction in lights visible from nourished berm within one to two month period.
Compaction	Three seasons following construction. Not required if the beach is tilled prior to nesting season each year placed sand remains on beach.	Shear resistance.	Less than 500 psi.
Escarpment Surveys	Weekly during nesting season for up to three years each year placed sand remains on the beach. ²	Number of scarps 18 inches or greater extending for more than 100 feet that persist for more than 2 weeks.	Successful remediation of all persistent scarps as needed.

Notes: ¹Not required for maintenance dredging.
²Not required if dredged sand is placed in the nearshore swash or littoral zones only.

MONITORING REQUIRED:

23. Water Quality - During hydraulic sand placement and in-water work (e.g., dredging or mechanical sand placement seaward of the mean high water line), physical sampling of turbidity is required. During placement of fill from an upland source, when the work remains landward of the mean high water line (e.g., mechanical sand placement), turbidity shall be monitored visually. The Permittee shall have a person with experience in turbidity monitoring on site at all times to visually monitor or physically sample turbidity, as described below: Turbidity shall be monitored follows:

Units: Nephelometric Turbidity Units (NTUs).

Physical Sampling of Turbidity (in-water work, hydraulic sand placement):

Frequency: ~~Turbidity monitoring~~ Sampling shall be conducted at least 3 times daily, approximately 4 hours apart, and at any other time that there is a likelihood of an exceedance of the turbidity standard, during all dredging or sand placement operations. Sampling shall be conducted **while the highest project-related turbidity levels are crossing the edge of the mixing zone.** Since turbidity levels can be related to pumping rates, the dredge pumping rates shall be recorded, and provided to the Department upon request. The compliance samples and the corresponding background samples shall be

collected at approximately the same time, i.e., one shall immediately follow the other.

Location: Background: Sampling shall occur at At surface and mid-depth, clearly outside the influence of any artificially generated turbidity plume or the influence of an outgoing inlet plume.

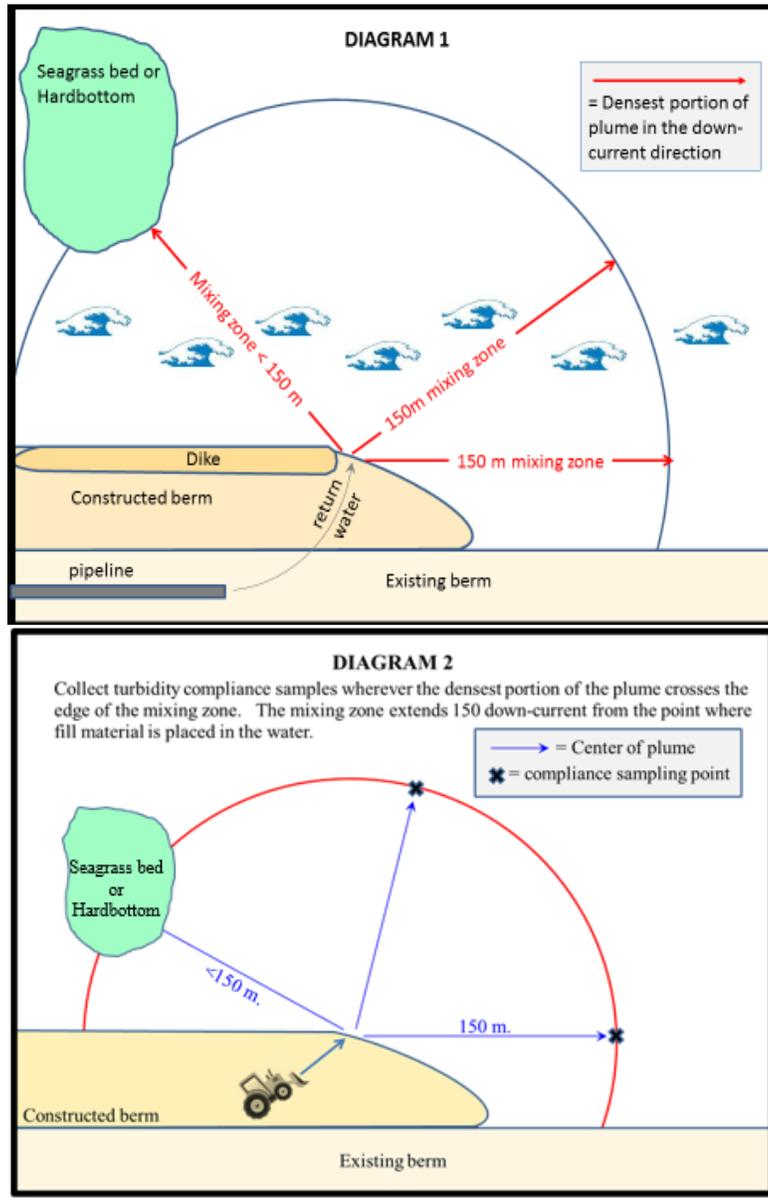
Doctor's Pass Dredging Complex: Samples shall be collected at least 300 meters up-current from the source of turbidity at the dredge site.

