CONSOLIDATED JOINT COASTAL PERMIT AND
SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:
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Environmental Branch
Jacksonville District
U.S. Army Corps of Engineers
701 San Marco Boulevard
Jacksonville, Florida  32207

PERMIT INFORMATION:
Permit Number: 0176979-006-JC
Project Name: Gulf Intracoastal Waterway Maintenance Dredging, Naples to Gordon Pass
County: Collier
Issuance Date: October 17, 2013
Expiration Date: October 17, 2028

REGULATORY AUTHORIZATION:
This permit is issued under the authority of Chapter 161 and Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). Pursuant to Operating Agreements executed between the Department of Environmental Protection (Department) and the water management districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

Permit No. 0176979-006-JC hereby supersedes Permit No. 0176979-001-JC and Variance No. 0176979-002-EV.

PROJECT DESCRIPTION:
The project consists of maintenance dredging approximately 4.5 miles of the federal channel in the Gulf Intracoastal Waterway (GIWW), Gordon Pass and Gordon Pass Entrance Channel, and dredging a new, 100-foot-wide Settling Basin adjoining the length of the Entrance Channel. Dredging will be to a maximum depth of -14 feet (i.e., -12 feet design depth, plus 2 feet allowable overdepth) Mean Lower Low Water (MLLW) in Cut-1 until Station 44+00, and then to a maximum depth of -12 feet (i.e., -10 feet design depth, plus 2 feet allowable overdepth) MLLW through Cut-7. Beach compatible dredged material will be placed within the approved beach fill template on Keewaydin Island.
PROJECT LOCATION:

The beach placement site starts approximately 300 feet south of Gordon Pass, and extends approximately 4,000 feet south on Keewaydin Island, between DEP Reference Monuments R-90 and R-94, in Collier County, Section 28, Township 50 South, Range 25 East, Gulf of Mexico, Class III Waters, adjacent to the Rookery Bay Aquatic Preserve, Outstanding Florida Waters (OFW).

The Settling Basin is located along the north side of the Entrance Channel (Cut-1). The navigational dredging activity extends from the Gordon Pass Entrance Channel (in the Gulf of Mexico), through Gordon Pass and northward through the GIWW, in Collier County, Sections 10, 15, 21, 22, 27, 28, Township 50 South, Range 25 East, Class III Waters, adjacent to OFW.

PROPRIETARY AUTHORIZATION:

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

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the beach placement activity qualifies for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby granted to the City of Naples, the project’s local sponsor, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

The Department acknowledges that the navigational dredging falls within one of the federal powers listed in the Submerged Lands Act under 43 USC 1311(d) or 43 USC 1314, and, under those provisions, the U.S. Army Corps of Engineers (Corps) needs no authorization from the Board of Trustees to utilize sovereignty submerged lands for that activity. However, under the provisions of the Coastal Zone Management Act (16 USC 1451-1465), this activity requires Florida’s concurrence with a determination of consistency with the sovereignty submerged lands provisions of Florida’s approved Coastal Management Program prior to federal approval of the proposed activity. The State has determined that the activity is consistent with the sovereignty submerged lands provisions of Florida’s approved Coastal Management Program.

COASTAL ZONE MANAGEMENT:
This permit constitutes a finding of consistency with Florida’s Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

WATER QUALITY CERTIFICATION:

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

LOCAL SPONSOR AGREEMENT:

The Department will enter into a contractual agreement with the local project sponsor, the City of Naples, under which the City of Naples will be responsible for conducting monitoring for the protection of nesting marine turtles, their hatchlings and their habitat. The agreement is enforceable against the City of Naples and is independent of this permit.

AGENCY ACTION:

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

GENERAL CONDITIONS:

1. This permit, including its general and specific conditions, must be construed in light of the February 28, 2006 Interagency Cooperative Agreement for Civil Works Projects (ICA) between the Department and the Corps. As recognized in the ICA, the Department has the authority to include reasonable conditions in this permit. All of the conditions in this permit, both general and specific, are enforceable to the extent sovereign immunity has been waived under 33 U.S.C. §§ 1323 and 1344(t). The ICA is incorporated herein by reference.

