



Florida Department of Environmental Protection

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December 16, 2016

U.S. Army Corps of Engineers
c/o Gina P. Ralph
701 San Marco Blvd
Jacksonville, FL 32207
Gina.P.Ralph@usace.army.mil

and

Pinellas County Environmental Management
Attn: John Bishop, Ph.D.
Coastal Management Coordinator
22211 US Hwy. 19 N, Bldg. 10
Clearwater, FL 33765
JBishop@pinellascounty.org

Permit Modification No. 0238664-008-JN
Permit No. 0238664-001-JC, Pinellas County
Sand Key Beach Nourishment

Dear Ms. Ralph and Mr. Bishop:

Your request to modify Permit No. 0238664-001-JC was received on July 14, 2016, and has been reviewed by Florida Department of Environmental Protection (Department) staff. The proposed permit modification is to extend the permit duration until 2026 (pursuant to revisions of Rule 62B-49) and to add Pinellas County Board of County Commissioners (Pinellas County) as a Co-Permittee. The project description will be updated to remove reference to the offshore borrow area 'L' and the dune feature previously constructed at R-60. The project location will be updated to include the location of the Egmont Shoal East borrow area, which was inadvertently excluded from the description of the project location when the permit was modified to authorize use of the Egmont Shoal East borrow area (Permit Modification 0238664-007-JN). To ensure consistency across overlapping permits, this modification also includes deeper authorized dredge depths for the Egmont Shoal East borrow area. This permit previously authorized depths ranging from -12 feet to -19 feet NAVD, and that is being changed to match the Treasure Island/Long

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Key Nourishment project (Permit Modification No. 0221569-016-JN), where the authorized dredge depths for the Egmont Shoal East borrow area ranges from -18 feet to -26 feet NAVD. Also, as part of this modification, the General Consent Conditions and the General Conditions for non-Corps Permittees will be added and many of the specific conditions will be reorganized and updated, including the fish and wildlife conditions, the water quality monitoring conditions and the physical monitoring conditions.

PERMITTING HISTORY

For information describing the project history prior to the current permit, and subjects related to the current permit and the proposed modification, please see the *CONSOLIDATED NOTICE OF INTENT TO ISSUE A JOINT COASTAL PERMIT, VARIANCE AND AUTHORIZATION TO USE SOVEREIGN SUBMERGED LANDS*, for Permit No. 0238664-001-JC and Variance No. 0238664-002-EV, dated June 8, 2011, available at the Bureau website:

ftp://ftp.dep.state.fl.us/pub/ENV-PRMT/pinellas/issued/0238664_Sand_Key/001-JC%20and%20002-BV/Intent/Sand%20Key%20Intent%20-%206-8-2011.pdf

On July 6, 2011, the Department issued Permit No. **0238664-001-JC** to U.S. Army Corps of Engineers (Corps) to nourish 8.7 miles (14.0 km) of beach on Sand Key. That included two beach fill segments from R-56 to R-66 and from 85 feet north of R-71A to R-107. A one-mile gap between the segments (from R-66 to R-71A) was not filled. The project was authorized to occur multiple times, on an as-needed basis, with the first event requiring approximately 1,017,000 cubic yards of beach-compatible sand.

Variance No. **0238664-002-EV** was also granted to the Corps on July 6, 2011, in association with Permit No. 0238664-001-JC. The variance authorized an expanded turbidity mixing zone that extends 150 meters offshore (or 300 meters offshore if there is no nearshore hardbottom) and up to 1,500 meters downcurrent from the point of discharge at the beach placement site.

File Nos. **0238664-003-EE** and **0238664-004-BE** were *de minimis* exemptions granted to Pinellas County in 2008 and 2009 for the collection of offshore geotechnical vibrocores.

On April 18, 2012, the Department issued Modification No. **0238664-005-JN** to include a dune feature in the Sand Key Beach Nourishment template between 4 feet south of R-60 and 182 feet south of R-61A. The dune required an additional 2,000 cubic yards of beach compatible sediment from the previously authorized borrow site.

On October 26, 2012, the Department issued Modification No. **0238664-006-JN** to the Corps to revise the Sand Key Beach Nourishment Permit. The modification extended the southern end of the fill template from R-107 to R-108, along the dry beach only.

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On November 27, 2012, the Department issued Modification No. **0238664-007-JN** to the Corps to add Egmont Shoal East Borrow Area as a sand source to the Sand Key Beach Nourishment project.

Staff Assessment and Justification

On November 19, 2015, the Joint Coastal Permit rules were revised, and those revisions included the following:

62B-49.011(5), F.A.C.: The permittee or authorized agent may apply for a minor permit modification to extend the expiration date of a permit issued for less than 15 years by filing a written application with the Department before the permit expires and paying any fees required in Rule 62B-49.006, F.A.C. An application will not be considered filed until the application is received by the Department. A new joint coastal permit is required to continue maintenance of a project beyond the expiration of the permit.

The Department has determined that the request for a time extension is consistent with revisions to Rule 62B-49.011(5), F.A.C., because the existing permit has a 10-year duration and the time extension request was timely received.

The revision of the JCP Rule (62B-49, F.A.C.) does not address the extension of Variance No. 0238664-002-BV, which, grants relief from Rule 62-4.244(5)(c), F.A.C., establishing a temporary mixing zone greater than 150 meters. However, this variance expires with the expiration of the permit and as such it will be extended automatically.

Department staff have reviewed and approved the proposal to add Pinellas County as a Co-Permittee. Pinellas County is the local sponsor for the project and as such they require oversight on the permit as well as the authorization to conduct monitoring and maintenance activities required by the permit. Consequently, the General Conditions for Joint Coastal Permits for non-Corps Permittees have been added.

The General Consent Conditions were inadvertently left out of Permit No. 0238664-001-JC. Rule 18-21.004(7), F.A.C., says: *All authorizations granted by rule or in writing under Rule 18-21.005, F.A.C., ... shall be subject to the general conditions as set forth in paragraphs (a) through (i) below. The general conditions shall be part of all authorizations under this chapter, shall be binding upon the grantee, and shall be enforceable under Chapter 253 or 258, Part II, F.S.*

The Egmont Shoal East Borrow Area is authorized for use in both this Sand Key Permit (No. 0238664-001-JC) and the Treasure Island and Long Key (TI/LK) Permit (No. 0221596-008-JM). During concurrent review of the modification requests for both the afore mentioned permits,

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Department staff identified that the dredge depth authorized in this Sand Key Permit (No. 0238664-001-JC) was shallower than the dredge depth requested for the Treasure Island Long Key Modification (No. 0221596-016-JN). Department Staff consulted with the Permittee and recommended that in order to conserve and more efficiently manage the finite resource, the dredge depth for the Egmont Shoal East borrow area should be the same in both permits. Consequently, the Permittee requested the deepening of the Egmont Shoal East Borrow Area authorized in this Sand Key Permit (No. 0238664-001-JC) to match that requested in the TI/LK Permit Modification (No. 0221596-016-JN). Historically, the material from the Egmont Shoal East Borrow Area has been consistently beach-compatible, and based on staff review of the geotechnical data provided for the TI/LK Permit Modification (No. 0221596-016-JN) the Department has reasonable assurance that the revised Egmont Shoal East Borrow Area should also be beach-compatible.