Beach Site: Samples shall be collected at least 300 meters up-current from any portion of the beach that has been, or is being, filled during the current construction event, at the same distances offshore as the associated compliance samples.

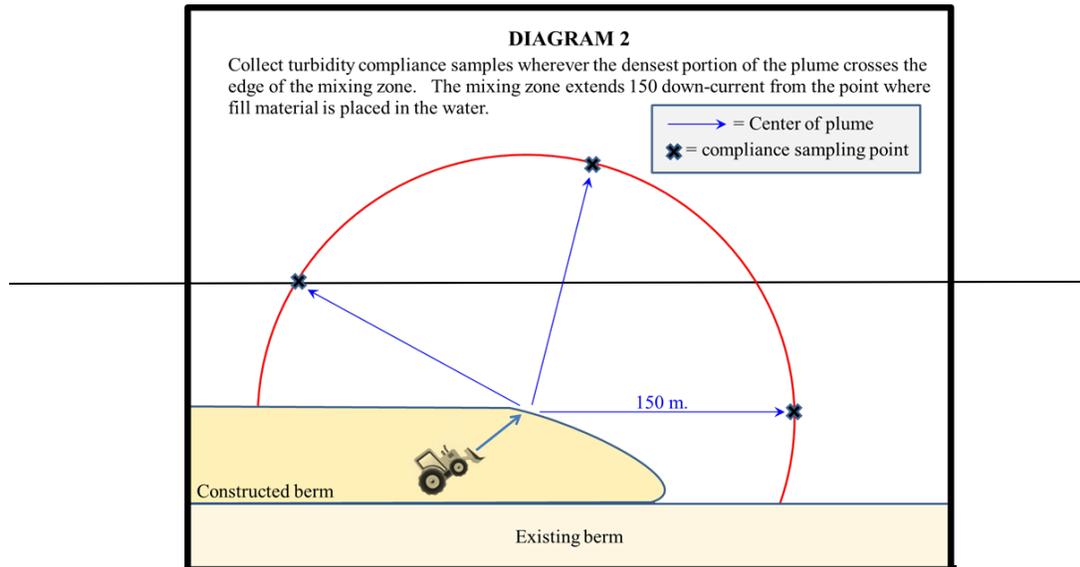
Compliance: Sampling shall occur at At-surface and mid depth, where the densest portion of the turbidity plume crosses the edge of the mixing zone. If no plume is visible, follow the likely direction of flow.

Doctor's Pass Dredging Complex: Samples shall be collected 150 meters down-current from the dredge head, or at the edge of the nearest seagrass bed/hardbottom in the downcurrent direction, whichever is closest to the dredge head. Samples shall also be collected at any other source of turbidity generated by the dredge. If no plume is visible, follow the likely direction of flow.

Beach Site ~~when using hydraulic discharge~~: Samples shall be collected within the turbidity plume, 150 meters downcurrent from the source (point where the return water from the dredged discharge reenters the Gulf of Mexico, or the point where the fill material was placed seaward of the MHW line), or at the edge of the nearest seagrass bed/hardbottom in the downcurrent direction, whichever is closest to the discharge point. *Note: If the plume flows parallel to the shoreline, the densest portion of the plume may be close to shore, in shallow water. In that case, it may be necessary to access the sampling location from the shore, in water that is too shallow for a boat. See Diagram 1 and Diagram 2.*



Beach Site when using an upland borrow area (truck haul):
 Samples shall be collected 150 meters downcurrent from the point where the fill material (that caused the plume) was placed seaward of the MHW line. See Diagram 2.



Visual Turbidity Monitoring (placement of fill from an upland source when the work remains landward of the mean high water line): The person conducting the visual turbidity monitoring shall maintain a log of at least 3 regular observations per day. This log shall indicate whether a turbidity plume was visible and whether it extended beyond the 150-meter mixing zone.