2. All activities approved shall be implemented as set forth in the drawings incorporated by reference and in compliance with the conditions and requirements of this document. The Corps shall notify the Department in writing of any anticipated changes in:

   a) operational plans;

   b) project dimensions, size or location;
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c) ability to adhere to permit conditions;

d) project description included in the permit;

e) monitoring plans.

If the Department determines that a modification to the permit is required then the Corps shall apply for and obtain the modification. Department approval of the modification shall be obtained prior to implementing the change, unless the change is determined by the Department to reduce the scope of work from that authorized under the original permit, and shall not effect compliance with permit conditions or monitoring requirements.

3. If, for any reason, the Corps does not comply with any condition or limitation specified herein, the Corps shall immediately provide the Department with a written report containing the following information:

a) a description of and cause of non-compliance;

b) the period of noncompliance, including dates and times;

c) impacts resulting or likely to result from the non-compliance;

d) steps being taken to correct the non-compliance; and

e) the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Compliance with the provisions of this condition shall not preclude the Department from taking any enforcement action allowed under state law with respect to any non-compliance.

4. The Corps shall obtain any applicable licenses, permits, or other authorizations which may be required by federal, state, local or special district laws and regulations. Nothing herein constitutes a waiver or approval of other Department permits or authorizations that may be required for other aspects of the total project.

5. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida’s sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.
6. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this authorization or a formal determination under Section 373.421(2), F.S., provides otherwise.

7. Nothing herein authorizes any entrance upon or activities on property which is not owned or controlled by the Corps or local sponsor, or conveys any vested rights or any exclusive privileges.

8. This document or a copy thereof, complete with all conditions, attachments, modifications, and time extensions shall be kept at the work site of the authorized activity. The Corps shall require the contractor to review this document prior to commencement of the authorized activity.

9. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that must be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.

10. At least forty-eight (48) hours prior to the commencement of authorized activity, the Corps shall submit to the Department a written notice of commencement of activities indicating the anticipated start date and the anticipated completion date.

11. If historic or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time on the project site, the Corps shall immediately stop all activities in the immediate area which disturb the soil and notify the Department and the State Historic Preservation Officer. In the event that unmarked human remains are encountered during permitted activities, all work shall stop in the immediate area and the proper authorities notified in accordance with Section 872.05, F.S.

12. Within a reasonable time after completion of construction activities authorized by this permit, the Corps shall submit to the Department a written statement of completion. This statement shall notify the Department that the work has been completed as authorized and shall include a description of the actual work completed. The Department shall be provided, if requested, a copy of any as-built drawings required of the contractor or survey performed by the Corps.
SPECIFIC CONDITIONS:

1. All reports or notices relating to this permit shall be sent to the Department’s JCP Compliance Officer (e-mail address: JCP Compliance@dep.state.fl.us), unless otherwise specified in the specific conditions.

2. The Permittee shall not store or stockpile tools, equipment, materials, etc., within littoral zones or elsewhere within surface waters of the state without prior written approval from the Department. Storage, stockpiling or access of equipment on, in, over or through seagrass (or other aquatic vegetation) beds or wetlands is prohibited unless within a work area or 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.

3. 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.

4. Pre-Construction Conference. The Permittee shall conduct a pre-construction conference to review the specific conditions and monitoring requirements of this permit with Permittee’s contractors, the engineer of record 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:

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

   DEP South District Office  
   Submerged Lands & Environmental Resources  
   2295 Victoria Avenue, Suite 364  
   Fort Myers, Florida 33902-2549  
   phone: (239) 344-5600  
   fax: (850) 412-0590

   Imperiled Species Management Section  
   Florida Fish & Wildlife Conservation Commission  
   620 South Meridian Street  
   Tallahassee, Florida 32399-1600  
   phone: (850) 922-4330  
   fax: (850) 921-4369  
   or email: marineturtle@myfwc.com
The Permittee is also advised to schedule the pre-construction conference at least a week prior to the intended commencement date. At least seven (7) 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.