Pursuant to provisions of 62B-49.011(5), F.A.C., the expiration date of the permit is changed as follows:

Original Expiration Date: July 6, 2021

New Expiration Date: **July 6, 2026**

The project description has been revised as indicated below (~~strikethroughs~~ are deletions, underlines are additions):

The project is to nourish 8.7 miles (14.0 km) of beach on Sand Key. This includes two beach fill segments: from R-56 to R-66 and from 85 feet north of R-71A to R-108. Between R-107 and R-108, fill will only be placed landward of the mean high water line. A one-mile gap between the segments (from R-66 to R-71A) will not be filled. The project is authorized to occur multiple times, on an as-needed basis, with the first event requiring approximately 1,017,000 cubic yards of beach-compatible sand. The sand will be dredged from an offshore borrow area located in federal waters and the Egmont Shoal East Borrow Area. The project has a design berm elevation of +4.1 feet (1.3 m) NAVD88, with a one-foot construction tolerance to a maximum elevation of +5.1 feet NAVD88 (1.6 m). Berm widths and volumes vary ~~from each section~~. An additional 2,000 cubic yards of beach-compatible sand will be placed between 4 feet south of R-60 and 182 feet south of R-61A for the purpose of dune nourishment, with a dune crest elevation of 7.1 feet (NAVD) and a crest width of 7.5 feet.

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The project location has been revised as indicated below (~~strikethroughs~~ are deletions, underlines are additions):

The beach nourishment site is located on Sand Key, between R-56 to R-66 and between 85 feet north of R-71A to R-1087, in central Pinellas County, Sections 1, 12, 13, 18, 19, 24, 25, 30, 31 and 36, Townships 29 and 30 South, Ranges 14 and 15 East, in the Gulf of Mexico, Class III Waters, Pinellas County Aquatic Preserve, Outstanding Florida Waters. The borrow area is located 10.5 nautical miles offshore of the northern end of the placement area, in the Gulf of Mexico, outside of State Waters. The Egmont Shoal East borrow area is located in the Gulf of Mexico, north of Egmont Key, in Hillsborough County, **not** an OFW.

General Conditions (for Pinellas County) shall be added as follows:

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.

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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.

The General Consent Conditions shall be added as follows:

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.

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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.

All of the Specific Conditions for Permit No. 0238664-001-JC are listed below. The Specific Conditions that are being revised under Permit Modification No. 0238664-008-JN are shown with ~~strikethroughs~~ to indicate deletions, and underlines to indicate additions:

1. The terms, conditions, and provisions of Variance No. 0238664-002-BV, to establish an expanded mixing zone for this project, shall continue to be met. ~~No work shall be conducted until and unless the Department issues a Final Order of Variance (File No. 0238664-002-BV) from Rule 62-4.244(5)(e), F.A.C. to establish an expanded mixing zone for this project.~~
2. All reports or notices relating to this permit shall be sent to the ~~DEP, Bureau of Beaches and Coastal Systems, JCP Compliance Officer, 3900 Commonwealth Boulevard, Mail Station 300, Tallahassee, Florida 32399-3000 (e-mail address: JCPCompliance@dep.state.fl.us)~~, unless otherwise stated in a specific condition of this permit.
3. The Permittee shall not store or stockpile tools, equipment, materials, etc., in the upland without prior coordination with the Department, and shall not do so within surface waters of the state without a permit modification. Storage, stockpiling or access of equipment on, in, over or through seagrass (or other aquatic vegetation) beds, wetlands or vegetated dunes is prohibited unless within a work area or

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ingress/egress corridor specifically approved by this permit. Anchoring or spudding of vessels and barges within beds of aquatic vegetation or over hardbottom areas 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.** 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 the Marine Turtle Monitor (Marine Turtle Permit Holder), the Bird Monitors, staff representatives of the Florida Fish and Wildlife Conservation Commission (FWC) and the JCP Compliance Officer (or designated alternate), prior to each construction event. In order to ensure that appropriate representatives are available, at least twenty-one (21) 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:

~~DEP, Bureau of Beaches & Coastal Systems~~ JCP Compliance Officer
Mail Station 300
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
phone: (850) 414-7716
e-mail: JCP Compliance@dep.state.fl.us

DEP Southwest District Office
~~Submerged Lands & Environmental Resources~~
13051 N Telecom Pkwy
Temple Terrace, FL 33637
(813) 632-7600
e-mail: SW_ERP@dep.state.fl.us

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

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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 one week prior to the intended commencement date. At least seven (7) days in advance of the pre-construction conference, the Permittee shall provide written notification, advising the participants (listed above) 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 an 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.

6. **Pre-Construction Submittals.** At least fourteen (14) days prior to the date of the pre-construction conference, the Permittee shall submit:

a. ~~¶~~ **The final plans and specifications** for ~~the upcoming event, this project,~~ which must be consistent with the activity description of this permit and the approved permit drawings. The Permittee shall point out any deviations from the activity description or the approved permit drawings, and any significant changes would require a permit modification. Submittal shall include ~~one (1) hardcopy (sized 11 inches by 17 inches or greater, with all text legible)~~ and one (1) electronic copy of the final plans and specifications. The plans and specifications shall be accompanied by a letter indicating the project name, the permit number, the type of construction activity, the specific type of equipment to be used, the anticipated volume of material to be moved (if applicable) and the anticipated schedule. The final plans and specifications submitted under this condition must comply with all conditions set forth in this permit.

b. **Turbidity Monitoring**

i. **Qualifications** of turbidity monitors. 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 review.

ii. 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; including the variable mixing zone sizes.

iii. **Intermediate Turbidity Monitoring Evaluation:** Prior to the second event authorized under this permit, and each subsequent event, the results of the intermediate turbidity monitoring shall be evaluated and a summary report provided to the Department (as required in Specific Condition 27d). If the Department determines that an adjustment to the mixing zone size is required, pursuant to Rule 62-4.244(5)(d), F.A.C., then an administrative modification to adjust the dimensions of the mixing zone would be required prior to the up-coming nourishment event.

c. Prior to construction of the first event subsequent to issuance of Modification No. 0238664-008-JN, an accurate, complete set of authenticated permit drawings shall be submitted and approved through a permit modification.

d. A **dredge plan and composite geotechnical statistics** shall be provided for the portion of the Egmont Shoal East Borrow Area to be dredged in each event. This dredge plan should include the outline of the entire borrow area and subareas, notation of the permitted maximum dredge depths, the location of the vibracores, the latest bathymetric data available, a clear outline of the area to be dredged for that specific event, and notations of all areas previously dredged. The composite geotechnical statistics should be representative of only the portion of the borrow area to be dredged in the current event.

e. A **revised detailed Physical Monitoring Plan**, prepared in accordance with Specific Condition 30, indicating the performance of the beach fill project, identifying erosion and accretion patterns within the monitored area, and including an analysis of the ebb shoal borrow area. In addition, the report shall include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project.

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- f. **Biological Monitoring Qualifications.** The names and qualifications of the individuals performing biological monitoring for the purpose of pipeline placement shall be submitted to the Department for review and approval prior to each construction event. These individuals shall be certified SCUBA divers, shall have professional experience in conducting hardbottom monitoring surveys, and shall have a BS degree or higher in the study of marine biology. 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 on the required monitoring procedures, as well as the QA/QC verification of their work.
7. In order to minimize the potential for elevated turbidity in Outstanding Florida Waters, the Permittee shall employ best management practices, such as constructing and maintaining a shore-parallel sand dike at the beach fill area at all times during hydraulic discharge on the beach and maintain a minimum set-back for the discharge pipe from open water.
8. Prior to marking the pipeline corridors and offshore work areas in the nearshore zone, scientific divers shall survey the area for hardbottom resources. These surveys shall include bounce dives on potential hardbottom areas (from 2006 side scan surveys), and video surveys of the center and two offset lines (with copies provided to the Department). Additionally, surface buoys shall be installed to delineate the placement over unconsolidated bottom. If the pre-placement survey reveals that hardbottom is present on the edges of the corridors, the buoys shall be placed to avoid these areas. If the pre-placement survey reveals unavoidable hardbottom across the corridor, a revised corridor shall be coordinated with the Department.
- If any deviations to the demarcated corridors occur during pipeline installation, scientific divers shall investigate the corridor for potential damage to hardbottom communities. If damage to hardbottom organisms is detected, the damage shall immediately be remediated to the extent possible, and then damage and remediation efforts will be reported to the Department. If the remediation does not fully restore the functions of the damaged hardbottom, mitigation may be required.
9. Sediment quality shall be assessed as outlined in the Sediment QA/QC Plan (dated April 11th, 2011 and approved by the Department); ~~which is attached herein.~~ Any occurrences of unacceptable material Placement of material that is not in compliance with the Plan shall be handled according to the protocols set

forth in the Sediment QA/QC Plan. The sediment testing result shall be submitted to the Department within 90 days following the completion of beach construction. The following requirements are included in the Sediment QC/QA Plan:

- a. If, during construction, the Permittee determines that the beach fill material does not comply with the sediment compliance specifications, the Permittee shall take measures to avoid further placement of noncompliant fill, and the sediment inspection results shall be reported to the Department.
 - b. The Permittee shall submit post-construction sediment testing results and an analysis report as outlined in the Sediment QC/QA Plan to the Department within 90 days following beach construction. 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 QC/QA 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 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.
10. Construction of the project may not begin until the Local Sponsor Agreement is finalized. In the event that Pinellas County, as the local sponsor for this project, does not conduct all necessary marine turtle protection and monitoring requirements, the Permittee is still responsible for those marine turtle protection measures specified by the applicable U. S. Fish and Wildlife Service Biological Opinion.

Manatee Marine Turtle Protection Conditions

11. **In-water Activity.** The Permittee shall adhere to the following requirements for all in-water activity:
- a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and other protected species, 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

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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 project area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels shall 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 protected species entanglement or entrapment. Barriers shall not impede manatee or marine turtle movement or travel.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles, manatees and other protected species. All in-water operations, including vessels, shall be shut down if a protected species 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 FWC Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Any collision with (and/or injury to) a marine turtle shall 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 shall 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/manatee. Questions concerning these signs can be sent to ImperiledSpecies@myFWC.com.

~~**Pre-Construction Meeting.** A meeting between representatives of the contractor, the Service, the FWC, and the permitted sea turtle surveyor must be held prior to the commencement of work on this project. At least 10 business days advance notice must be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle and piping plover protection measures as well as additional guidelines when construction occurs during the nesting season such as storing equipment, minimizing driving, and follow up meetings during construction.~~

Marine Turtle Protection Conditions

12. **Marine Turtle Nest Surveys and Relocations.** Daily early morning surveys, beginning no earlier than sunrise, shall be conducted at all sandy beaches within the project area that are seaward of any existing coastal armoring structures or dune crest, and all areas used for beach access. No construction activity may commence until completion of the marine turtle survey each day. All project-related depressions, ruts and holes outside of the fill restriction zone, indicated in Specific Condition 15, shall be filled or leveled to match the surrounding beach each day prior to 9 pm.
 - a. Sand placement activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) during the nesting season (May 1 through October 31), ~~under~~ provided the following conditions requirements are met:
 - i.a) Daily marine ~~Sea~~ turtle nesting surveys shall be initiated 65 days prior to sand placement activities or by April 15, whichever is later.
 - ii. Daily Nnesting surveys ~~shall~~ must continue through the end of the project or through September 15, or until two weeks after the last crawl in the project area, whichever is earlier.
 - iii. Hatchling and emerging success monitoring ~~will~~ involves checking nests beyond the completion date of the daily early morning nesting surveys. Consequently, 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 Condition 20, below.

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- b) **Turtle Monitors.** ~~Sea turtle n~~Nesting surveys and egg relocations ~~wi~~shall only be conducted by persons with prior experience and training in these activities and who ~~are~~^{is} duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to FAC 68E-1. Please contact FWC's Marine Turtle Management Program in Tequesta at MTP@myfwc.com for information on the turtle 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 must be conducted daily between sunrise and 9 a.m.~~
- e) ~~The contractor shall not initiate work until daily notice has been received from the sea turtle permit holder that the morning survey has been completed. Surveys must be performed in such a manner so as to ensure that construction activity does not occur in any location prior to completion of the necessary sea turtle protection measures.~~
- c.d) If nests are laid in areas where they may be affected by sand placement activities, The surveys shall be conducted and eggs shall be relocated per the following requirements:
- i.) ~~Only those nests that may be affected by material placement wi~~shall be relocated. Nest relocation shall no longer occur after the sand placement is completed. Nests requiring relocation shall be moved **no later than 9 a.m. the morning following deposition** to a nearby self-release beach site in a secure setting where artificial lighting will 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; or known to routinely experience severe erosion; and previous egg loss; or subject to illumination by artificial lighting. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests.~~
- ii.) Marine ~~Sea turtle~~ nests deposited where the project 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 situ unless other factors threaten the success of the nest. The turtle permit holder shall install an on-beach marker at the nest site and ~~or~~ shall also install a secondary marker at a point landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. A series of stakes and highly visible survey ribbon

or string shall be installed to establish a 10-foot radius around the nest. No activity shall occur within this area, nor will any activities occur which 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 activities.

- iii) ~~Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of three additional nesting seasons if placed material still remains on the beach. Monitoring of nesting activity in the seasons following construction shall include daily report sheets noting all activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any), dates of construction and names of all personnel involved in nest surveys and relocation activities. Data should be reported separately for the nourished areas and for an equal length of adjacent beach that is not nourished in accordance with the attached Table. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets). All reports should be submitted by January 15 of the following year.~~

Table 1. Marine Turtle Monitoring for Beach Restoration Projects

The following monitoring is required for beach restoration and nourishment projects. An electronic spreadsheet summarizing sea turtle nesting and hatching should be submitted electronically to the FWC Imperiled Species Management section by January 15 of the subsequent year (electronic copies can be submitted to MTP@myfwc.com). Data on nesting activity on the nourished beach and on equal length of beach that is not nourished shall be reported separately, and should include number of nests lost to erosion or washed out. The FWC excel spreadsheet is available upon request from MTP@myfwc.com.

Characteristic	Parameter	Measurement	Variable
Nesting Success	False crawls – number	Visual assessment of all false crawls	Number and location of false crawls in fill areas and non-fill areas: any interaction of the turtle with obstructions, such as groins, seawalls, or scarps, should be noted.
	False crawl – type	Categorization of the stage at which nesting was abandoned	Number in each of the following categories: emergence no digging, preliminary body pit, abandoned egg chamber.
	Nests	Number	The number of marine turtle nests in filled and non-filled areas should be noted. If possible, the location of all marine turtle

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			nests shall be marked on map of project, and approximate distance to sea walls or scarps measured using a meter tape. Any abnormal cavity morphologies should be reported as well as whether turtle touched groins, seawalls, or scarps during nest excavation
		Lost Nests	The number of nests lost to inundation, erosion or the number with lost markers that could not be found.
	Lighting Impacts	Disoriented sea turtles	The number of disoriented hatchlings and adults shall be documented and reported in accordance with existing FWC protocol for disorientation events.
Reproductive Success	Emergence & hatching success	Standard survey protocol	Numbers of the following: unhatched eggs, depredated nests and eggs, live pipped eggs, dead pipped eggs, live hatchlings in nest, dead hatchlings in nest, hatchlings emerged, disoriented hatchlings, depredated hatchlings per each nest.

13. **Project Lighting.** Direct lighting of the beach and nearshore waters during the marine turtle nesting season 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 codified requirements for human safety. Light intensity of lighting equipment shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirecting marine sea 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, as illustrated below.