If a visible turbidity plume extends beyond the 150-meter mixing zone, physical samples (background and compliance) shall be obtained. If this occurs two or more times within a week, then the Permittee shall begin physically collecting turbidity samples as described above. In the event that the physical sampling indicates an exceedance of the turbidity standard, the compliance protocol, established in Specific Condition 24, shall be implemented. If the turbidity plumes are no longer visible at the edge of the mixing zone, and that continues for a week of fill placement landward of the MHW line, the JCP Compliance Officer may approve the re-initiation of visual monitoring.

A weekly log of visual turbidity monitoring (including any physical samples) shall be submitted as detailed in Specific Condition 25. At a minimum, this log shall include items a, b, c, f, g, j, k, and l.

Calibration: The instruments used to measure turbidity shall be fully calibrated with primary standards within one month of the commencement of the project, and at least once a month throughout the project. Calibration with secondary standards shall be verified each morning prior to use, after each time the instrument is turned on, and after field sampling using two secondary turbidity “standards” that bracket the anticipated turbidity samples. If the post-sampling calibration value deviates more than 8% from the previous calibration value, results shall be reported as estimated and a description of the problem shall be included in the field notes.

Analysis of turbidity samples shall be performed in compliance with DEP-SOP-001/01 FT 1600 Field Measurement of Turbidity:

<http://publicfiles.dep.state.fl.us/dear/sas/sopdoc/2008sops/ft1600.pdf>

If the turbidity monitoring protocol specified above prevents the collection of accurate data, the person in charge of the turbidity monitoring shall contact the JCP Compliance Officer to establish a more appropriate protocol. Once approved in writing by the Department, the new protocol shall be implemented through an administrative permit modification.

24. The **compliance** locations given above shall be considered the limits of the temporary mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the **compliance** sites that are greater than 29 NTUs above the corresponding background turbidity levels, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the JCP Compliance Officer via email at JCPCCompliance@dep.state.fl.us and include in the subject line, "TURBIDITY EXCEEDANCE", and the Project Name and Permit Number. Also notify the Department's South District office.

Any project-associated turbidity source other than dredging or fill placement for beach nourishment (e.g., scow or pipeline leakage) shall be monitored as close to the source as possible. If the turbidity level exceeds 29 NTUs above background, the construction activities related to the exceedance shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. This turbidity monitoring shall continue every hour until background turbidity levels are restored or until otherwise directed by the Department. The Permittee shall notify the Department, by separate email to the JCP Compliance Officer, of such an event within 24 hours of the time the Permittee first becomes aware of the discharge. The subject line of the email shall state "OTHER PROJECT-ASSOCIATED DISCHARGE, TURBIDITY EXCEEDANCE".

- a. When reporting a turbidity exceedance, the following information shall also be included:
- ia. the Project Name;
 - iib. the Permit Number;
 - iiie. location and level (NTUs above background) of the turbidity exceedance;
 - ivd. the time and date that the exceedance occurred; and

- k. a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, calibration of the meter, accuracy of the data and precision of the GPS measurements;
 - l. When samples cannot be collected, include an explanation in the report. If unable to collect samples due to severe weather conditions, include a copy of a current report from a reliable, independent source, such as an online weather service.
26. No impacts to hardbottom or submerged aquatic vegetation are authorized by this permit. Biological monitoring of nearshore hardbottom areas, pipeline corridors, borrow areas, and submerged aquatic vegetation shall be conducted to provide the Department with reasonable assurance that any unpermitted project-related persistent or temporary negative impacts (direct or indirect) to hardbottom or submerged aquatic vegetation will be documented, if they occur.
- a. The Permittee shall adhere to the approved **Hardbottom Biological Monitoring Plan** (approved July 10, 2017) ~~dated June 2015~~, which is a binding part of this permit. The Hardbottom Biological Monitoring Plan includes the following:
 - i. When pipeline corridors are used for construction, the Permittee shall monitor ~~N~~natural hardbottom within Pipeline corridors (P1, P2, and P3) ~~will be monitored~~ once prior to construction, weekly during construction, and once immediately following construction.
 - ii. Nearshore hardbottom adjacent to the following four beach segments: Vanderbilt, Pelican Bay, Park Shore (including the extended area between R-43+500 to R-42, known as the Clam Pass Park Placement Area), and Naples Beach, segments shall be monitored once prior to their respective initial construction events, ~~once immediately following construction (within 6 months), and annually for three years post-construction.~~ This pre-construction survey will serve as the baseline for all subsequent nourishment event monitoring conducted under this permit. An immediate post-construction survey (the summer following construction) and three annual post-construction surveys (Years 1, 2, and 3 post-construction) shall be required following the initial construction / nourishment event. Each subsequent nourishment shall initiate another complete round of post-construction monitoring (i.e., one survey within six (6) months of construction and three annual surveys). All nearshore hardbottom monitoring surveys shall be conducted in summer months (May through September). ~~The pre-construction survey performed prior to the first nourishment shall serve as the baseline for all subsequent nourishment events conducted under this permit.~~