5. **Pre-Construction Submittals.** At least fourteen (14) days prior to the date of the pre-construction conference (as required above), the Permittee shall submit the final plans and specifications for this project, which must be consistent with the project description of this permit and the approved permit drawings. The Permittee shall point out any deviations from the project description or the approved permit drawings, and any significant changes would require a permit modification. The final plans and specifications, along with any accompanying documents, shall be submitted electronically. 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. Further, the Permittee shall specify any anticipated sites that will be used (such as a disposal or re-use location) and appropriate contact information for those facilities. The final plans and specifications submitted under this condition must comply with all conditions set forth in this permit.

6. In the event that the City of Naples, 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 and the local sponsor agreement for this project.

**MONITORING REQUIRED:**

7. **Water Quality - Turbidity** shall be monitored as follows:

   **Units:** Nephelometric Turbidity Units (NTUs).

   **Frequency:** Three (3) times per day, at least 4 hours apart, during all dredging and filling operations. Sampling shall be conducted while the highest project-related turbidity levels are crossing the edge of the mixing zone. Since turbidity levels can be related to pumping rates, the dredge pumping rates shall be recorded, and provided to the Department upon request. The compliance samples and the corresponding background samples shall be collected at approximately the same time, i.e., one shall immediately follow the other.

   **Location:** Background: 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.

**Dredge Site**: Samples shall be collected at least 300 meters up-current from the source of turbidity at the dredge site.

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

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

**Dredge Site**: Samples shall be collected 150 meters down-current from the dredge head, 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.

However, if the dredge is operating within 150 meters updrift of a seagrass or submerge aquatic vegetation bed, and the turbidity plume is moving in the direction of the bed, samples shall be collected where the densest portion of the turbidity plume crosses the nearest edge of the bed.

**Beach Site**: Samples shall be collected in the densest portion of the turbidity plume, 150 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.
Calibration: The instruments used to measure turbidity shall be fully calibrated with primary standards within one month of the commencement of the project, and at least once a month throughout the project. Calibration with secondary standards shall be verified each morning prior to use, after each time the instrument is turned on, and after field sampling using two secondary turbidity “standards” that bracket the anticipated turbidity samples. If the post-sampling calibration value deviates more than 8% from the previous calibration value, results shall be reported as estimated and a description of the problem shall be included in the field notes.

Analysis of turbidity samples shall be performed in compliance with DEP-SOP-001/01 FT 1600 Field Measurement of Turbidity:
http://publicfiles.dep.state.fl.us/dear/sas/sopdoc/2008sops/ft1600.pdf

If the turbidity monitoring protocol specified above prevents the collection of accurate data, the person in charge of the turbidity monitoring shall contact the JCP Compliance Officer to establish a more appropriate protocol. Once approved in writing by the Department, the new protocol shall be attached to the permit and shall be implemented without the need for a formal permit modification.

9. 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 within the OFW exceed the associated background levels or the compliance sites outside of the OFW are greater than 29 NTUs above the corresponding background turbidity levels, construction activities shall cease immediately and not resume until corrective measures have been taken and turbidity has
returned to acceptable levels. Any such occurrence shall also be immediately reported to
the JCP Compliance Officer via email at JCP Compliance@dep.state.fl.us and include in
the subject line, “TURBIDITY EXCEEDANCE”, and the Project Name and Permit
Number. Also notify the Department’s South District office.

Any project-associated turbidity source other than dredging or beach nourishment (e.g.,
scow or pipeline leakage) shall be monitored as close to the source as possible (without a
mixing zone). If the turbidity level exceeds the water quality standards specified above,
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 “PROJECT-ASSOCIATED DISCHARGE-OTHER”.