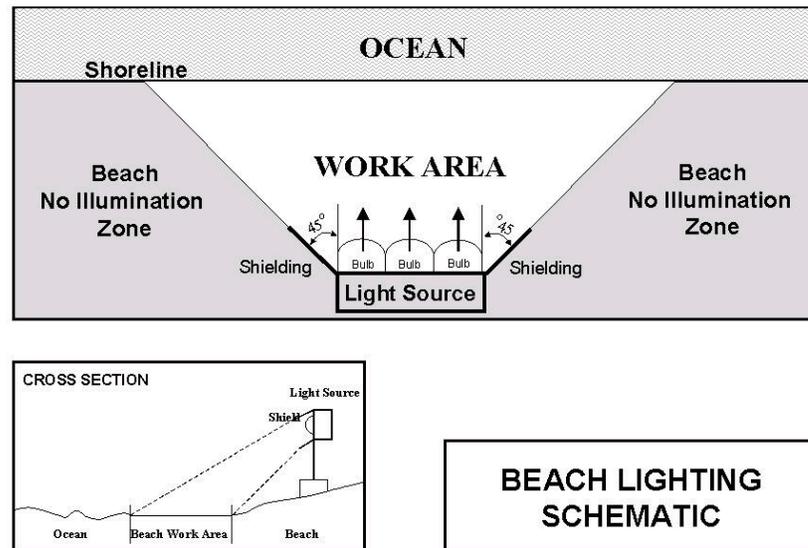


Figure. 1

14. **Equipment Storage.** Staging areas for construction equipment for sand placement shall be located off the beach to the maximum extent practicable ~~from May 1 to October 31~~ during the marine turtle nesting season, in accordance with the following protocols:
- a.) Nighttime storage of the beach restoration project construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities.
 - b.) 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.
 - i.) Temporary storage of pipes shall be off the beach to the maximum extent possible.
 - ii.) Temporary storage of pipes on the beach shall be in such a manner so as to impact the least amount of nesting habitat and shall not compromise the integrity of the dune systems.
 - iii.) Pipes placed parallel to the dune shall be five to ten feet away from the toe of the dune.

If it will be necessary to extend construction pipes past a known shorebird nesting site, or over-wintering area for piping plovers, then whenever

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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, unless authorized by the FWC Regional Biologist.

15. **Fill Restrictions.** During nesting season, the contractor shall not ~~extend~~ advance 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, ~~as follows:~~ An exception to this may occur if there is a permitted marine turtle monitor present on-site to ensure that no nesting and hatching marine turtles are present within the extended work area. a) If the 500-foot advancement limitation ~~feet~~ is not feasible for the project, an agreed upon distance shall be ~~established~~ decided on during the preconstruction meeting. b) Once the beach has been cleared for fill advancement, and the necessary nest relocations have been completed, the contractor is allowed to proceed with the placement of fill during daylight hours until dusk, at which time the 500-foot length limitation shall apply.
16. **Beach Maintenance.** All debris, including derelict concrete, metal, and coastal armoring material and other debris shall be removed from the beach to the maximum extent practicable prior to any ~~dredged material~~ placement of construction material to the maximum extent practicable. If debris removal activities will take place from April 15 through September 30, the work shall be conducted during daylight hours only and shall not commence until completion of the sea turtle survey 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 alterations of the beach topography shall be filled or leveled to the natural beach profile prior to 9 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.
17. **Compaction Sampling.** Immediately after completion of the beach nourishment project, and prior to April 1 for 3 subsequent years, sand compaction shall be monitored in the area of sand placement in accordance with the ~~following~~ protocols: agreed to by the FWC and the Permittee. The requirement for compaction monitoring can be eliminated if the placed sand is tilled, regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed sand no longer remains on the beach. At a minimum, the protocol provided under Specific Conditions 17.a. through 17.d.

(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 prior to the beginning of marine turtle nesting season.

- 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 a depth 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.) If the average value for any depth exceeds 500 psi for any two or more adjacent stations, then that area shall be tilled prior to April 15.
- d.) 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 consultation with the FWC shall be required 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.

18. **Tilling Requirements.** If tilling is required, as specified in Specific Condition 17, above, the area shall be tilled to a depth of 24 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 Permittee to ensure that their contractors 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

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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. If flightless shorebird young are present within the work zone or equipment travel corridor, a Bird Monitor shall be present during the operation to ensure that equipment does not operate within 300 feet of the flightless young.
- 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. A 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 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-serve/wildlife/beach-driving/>).

~~Immediately after completion of the beach fill placement event, and prior to April 15 for 3 subsequent years, if placed sand still remains on the beach, the beach shall be tilled as described below, or the Permittee or Local Sponsor in the years post construction may follow the procedure outlined below to request a waiver of the tilling requirement. During tilling, at a minimum, the protocol provided below shall be followed:~~

- ~~a) — The area shall be tilled to a depth of 24 inches. All tilling activity must be completed prior to April 15. Each pass of the tilling equipment shall be overlapped to allow more thorough and even tilling. Tilling should occur landward of the wrack line and avoid all vegetated areas 3 square feet or greater with a 3 foot buffer around the vegetated areas.~~
- ~~b) — An annual summary of compaction surveys and the actions taken shall be submitted to the FWC.~~

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- e) ~~If the project is completed just before the nesting season, tilling shall not occur in areas where nests have been left in place or relocated unless authorized by the U.S. Fish and Wildlife Service in an Incidental Take Statement.~~
- d) ~~This condition shall be evaluated annually and may be modified if necessary to address sand compaction problems identified during the previous year.~~
- e) ~~To request a waiver of the tilling requirement, the permittee may measure sand compaction in the area of restoration in accordance with a protocol agreed to by the FWC, the Department, the U.S. Fish & Wildlife Service, and the applicant to determine if tilling is necessary.~~

19. **Escarpment Surveys.** Visual surveys for escarpments along the project area shall be made immediately after completion of sand placement, and two weeks prior to marine turtle nesting season, for three (3) subsequent years if placed sand still remains on the beach. In addition, weekly surveys of the project area shall be conducted during the two nesting seasons following completion of fill placement. 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 the beginning of marine turtle nesting season. 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, escarpment leveling may be required 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 if the escarpments exceed 18 inches in height for a distance of 100 feet. The FWC would then determine the appropriate action to be taken. If it is determined 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, as described below. If escarpment removal will occur during shorebird breeding season, shorebirds 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.**

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- a. No heavy equipment shall operate within 300 feet of any shorebird nest.
- b. If flightless shorebird young are present within 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.
- 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/>).

~~Visual surveys for escarpments along the beach fill area shall be made immediately after completion of the beach nourishment project and between March 15 and April 15 for the following three years if placed sand still remains on the beach. All scarps shall be leveled or the beach profile shall be reconfigured to minimize scarp formation. In addition, weekly surveys of the project area shall be conducted during the two nesting seasons following completion of fill placement as follows:~~

- ~~a) — The number of escarpments and their location relative to DNR-DEP reference monuments shall be recorded during each weekly survey and reported relative to the length of the beach surveyed (e.g., 50% scarps). Notations on the height of these escarpments shall be included (0 to 2 feet, 2 to 4 feet, and 4 feet or higher) as well as the maximum height of all escarpments.~~
- ~~b) — Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet shall be leveled to the natural beach contour by April 15. Any escarpment removal shall be reported relative to R-monument.~~
- ~~c) — If weekly surveys during the marine turtle nesting season document subsequent reformation of escarpments that exceed 18 inches in height for a distance of 100 feet, the FWC shall be contacted immediately to determine the appropriate action to be taken. Upon written notification, the permittee shall level escarpments in accordance with mechanical methods prescribed by the FWC.~~