- iii. If a phased approach to nourishment is taken for the four beach segments in Collier County, then post-construction monitoring of beach segments shall match the phased approach to their nourishment (i.e., monitoring shall be tied to the beach segment that is nourished).
- iv. The Permittee shall require the biological monitoring firm to submit the **raw data**, as collected in the field and as entered into spreadsheets for analysis (Microsoft Excel file format), simultaneously to the JCP Compliance Officer, contractor and Permittee no later than 45 days following the completion of each hardbottom survey.
- v. The Permittee shall also require the biological monitoring firm to submit a **monitoring report** to the JCP Compliance Officer no later than 90 days following the completion of each survey, according to the plan.

~~The table below summarizes tasks required by the approved Hardbottom Biological Monitoring Plan (see attached plan for details), and these are described in detail in the Plan. Reports are required to be submitted following each survey, according to the Plan. The Permittee shall acquire written approval from the Department prior to implementing any substantial revisions to the approved plan.~~

Hardbottom monitoring summary table

Survey Method	Description / Information	Task	Frequency	Deliverables
Pipeline Corridors	Three corridors (P1, P2, and P3)	Qualitative video along each	1 Pre-construction, weekly during construction, 1 post-construction	Video
Transects	32 31 permanent cross shore 50 m long transects	Line-intercept along each transect	1 <u>Baseline Survey (prior to first construction/nourishment event only).</u> Pre-construction , 1 immediate and 3 annual post-construction surveys following each construction/nourishment event.	Excel spreadsheet
		Interval sediment depth along each transect		Excel spreadsheet
		Census of all scleractinian coral colonies ≥ 5 cm within 1-m wide belts along each transect		Excel spreadsheet
		Photo monitoring of 2 coral colonies ≥ 15 cm along each transect		Photographs and Excel spreadsheet
		Qualitative video collected along each transect		Video
Quadrats	0.5 m ² permanent quadrats established every 5 m along each transect	BEAMR functional group, sediment depth, and physical relief data collected in each quadrat		Excel workbook
Hardbottom Edge	<u>Specified areas between R-21+80 and R-66</u>	Mapping of landward (<u>nearshore</u>) hardbottom edge		Shapefiles

- b27. The Permittee shall adhere to the **Seagrass Monitoring Plan** (approved April 16, 2015), which is a binding part of this permit. The **Seagrass Monitoring Plan** includes the following:
- i. When maintenance dredging of Doctor's Pass occurs, the Permittee shall monitor all submerged aquatic vegetation (SAV) resources within the influence of the project ~~shall be monitored~~ before and after construction. The Permittee shall adhere to the approved **Seagrass Monitoring Plan** dated April 2015, which is a binding part of this permit. All seagrass monitoring surveys shall be conducted during the summer SAV growing season (June 1 – September 30).
 - ii. The Permittee shall require the biological monitoring firm to submit the **raw data**, as collected in the field and as entered into spreadsheets for analysis (Microsoft Excel file format), simultaneously to the JCP Compliance Officer, contractor and Permittee no later than 30 days following the completion of each seagrass survey.
 - iii. The Permittee shall also require the biological monitoring firm to submit the **monitoring report** to the JCP Compliance Officer within 90 days following the completion of each survey.

~~The below table below summarizes tasks associated with each survey (see Plan for specifics and details). Reports are required to be submitted following each survey, according to the Plan. The Permittee shall acquire written approval from the Department prior to implementing any substantial revisions to the approved plan.~~

SAV monitoring summary table

Survey method	Task	Description/Information	Frequency	Deliverables
Mapping and qualitative characterization	Edge Delineation	Acreage map using diver-verified GPS coordinates along the edge of all SAV beds.	Pre-construction and post construction of Doctor's Pass maintenance	GIS layer / Shapefile
	Qualitative Assessment	Species composition, above-ground biomass, epiphyte coverage, and overall condition of each patch will be assessed, and compared to previous surveys.		narrative
Quantitative Survey	Determine the number, size and position of quadrats	Quadrats haphazardly distributed, depending of patch size. The number and size of quadrats =consistent for all surveys.		narrative
	Braun-Blanquet cover-abundance	The % of each quadrat covered by benthic categories visually assessed. A BB score reported for each of the SAV taxa and total cover of all SAV taxa present within quadrats.	Excel spreadsheet	