When reporting a turbidity exceedance, the following information shall also be included:

a. the Project Name;
b. the Permit Number;
c. location and level (NTUs above background) of the turbidity exceedance;
d. the time and date that the exceedance occurred; and
e. the time and date that construction ceased.

Prior to re-commencing the construction, a report shall be emailed to the Department’s
JCP Compliance Officer with the same information that was included in the “Exceedance
Report”, plus the following information:

a. turbidity monitoring data collected during the shutdown documenting the decline
   in turbidity levels and achievement of acceptable levels;
b. corrective measures that were taken; and
c. cause of the exceedance.

10. 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 standards specified above 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 samples;
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;
h. water temperature;
i. a map (overlaid on an aerial photograph) indicating the sampling locations, dredging and discharge locations, and direction of flow;
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 and accuracy of the turbidity and GPS data;
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.

Monitoring reports shall be submitted by email to the JCP Compliance Officer. In the subject line of the reports, on the cover page to the submittal and at the top of each page, include the Project Name, Permit Number and the dates of the monitoring interval. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit.

12. As part of the written statement of completion required by the General Conditions, for each maintenance event, provide the approximate alongshore location (preferably, FDEP
13. The approved Sediment Quality Control-Quality Assurance Plan, dated October 2012, is hereby incorporated by reference. Compliance with the provisions of the Plan is a requirement of this permit. Prior to each maintenance dredging event of channel segments Cut-7 through Cut 15, geotechnical data of sediment samples that are sufficient to characterize the material shoaled within these channels shall be submitted with the final plans and specifications.

14. **Manatee, Marine Turtle, and Shorebird Protection Conditions.** During all construction authorized by this permit and subsequent to authorization of incidental take by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (Service) in accordance with Florida Statute 161.041 (5), 379.2431 (1), the Permittee shall comply with the following conditions intended to protect manatees, marine turtles and shorebirds from direct project effects:

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

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

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

d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). **All in-water operations, including vessels, shall be shutdown if a marine turtle or manatee comes within 50 feet of the operation.** Activities shall not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.

e. Any collision with or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (USFWS) in Jacksonville at 1-904-731-3336.
Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the Permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution Boaters – Watch for Manatees must be posted. A second sign measuring at least 8 ½” by 11” explaining the requirements for “Idle Speed/No Wake” and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Signs already approved by the FWC can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

All personnel associated with the project shall be instructed about the potential presence of nesting shorebirds and the need to avoid take of (including disturbance to) these protected species.

All vehicles shall be operated in accordance with the FWC’s Best Management Practices for Operating Vehicles on the Beach (http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/). Specifically, the vehicle must be operated at a speed <6 mph and run at or below the high-tide line.

**Fish and Wildlife Protection Conditions for Dredging Activities:**

15. **Hopper Dredging.** In the event a hopper dredge is utilized, the following requirements shall be met in addition to the Terms and Conditions of the applicable NMFS Regional Biological Opinion for Hopper Dredging (Gulf of Mexico):

a. Handling of captured sea turtles or sea turtle shall be conducted only by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid Marine Turtle Permit issued by the Florida Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code (FAC) 68E-1.

b. Standard operating procedure shall be that dredging pumps shall be disengaged by the operator, or the draghead bypass value shall be open and in use when the dragheads are not firmly on the bottom, to minimize impingement or entrainment of sea turtles within the water column. This precaution is especially important during the cleanup phase of dredging operations.

c. 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 shall be notified at Allen.Foley@myfwc.com at the start-up and completion of hopper dredging operations. In the event of capturing or recovering sea turtles or sea turtle parts, the STSSN should be contacted at SeaTurtleStranding@myfwc.com

e. Relocation trawling or non-capture trawling shall be implemented in accordance with the applicable NMFS Biological Opinion and Incidental Take authorization.
i. The permittee or their contractor shall e-mail (MTP@MyFWC.com) weekly reports to the Imperiled Species Management section on Friday each week that trawling is conducted in Florida waters. 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 trawling activity, including non-capture trawling, and 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 MTP@myfwc.com by January 15 of the following year or at the end of the project.