20. **Post-Construction Monitoring and Reporting of Marine Turtle Nesting.** Monitoring of nesting activity in the seasons following construction shall include daily report sheets noting all activity, nesting success rates, hatching success of all relocated nests, hatching success of a representative sampling of nests left in place (if any), dates of construction and names of all personnel involved in nest surveys and relocation activities. Data should be reported separately for the nourished areas and for an equal length of adjacent beach that is not nourished in accordance with the attached Table. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of three additional nesting seasons as follows:
- a. For the remainder of the nesting season immediately following construction, and for 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%.
 - b. 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.
 - c. If the documented reproductive success for each species meets or exceeds the required criteria, as outlined in **Table 1** (below), monitoring for reproductive success shall be recommended, but not required for the second year post-construction.
 - d. 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, permit numbers and dates of construction.
 - e. **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 1 and May 15 of the first nesting season following construction, or immediately after placement if construction is not completed until after May 15. 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. 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 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, light sources or glow shall be visible from the newly elevated beach. A report summarizing all visible lights 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 the 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 with the 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. Two surveys shall be conducted of all lighting visible from the beach placement area by the applicant or local sponsor, using standard techniques for such a survey, in the year following construction. The first survey shall be conducted between May 1 and May 15 and a brief summary provided to the Service. The second survey shall be conducted between July 15 and August 1. A summary report of the surveys, including any actions taken, shall be submitted to the FWC Imperiled Species Management Section in Tallahassee by December 1 of the year in which surveys are conducted. After the annual report is completed, a meeting shall be set up with the Applicant or local sponsor, county or municipality, FWC, Corps, and the Service to discuss the survey report, as well as any documented sea turtle disorientations in or adjacent to the project area.

- f. Data shall be reported for the nourished areas in accordance with the **Table 1** (below), and shall include the number of nests that were lost to erosion or that were washed out. Data on nesting activity on the nourished beach and on equal length of beach that is not nourished shall be reported separately, and should include number of nests lost to erosion or 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 15th of the following year. The FWC Excel spreadsheet is available upon request from marineturtle@myfwc.com.

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Table 1. Marine Turtle Monitoring for Beach Placement of Material

<u>Metric</u>	<u>Duration</u>	<u>Variable</u>	<u>Criterion</u>
<u>Nesting Success</u>	<u>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.</u> ^{1 & 2}	<u>Number of nests and non-nesting events.</u>	<u>40% or greater</u>
<u>Hatching Success</u>	<u>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.</u> ^{1 & 2}	<u>Number of hatchlings by species to hatch from egg.</u>	<u>60 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).</u>
<u>Emergence Success</u>	<u>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.</u> ^{1 & 2}	<u>Number of hatchlings by species to emerge from nest onto beach</u>	<u>80 percent or greater (a statistically valid number of loggerhead and green nests, and all leatherback nests).</u>
<u>Disorientation</u>	<u>Year of in-season construction and two years post construction if placed sand remains on the beach.</u> ^{1 & 2}	<u>Number of nests and individuals that misorient or disorient.</u>	<u>Disorientation Report Form http://myfwc.com/media/418153/Seaturtle_Guidelines_A_LDIR_Directions.pdf</u>
<u>Lighting Surveys</u>	<u>Two surveys the year following construction, one survey between May 1 and May 15 and second survey between July 15 and August 1.</u> ^{1 & 2}	<u>Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made</u>	<u>Lighting survey and meeting resulting with plan for reduction in lights visible from nourished berm within one to two month period.</u>
<u>Compaction</u>	<u>Three seasons following construction. Not required if the beach is tilled prior to nesting season each year placed</u>	<u>Shear resistance</u>	<u>Less than 500 psi</u>

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<u>Metric</u>	<u>Duration</u>	<u>Variable</u>	<u>Criterion</u>
	<u>sand remains on beach.</u>		
<u>Escarpment Surveys</u>	<u>Weekly during nesting season for up to three years each year placed sand remains on the beach.²</u>	<u>Number of scarps 18 inches or greater extending for more than 100 feet that persist for more than 2 weeks</u>	<u>Successful remediation of all persistent scarps as needed</u>

Notes: ¹Not required for maintenance dredging.

²Not required if dredged sand is placed in the nearshore swash or littoral zones only.

21. In the event a hopper dredge is utilized, the following requirements shall be met in addition to the Terms and Conditions of the NMFS Regional Biological Opinion for Hopper Dredging in the Gulf of Mexico:
 - a.) ~~Handling of sea-marine turtles captured during hopper dredging projects shall be conducted only by persons with prior experience and training in these activities, such as a National Marine Fisheries Service (NMFS)-approved marine turtle observer, or by persons who have submitted documentation to the Corps of meeting the FWC Marine Turtle Conservation Guidelines specific to stranding activities, and who is duly authorized to conduct such activities through a valid permit issued by the Florida Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code 68E-1. The Corps shall forward documentation of these qualifications to FWC for review, concurrently with the submission of the contractor's Environmental Protection Plan. Corps staff or their designee who 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 of transported specimens, species of turtle, type of specimen, and the destination after transport is complete. Before transport, if the turtle is believed to be alive, Corps staff or their designee shall coordinate with FWC to determine the appropriate facility to receive live marine turtles for rehabilitation. Corps staff or their designee shall abide by the State of Florida's FWC Marine Turtle Conservation Guidelines (<http://www.myfwc.com/wildlifehabitats/managed/sea-turtles/conservation-guidelines/>) specific to transport of live stranded turtles.~~

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- b.) *Dredging Pumps:* Standard operating procedure shall be that dredging pumps shall be disengaged by the operator when the dragheads are not firmly on the bottom, to prevent impingement or entrainment of sea turtles within the water column. This precaution is especially important during the cleanup phase of dredging operations.
- c.) *Sea Marine Turtle Deflecting Draghead:* A state-of-the-art rigid deflector draghead must be used on all hopper dredges in all channels at all times of the year.
- d.) The Sea Turtle Stranding and Salvage Network (STSSN) Coordinator, Dr. Allen Foley, shall be notified at (904) 573-3930 or via e-mail at Allen.Foley@myfwc.com of the start-up and completion of hopper dredging operations. If a marine turtle is captured or marine turtle parts are recovered, the STSSN shall be contacted at seaturtlestranding@myfwc.com
- e) ~~Relocation trawling shall be undertaken at all projects where any of the following conditions are met; however, other ongoing projects not meeting these conditions are not required to conduct relocation trawling:~~
 - i) ~~Two or more turtles are taken in a 24 hour period in the project.~~
 - ii) ~~Four or more turtles are taken in the project.~~

22. **Trawling.** If relocation trawling or non-capture trawling for marine turtles is required as per applicable National Marine Fisheries Service 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 trawling. Handling of captured marine turtles during trawling activities shall be conducted only by persons with prior experience and training in these activities, such as a National Marine Fisheries Service (NMFS)-approved marine turtle observer, or by persons who have submitted documentation to the Corps of meeting the FWC Marine Turtle Conservation Guidelines specific to stranding activities. The Corps shall forward documentation of these qualifications to FWC for review, concurrently with the submission of the contractor's Environmental Protection Plan. Corps staff or their designee who 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 of transported specimens, species of turtle, type of specimen, and

the destination after transport is complete. Before transport, if the turtle is believed to be alive, Corps staff or their designee shall coordinate with FWC to determine the appropriate facility to receive live marine turtles for rehabilitation. Corps staff or their designee shall abide by the State of Florida's FWC Marine Turtle Conservation Guidelines (<http://www.myfwc.com/wildlifehabitats/managed/sea-turtles/conservation-guidelines/>) specific to transport of live stranded turtles.

- 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, their general health, and release information.

A summary of all trawling activity (including non-capture trawling) 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 FWC-provided Excel spreadsheet (available at <http://myfwc.com/media/3333816/Trawl-Report-Template.pdf>), and shall list all turtles captured in Florida waters, the measurements of all captured turtles, the location of captures (latitude and longitude in decimal degrees), the location of tow start-stop points (latitude and longitude in decimal degrees), and times for the start-stop points of the tows (including tows when no turtles are captured).