~~28. The Permittee shall require the biological monitoring firm to submit raw data, as collected in the field and as entered into spreadsheets for analysis (Microsoft Excel file format), simultaneously to the Department, contractor and Permittee no later than 45 days after completing each survey, beginning with the pre-construction monitoring survey.~~

2729. The Permittee shall adhere to the approved **Physical Monitoring Plan** (approved August 25, 2017) dated March 2015, which is a binding part of this permit. The Permittee shall acquire written approval from the Department prior to implementing any substantial revisions to the approved plan.

The approved Physical Monitoring Plan can be revised at any later time by written request of the Permittee and with the written approval of the Department. If, subsequent to approval of the Physical Monitoring Plan, there is a request for modification of the permit, the Department may require revised or additional monitoring requirements as a condition of approval of the permit modification.

28. During the planning of each beach nourishment event of Clam Pass Park, the Collier County Coastal Zone Management Department and the Pelican Bay Services District staff shall meet and review the monitoring data and agree that the physical monitoring data indicates inlet stability is not approaching a critical condition due to shoaling; if data indicates a critical condition may develop such that beach nourishment may interfere with maintenance dredging of the inlet, then the Permittee shall develop an alternative course of action, for approval by the Department of Environmental Protection.
2930. Sediment quality shall be assessed as outlined in the applicable-attached Sediment QA/QC Plan, which is dated October 2014: Upland Sediment, Offshore Sediment and / or Maintenance Dredging Sediment (all approved April 16, 2015). Any placement of material that is not in compliance with the applicable Sediment QA/QC Plan shall be handled according to the protocols set forth in the Sediment QA/QC Plan. The sediment testing results shall be submitted to the JCP Compliance Officer within 90 days following the completion of beach construction. The Sediment QA/QC Plans includes the following:
- a. If during construction, the Permittee or Engineer determines that the beach fill material does not comply with the sediment compliance specifications, measures shall be taken to avoid further placement of noncompliant fill, and the sediment inspection results shall be reported to the JCP Compliance Officer.
 - b. The Permittee shall submit post-construction sediment testing results and an analysis report to the JCP Compliance Officer within 90 days following beach construction, as outlined in the Sediment QA/QC Plan. The sediment testing results shall be certified by a P.E. or P.G. from the testing laboratory. A summary table of the sediment samples and test results for the sediment compliance parameters, as outlined in Table 1 of the Sediment QA/QC Plan, shall accompany the complete set of laboratory testing results. A statement of how the placed fill material compares to the sediment analysis and volume calculations from the geotechnical investigation of the borrow site shall be included in the sediment testing results report.
 - c. A post-remediation report containing the site map, sediment analysis, and volume of noncompliant fill material removed and replaced shall be submitted to the Department within 7 days following completion of remediation activities.

~~3031.~~ If the Permittee is unable to complete two maintenance events within the 15-year life of the permit, the Permittee may request (prior to the expiration date of the permit), and the Department shall grant, an extension of the permit expiration date in order to allow completion of the second maintenance event. The extension would be documented through an administrative modification.

31. Dune restoration / maintenance planting conditions.

The Permittee may restore sand dunes, within the project area, that have been altered or damaged by a storm, by regrading or filling and replanting the restored dunes according to the following: ~~Vegetation planting is also planned for select locations throughout the project area. Dune maintenance and restoration activities shall comply with the following conditions:~~