~~The Permittee shall e-mail (MTP@MyFWC.com) weekly reports to the Imperiled Species Management section on Friday each week that trawling is conducted in Florida water. These weekly reports shall include: the species and number of turtles captured in Florida waters, general health, and release information. A summary (FWC provided Excel spreadsheet) of all turtles captured in Florida waters, including all measurements, the latitude and longitude (in decimal degrees) of captures and tow start-stop points, and times for the start-stop points of the tows, including those tows on which no turtles are captured shall be submitted to the ISM by January 15 of the following year.~~

23. ***Marine Turtle or Nest Encounters.*** Upon locating a dead, injured, or sick endangered or threatened sea marine turtle specimen adult, hatchling or egg that may have been harmed or destroyed as a direct or indirect result of the project, the Permittee shall notify initial notification must be made to the FWC Wildlife Alert at 1-888-404-3922. Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or

preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. In the event a sea turtle nest is excavated during construction activities, but not as part of the authorized nest relocation process outlined in these specific conditions, all work shall cease in that area immediately and the permitted person responsible for egg relocation for the project should be notified so the eggs can be moved to a suitable relocation site.

Shorebird Protection Conditions

24. **Shorebird Monitoring.** The Permittee shall comply with the following shorebird monitoring requirements:

- a. ***Shorebird Surveys.*** Shorebird surveys should be conducted by trained, dedicated individuals (Shorebird Monitor) with proven shorebird identification skills and avian survey experience. Credentials of the Shorebird Monitor are approved by Corps and the Corps Construction Office. Copies of person's resumes and qualifications will be submitted to the FWC Regional Biologist for review. ~~Shorebird Monitors will use the following survey protocols:~~
- b. ***Selection of Bird Monitors.*** A list of Bird Monitors shall be provided to the FWC, along with their contact information and a summary of their qualifications, including bird identification skills and avian survey experience. This information shall be submitted to the FWC Regional Biologist (see contacts available at <http://myfwc.com/conservation/you-serve/wildlife/shorebirds/>) for review and consultation prior to any construction or shorebird surveys. 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 to 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

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<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 complete 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 FWS in Florida (please provide references).
 - viii. Experience posting beach-nesting bird sites, consistent with Florida Shorebird Alliance (FSD) Guidelines (<http://flshorebirdalliance.org/resources/instructions-manuals.aspx>).
 - ix. Registered contributor to the Florida Shorebird Database.
- c. a) ~~*Nesting Season Surveys.*~~ Shorebird Monitors shall review and become familiar with the general information and data collection protocols outlined on the FWC's Florida Shorebird Database (FSD) website (www.FLShorebirdDatabase.org) Beach-Nesting Bird Website (<http://www.flshorebirddatabase.org/>). They shall use the data collection protocol and implement data-entry procedures as outlined in that website. An outline of what data shall to be collected, including downloadable field data sheets, is available on the website.
- d. b) 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. Please see Shorebird Nest dates at <http://myfwc.com/conservation/you-serve/wildlife/shorebirds/>. The nesting season is generally 1 April – 1 September, but some nesting may occur through September. In addition, the imperiled snowy plover (*Charadrius alexandrinus*) may nest as early as February along the west coast and panhandle of Florida.
- e. e) Nesting season surveys shall begin on February 15 or 10 days prior to project commencement (including surveying activities and other pre-construction presence on the beach), whichever is later, and be conducted daily throughout the construction period or through August, whichever is

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earlier. Weekly surveys of the project site shall continue through August or through fledgling or loss of identified nests or hatchlings, 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.

- f. ~~d~~) Nesting season surveys shall be conducted in all potential beach-nesting bird habitat within the project boundaries that may be impacted by construction or pre-construction activities during the nesting season. Portions of the project in which there is no potential for project-related activity during the nesting season may be excluded.
- g. ~~e~~) 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, and (3) any other activities occur that have the potential to disrupt breeding behavior or cause harm to the birds, their eggs or their 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. Surveys for detecting new nesting activity will be completed on a daily basis prior to movement of equipment, operation of vehicles, or other activities that could potentially disrupt nesting behavior or cause harm to the birds or their eggs or young.
- h. ~~f~~) 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. Surveys should be conducted by traversing the length of the project area and visually inspecting, using binoculars or spotting scope, for the presence of shorebirds exhibiting breeding behavior.
- i. ~~g~~) 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-
conserve/wildlife/beach-driving/](http://myfwc.com/conservation/you-
conserve/wildlife/beach-driving/)). Specifically, the vehicle shall ~~must~~ be operated at a speed under 6 mph, shall be run at or below the high-tide

line, and the Shorebird Monitor ~~shall will~~ stop at no greater than 200 meter intervals to visually inspect for nesting activity.

- ~~j. h)~~ Once the Bird Monitor(s) confirms that birds are breeding, as evidenced is confirmed by the presence of a scrape, eggs, or young, the Bird Monitor ~~will shall~~ notify the FWC Regional Species Conservation Biologist Nongame Biologist of the FWC at (863) 648 3200 within 24 hours. ~~(see the FWC Regional Species Conservation Biologist Contact list: <http://myfwc.com/conservation/you- conserve/wildlife/shorebirds/>)~~ within 24 hours. The Bird Monitor(s) shall report all breeding activity to the FSD website within one week of data collection.
- ~~i)~~ All breeding activity will be reported to the Beach Nesting Bird website within one week of data collection.

25. **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. 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 appear to be agitated or disturbed by these activities, then the Bird Monitor(s) shall immediately widen the buffer zone 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 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 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.
- f. If flightless shorebird chicks are present within or adjacent to an equipment travel corridor, a Shorebird Monitor shall be present during the operation to ensure that the equipment does not operate within 300 feet of the flightless chicks. It is the Permittee’s responsibility to have their contractor ensure that no chicks are in the path of the moving vehicles and that the 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.
- g. 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.
- h. *Notification.* If the Bird Monitor finds that shorebirds are breeding within the project area, the Permittee shall ensure that an informational bulletin board is placed and maintained in the construction staging area. This

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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”.

~~**Buffer Zones and Travel Corridors.** Within the project area, the Permittee shall establish a 200 ft wide buffer zone around any location where shorebirds have been engaged in nesting behavior, including territory defense. Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone. Protocols include:~~

- ~~a) The width of the buffer zone may be discussed and increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.~~
- ~~b) Site-specific buffers may be implemented upon coordination with FWC as needed.~~
- ~~c) Reasonable and traditional pedestrian access should not be blocked where nesting 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 nesting was initiated within 300 feet of an established beach access pathway. The permittee shall work with FWC staff to determine if pedestrian access can be accommodated without compromising nesting success.~~
- ~~d) Designated buffer zones must be posted with clearly marked signs around the perimeter. If pedestrian pathways are approved within the 200-foot buffer zone, these should be clearly marked. These markings shall be maintained until nesting is completed or terminated. In the case of solitary nesters, nesting is not considered to be completed until all chicks have fledged.~~
- ~~e) No construction activities, movement of vehicles, or stockpiling of equipment shall be allowed within the buffer area.~~
- ~~f) FWC coordinated travel corridors should be designated and marked outside the buffer areas. Heavy equipment, other vehicles, or pedestrians may transit past nesting areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the nesting site.~~

- i. ~~Where such a travel corridor must be established within the project area it should avoid critical areas for shorebirds (known nesting sites, wintering grounds, FWC designated Critical Wildlife Areas, and USFWS designated critical piping plover habitat) as much as possible, and be marked with signs clearly delineating the travel corridor from the shorebird buffer areas described above.~~

~~To the degree possible, the Permittee should maintain some activity within these corridors on a daily basis, without directly disturbing any shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction. Passive methods to modify nesting site suitability must be discussed with the FWC Regional Biologist for that region.~~

26. **Post-construction Shorebird Protection.** ~~If the Permittee conducts beach cleaning on the nourished beach, a minimum of 30% of the biotic material within the wrack line shall be left on the beach after 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. *Placement of Equipment and Sand.* 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 should be placed landward of the site before birds are active in that area. No pipe or sand shall be placed seaward of a known shorebird nesting site during the shorebird nesting season.~~

Water Quality Monitoring Required:

27. **Turbidity shall be monitored as follows (applicable to State of Florida waters only):**

a. Units: Nephelometric Turbidity Units (NTUs).

b. Frequency:
If a pipeline dredge is used: Monitoring shall be conducted 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, sand placement, operations.

If a hopper dredge is used: Monitoring shall be conducted for three hopper dredge loads during daylight hours. At the dredge site, sampling shall be conducted after overflow from the hopper begins and the associated turbidity plume has reached the edge of the mixing zone. At

the fill placement site, sampling shall be conducted after discharge from the hopper begins and the associated turbidity plume has reached the edge of the mixing zone.

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.

c. Location:

Background: Sampling shall occur at surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above the bottom, clearly outside the influence of any artificially generated turbidity plume or the influence of an outgoing inlet plume.

Egmont Shoal East Borrow Area: Samples shall be collected at least 200 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.

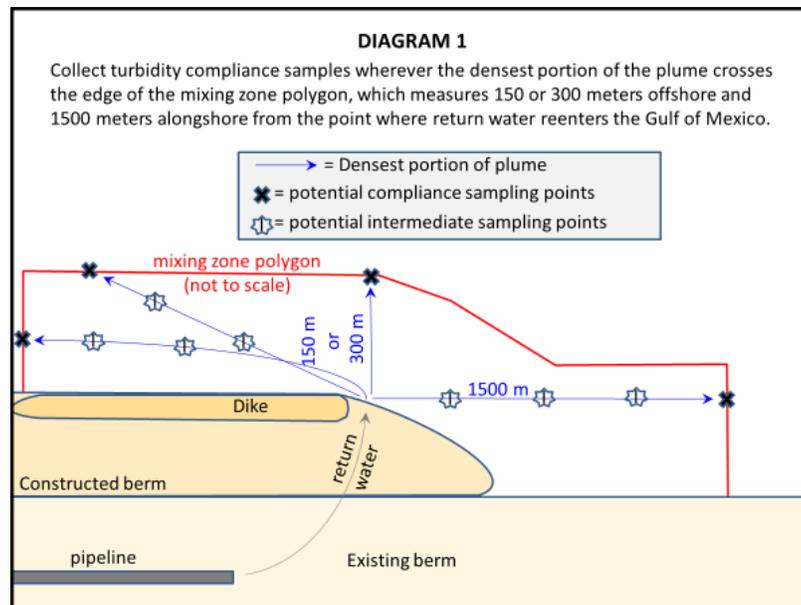
Compliance: Sampling shall occur at surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above the bottom.

Egmont Shoal East Borrow Area: Samples shall be collected 150 meters downcurrent from the source of turbidity at the dredge (cutterhead, hopper overflow, etc.) and from any other source of turbidity generated by the dredge, in the densest portion of any visible turbidity plume. If no plume is visible, follow the likely direction of flow.

Beach Site with hardbottom resources directly offshore (R-72 to R-107): Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone polygon, which measures 150 meters offshore and 1,500 meters downcurrent from the point where the return water from the dredged discharge reenters the Gulf of Mexico. *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.

Beach Site without hardbottom resources offshore (R-56 to R-72): Samples shall be collected where the densest portion of the turbidity plume crosses the edge of the mixing zone polygon, which measures 300 meters offshore and 1,500 meters downcurrent from the point where the return water from the dredged discharge reenters the Gulf of Mexico. *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*



- d. **Intermediate Monitoring** (required when using a mixing zone that exceeds 150 meters in size): At surface, mid-depth, and (for sites with depths greater than 25 feet) 2 meters above bottom. At points approximately 150, 500, 750 and 1000 meters downcurrent from the point where the return water from the dredged discharge reenters the Gulf of Mexico (if those points are located inside the mixing zone), within the densest portion of any visible turbidity plume generated by this project. These measurements will be used to calibrate the size of the mixing zone for future events. Please note that the sampling locations should not

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exceed 150 meters offshore, between R-72 and R-107, or 300 meters offshore, between from R-56 and R-72. See Diagram 1.

Within 90 days following completion of each nourishment event, the Permittee shall provide the Intermediate Monitoring data (in tabular format) to the JCP Compliance Officer. Along with the raw data, the Permittee shall also provide an analysis of the frequency at which the turbidity standard (as specified in Specific Condition 28) was exceeded at each intermediate distance, for each work area (Borrow Areas and Beach Nourishment Sites). If the Department determines that an adjustment to size of any of the mixing zones is required, pursuant to Rule 62-4.244(5)(d), F.A.C., then an administrative modification to adjust the dimensions of the mixing zone would be required prior to the next nourishment event.

- e. **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 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.

~~**Notification.** If shorebird nesting occurs within the project area, a bulletin board will be placed and maintained in the construction area with the location map of the construction site showing the bird nesting areas and a warning, clearly visible, stating that “BIRD NESTING AREAS ARE PROTECTED BY THE FLORIDA THREATENED AND ENDANGERED SPECIES ACT AND THE STATE AND FEDERAL MIGRATORY BIRD ACTS”.~~

28. 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 0 NTUs above the corresponding background turbidity levels when the plume extends into OFW, 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 JCPCompliance@dep.state.fl.us and include in the subject line, “TURBIDITY EXCEEDANCE”, and the Project Name and Permit Number. Also notify the Department’s Southeast 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 0 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:
- i. the Project Name;
 - ii. the Permit Number;
 - iii. location and level (NTUs above background) of the turbidity exceedance;
 - iv. the time and date that the exceedance occurred; and
 - v. the time and date that construction ceased.
- b. Prior to re-commencing the construction, a report shall be emailed to the Department with the same information that was included in the “Exceedance Report”, plus the following information:

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- i. turbidity monitoring data collected during the shutdown documenting the decline in turbidity levels and achievement of acceptable levels;
- ii. corrective measures that were taken; and
- iii. cause of the exceedance.

~~**Beach Contours.** Shorebird surveys must be conducted at least ten (10) days prior to any tilling or scarp removal that occurs during shorebird nesting season, starting February 15. It is the responsibility of the contractors or the local sponsor in the 3 years' post construction to avoid tilling or scarp removal in areas where nesting birds are present.~~

- a) ~~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.~~
- b) ~~The slope between the mean high water line and the mean low water line must be maintained in such a manner as to approximate natural slopes.~~

Manatee Protection Conditions

29. **Turbidity Reports:** All turbidity monitoring data shall be submitted within one week of analysis. The data shall be presented in tabular format, indicating the measured turbidity levels at the compliance sites for each depth, the corresponding background levels at each depth and the number of NTUs over background at each depth. Any exceedances of the turbidity standard (0 NTUs above background) shall be highlighted in the table. In addition to the raw and processed data, the reports shall also contain the following information:

- a. time of day samples were taken;
- b. dates of sampling and analysis;
- c. GPS location of sample;
- d. depth of water body;
- e. depth of each sample;
- f. antecedent weather conditions, including wind direction and velocity;
- g. tidal stage and direction of flow;

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- h. water temperature;
- i. a map, overlaid on an aerial photograph, indicating the sampling locations, dredging and discharge locations, and direction of flow. A sample map shall be submitted to the Department for review and approval prior to construction;
- j. a statement describing the methods used in collection, handling, storage and analysis of the samples;
- 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.

Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the Department, on the submittal cover page and at the top of each page of the report, please state: "This information is provided in partial fulfillment of the monitoring requirements in Permit No. 0238664-001-JC, for the Sand Key Nourishment Project."

~~All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.~~

30. PHYSICAL MONITORING REQUIRED:

Pursuant to 62B-41.005(16), F.A.C., physical monitoring of the project shall be required through acquisition of project-specific data to include, at a minimum, topographic and bathymetric surveys of the beach, offshore, and borrow site areas, and engineering analysis. The monitoring data are necessary in order for both the project sponsor and the Department to regularly observe and assess, with quantitative measurements, the performance of the project, any adverse effects which have occurred, and the need for any adjustments, modifications, or mitigative response to the project. The scientific monitoring process also provides

the project sponsor and the Department information necessary to plan, design, and optimize subsequent follow-up projects, potentially reducing the need for and costs of unnecessary work, as well as potentially reducing any environmental impacts that may have occurred or would be expected to occur.

Prior to the next construction event, the Permittee shall submit a revised detailed Physical Monitoring Plan to the Department for review and approval.

The approved 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 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.

As guidance for obtaining Department approval, the plan shall generally contain the following items:

- a. Topographic and bathymetric profile surveys of the beach and offshore shall be conducted within 90 days prior to commencement of construction, and again within 60 days following completion of construction. A pre-construction survey of the project area to receive beach fill may use surveys conducted for purposes of construction bidding, contracting or construction management. The post-construction survey of the beach fill may use surveys and other information collected periodically during construction for purposes of construction management and payment. Alternatively, the post-construction survey may consist of a single beach-offshore profile survey event of the project monitoring area, conducted within 60 days after completion of beach fill placement.

Thereafter, monitoring surveys shall be conducted biennially, beginning approximately one year following completion of construction, until the next beach nourishment event or the expiration of the project design life, whichever occurs first. The monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. If the time period between the immediate post-construction survey and the first biennial monitoring survey is less than six months, then the Permittee may, at their discretion, request a postponement of the first monitoring survey until the following spring/summer.

The monitoring area shall include profile surveys at each of the Department of Environmental Protection's reference monuments within

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the bounds of the beach fill area, and along at least 5,000 feet of the adjacent shoreline on both sides of the beach fill area. All work activities and deliverables shall be conducted in accordance with the latest update of the Department's *Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.*

- b. Bathymetric surveys of borrow area(s) located at inlet channels and shoals shall be conducted within 90 days prior to commencement of construction and again within 60 days following completion of construction of the project. Thereafter, monitoring surveys of the inlet borrow area(s) shall be surveyed concurrently with the biennial beach and offshore surveys required above. A prior design survey may be submitted for the pre-construction survey.

Survey grid lines across the borrow area(s) shall be spaced to provide sufficient detail for accurate volumetric calculations but spaced not more than a maximum of 500 feet apart, and shall extend a minimum of 500 feet beyond the boundaries of the borrow site. For borrow sites located in tidal inlet shoals, bathymetric surveys of the entire shoal complex, including any attachment bars, shall be conducted unless otherwise specified by the Department based upon the size of the shoal and the potential effects of the dredging on inlet processes. In all other aspects, work activities and deliverables shall be consistent with the Department's *Monitoring Standards for Beach Erosion Control Projects, Section 01200.*

- c. The Permittee shall submit an engineering report and the monitoring data to the JCP Compliance Officer within 90 days following completion of the post-construction survey and each biennial monitoring survey.

The report shall summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. In addition, the report shall include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project. The report shall specifically include:

- A record of the volume and location of all beach fill or inlet sand bypassing material placed within the project area;
- The volume and percentage of advance nourishment lost since the last beach nourishment project as measured landward of the MHW line of the most recent survey;

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- The most recent MHW shoreline positions (feet) in comparison with the design profile at each individual monument location;
- The MHW shoreline position changes (feet) relative to the pre-construction survey at each individual monument location for all the monitoring periods;
- The total measured remaining volume (cubic yards) in comparison with the total predicted remaining volume (cubic yards) landward of the MHW line and shallower than the Depth of Closure for the entire project area over the successive monitoring periods; and,
- Other shoreline position and volumetric analysis the Permittee or engineer deem useful in assessing, with quantitative measurements, the performance of the project.

The report shall include computations, tables and graphic illustrations of volumetric and shoreline position changes for the monitoring area. An appendix shall include superimposed plots of the two most recent beach profile surveys, the design profile, and pre- and post-construction beach profile at each individual reference monument location.

- d. One electronic copy of the monitoring report, and one electronic copy of the survey data shall be submitted to the JCP Compliance Officer. When submitting any monitoring information to the JCP Compliance Officer, please include a transmittal cover letter clearly labeled with the following at the top of each page: **"This monitoring information is submitted in accordance with the approved Monitoring Plan for Permit No. 0238664-001-JC for the monitoring period [XX]."**

~~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.~~

31. Pursuant to Chapter 161.141, F.S., prior to construction of beach restoration or beach nourishment, the Board of Trustees must establish the line of mean high water for any area affected by this project that does not already have an Erosion Control Line (ECL). This is required to establish the boundary line between sovereignty lands of the state bordering on the Gulf of Mexico and the upland properties. No work shall commence until the Erosion Control Line has been

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established to the satisfaction of the Department and recorded in the public records of the county in which the project is located.

Prior to placement of fill between the existing ECL (point of beginning approximately R 106.7) and R-109 the Permittee shall have established an Erosion Control Line (ECL). Please contact Mr. Weeks (email: William.Weeks@dep.state.fl.us) in the Beaches, Inlets and Ports Program for guidance on establishing this ECL.

~~Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.~~

Specific Conditions 32 through 38 have been stricken from the permit.

After thorough review of your application, staff finds that the proposed modification is not expected to adversely affect water quality or change the determination that the project is clearly in the public interest. Staff has also determined that the proposed alteration does not increase the potential for adverse impact on the coastal system, public beach access seaward of the mean high water line or nesting sea turtles and hatchlings and their habitat, and that the proposed alteration does not reduce the design adequacy of the project. Since the proposed modification is not expected to result in any adverse environmental impact or water quality degradation, the **permit is hereby modified** as stated above. By copy of this letter and the attached drawings we are notifying all necessary parties of the modification.

This letter of approval extends the expiration date of the permit from July 6, 2021, to **July 6, 2026**. The Specific Conditions of the permit are altered by this modification as specified above. This letter and the attached drawings must be attached to the original permit.

This permit is hereby modified unless a sufficient petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), as provided below. The procedures for petitioning for a hearing are set forth below. Mediation under Section 120.573, F.S., is not available for this proceeding.

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

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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.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

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.

If you have any questions regarding this matter, please contact Ivana Kenny Carmola by email at Ivana.KennyCarmola@dep.state.fl.us or by telephone at (850) 245 7618.

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Sincerely,



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

Attachments:

Existing Permit Drawings [41 sheets]
Revised Egmont Shoal East Borrow Area Drawing (1 sheet)

cc: Paul Karch, USACE	Charles Grisafi, SW District
Gregory Garis, DWRM	Randy Runnels, Tampa Bay Aquatic Preserve
Martin Seeling, DWRM	Bruce Laurion, Tampa Port Authority
Robert Brantly, DWRM	Luke Davis, FWC
Ralph Clark, DWRM	MarineTurtle@myfwc.com
Jennifer Steele, DWRM	FWCConservationPlanningServices@myfwc.com
Vladimir Kosmynin, DWRM	tampareg@usace.army.mil
Roxane Dow, DWRM	JCP Compliance Officer
Alex Reed, DWRA	Permit File
Catherine Florko, DWRA	CE Review
Pamela Vazquez, SW District	

FILING AND ACKNOWLEDGMENT

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



Deputy Clerk

12/16/2016

Date