- a. ~~The Permittee shall restore any disturbed dune topography to pre-project elevations, grades and configuration.~~ The Permittee shall place clean, beach compatible sand (that is pre-approved by the Department for dune placement) to create a stable dune system seaward of the major structure and continuous with the natural dune features in the area. Fill material shall be free of construction debris, rocks, clay, marl, cobble, or other foreign matter. Fill shall be placed as far landward as practicable to establish or repair dune features, while taking into account the existing beach and dune profile in order to determine proper siting of fill. The seaward toe of the fill is to be located so as not to interact with high frequency storm events. Side slopes of the restored dune shall match the slope of natural dunes in the area, and in no case shall exceed a 3:1 horizontal run to vertical rise ratio. The crest elevation of the restored dune shall be set at the crest elevation of natural dunes in the area.
- b. No dune restoration construction activity shall occur seaward of the frontal dune and no temporary lighting of the construction area is authorized during the marine turtle nesting season (1 May through 31 October).
- c. The Permittee shall plant the restored dune with the Florida-native plant species. This usually consists predominantly of sea oats (*Uniola paniculata*), dune panic grass (*Panicum amarum*), railroad vine (*Ipomea pes-caprae*) and /or dune sunflower (*Helianthus debilis*); with. ~~The restored dune shall include a minimum of 70% coverage by dune grasses. Planting materials shall be appropriate~~ adapted to the region of the planting site. Dune restoration plants shall be spaced throughout the designated area in staggered rows. Plant units shall be four-inch size or less, spaced a maximum distance of 18 inches apart and installed a minimum of six inches deep. The Permittee shall fertilize and water-in the planting units at the time of installation and ~~irrigate and fertilize only~~ as necessary until the plants are established per the recommendations of the United States Department of

Agriculture (USDA), Natural Resources Conservation Service (NRCS) "Native Plants for Coastal Dune Restoration: What, When, and How for Florida"
https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs141p2_014913.pdf
and meet the survival criteria below. Irrigation systems, if necessary, shall be ~~installed below grade and remain below grade.~~

- d. Irrigation systems (if proposed) shall be entrenched 1 to 3 inches below grade so as not to pose a barrier to hatchlings and to allow for easy removal. Irrigation piping shall avoid all marked nests by a minimum of ten (10) feet. The irrigation system shall be designed and maintained so that watering of the unplanted sandy beach does not occur. In the event a marine turtle nest is deposited within the newly established dune planting area, the Permittee shall modify the irrigation system so that watering within 10 feet of the nest does not occur. Daily inspection of the irrigation system shall be conducted ~~accomplished~~ by the Permittee to ensure compliance with this condition.
- ~~e. Within 180 days, a minimum of 80 percent overall survival rate of the planting units shall be established and 80 percent of the planted area shall be covered with the selected species. Gaps in the shore parallel coverage shall be replanted. The Permittee shall replant all deficient areas and maintain the plantings until the above success criteria are met. Irrigation systems and other structures placed during plant installation shall be removed only after approval of planting success by the Department and within thirty days from the submittal for final project certification.~~
- ef. The dune restoration areas (constructed under this permit) shall be protected from foot traffic or other encroachments. Signs, rope and bollard barriers, or sand fencing shall be constructed, as required by the Department field representative, to prevent trampling of vegetation and erosion of the dune feature. These shall be removed once the plants have become viably established.
- fg. Within 30 days of project completion, and prior to submitting the final certification of project completion, the Permittee shall submit to the Department's JCP Compliance Officer for approval, an as-built plan prepared and certified by an appropriate registered professional, such as a licensed landscape architect or a professional engineer, showing that the dune restoration has been constructed and planted in full accordance with these specific permit conditions. The Permittee shall include the dune restoration in the final certification referenced in General Permit Condition 11. If the completed activity differs substantially from the approved plans, any substantial deviations shall be noted and explained on two copies of as-built drawings submitted to the Department prepared and certified by a licensed landscape architect showing the dune restoration.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section

120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

When there has been no publication of notice of agency action or notice of proposed agency action as prescribed in Rule 62-110.106, F.A.C., a person may request a copy of the agency action. The Department shall upon receipt of such a request, if agency action has occurred, promptly provide the person with notice. The Department does not require notice of this agency action to be published. However, the applicant may elect to publish notice as prescribed in Rule 62-110.106, F.A.C., which constitutes notice to the public and establishes a time period for submittal of any petition.

Attachments:

- Permit Drawings - Sheets 1, 2, 3, 8, 9 and 17a, shall be replaced by the respective sheets, signed and sealed on November 30, 2016
- Physical Monitoring Plan (dated August 2017, approved August 25, 2017)
- Biological Monitoring Plan (dated July 2017, approved July 10, 2017)
- Seagrass Monitoring Plan (dated April 2015, approved April 16, 2015)
- Offshore Sediment QA/QC Plan (dated March 2015, approved April 16, 2015)
- Upland Sediment QA/QC Plan (dated October 2014, approved April 16, 2015)
- Maintenance Dredging Sediment QA/QC Plan (dated October 2014, approved April 16, 2015)

EXECUTION AND CLERKING:

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Lainie Edwards, Ph.D.
Program Administrator
Beaches, Inlets and Ports Program
Division of Water Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this permit and all copies were sent on the filing date below

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Kaelyn Massey 11/20/2017
Clerk Date