Fish and Wildlife Protection Conditions for Nearshore and Beach Placement of Dredge Material:

16. **Beach Maintenance.** All derelict concrete, metal, and coastal armoring material and other debris shall be removed from the beach prior to any material placement to the maximum extent practicable. If debris removal activities will take place during shorebird breeding or sea turtle nesting seasons, the work shall be conducted during daylight hours only and shall not commence until completion of daily seabird, shorebird or sea turtle surveys each day. 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 unless otherwise authorized.

17. **Pre-Construction Meeting.** A meeting between representatives of the contractor, the US Fish and Wildlife Service (FWS), the FWC, the permitted sea turtle surveyor and Bird Monitors as appropriate, shall be held prior to commencement of work on projects. At least 10-business days advance notice must be provided prior to conducting this meeting. The meeting will provide an opportunity for explanation and/or clarification of the protection measures as well as additional guidelines when construction occurs during nesting season, such as staging equipment and reporting within the work area as well as follow up meetings during construction.

18. **Nesting Seabird and Shorebird Protection Conditions:** Nesting seabird and shorebird (i.e. shorebird) surveys should be conducted by trained, dedicated individuals (Bird Monitor) with proven shorebird identification skills and avian survey experience. A list of candidate Bird Monitors with their contact information, summary of qualifications, including bird identification skills, and avian survey experience, shall be provided to FWC. This information will be submitted to the FWC regional biologist (contact information attached) prior to any construction or hiring for shorebird surveys for revision and consultation. Bird Monitors shall use the following survey protocols:

   a. Bird Monitors shall review and become familiar with the general information, employ the data collection protocol, and implement data entry procedures outlined on the FWC’s Florida Shorebird Database (FSD) website (www.FLShorebirdDatabase.org). An outline of data to be collected, including downloadable field data sheets, is available on the website.
b. Breeding season varies by species. Most species have completed the breeding cycle by September 1, but flightless young may be present through September. The following dates are based on the best available information regarding ranges and habitat use by species around the state:

All Gulf Coast counties: February 15 – September 1

Breeding season surveys shall begin on the first day of the breeding season or 10 days prior to project commencement (including surveying activities and other pre-construction presence on the beach), whichever is later. Surveys shall be conducted through August 31st or until all breeding activity has concluded, whichever is later.

c. Breeding season surveys shall be conducted in all potential beach-nesting bird habitats within the project boundaries that may be impacted by construction or pre-construction activities. Portions of the project in which there is no potential for project-related activity during the nesting season may be excluded. One or more shorebird survey routes shall be established in the FSD website to cover these areas.

d. During the pre-construction and construction phases of the project, surveys for detecting breeding activity and the presence of flightless chicks shall be completed on a daily basis prior to movement of equipment, operation of vehicles, or other activities that could potentially disrupt breeding behavior or cause harm to the birds or their eggs or young.

e. Surveys shall be conducted by walking the length of the project area and visually surveying for the presence of shorebirds exhibiting breeding behavior, shorebird/seabird chicks, or shorebird/seabird juveniles as outlined in the FSD Breeding Bird Protocol for Shorebirds and Seabirds. Use of binoculars is required.

i. 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/). Specifically, the vehicle must be operated at a speed <6 mph and run at or below the high-tide line. The Bird Monitor will stop at no greater than 200 meter intervals to visually inspect for breeding activity.

f. Once breeding is confirmed by the presence of a scrape, eggs, or young, the Bird Monitor shall notify the FWC Regional Species Conservation Biologist (contact information attached) within 24 hours. All breeding activity shall be reported to the FSD website within one week of data collection.
19. **Seabird and Shorebird Buffer Zones and Travel Corridors.** Within the project area, the Permittee shall establish a disturbance-free buffer zone around any location where shorebirds have been engaged in breeding behavior, including territory defense. A 300 foot-wide buffer is considered adequate based on published studies. However, a smaller, site-specific buffer may be implemented upon approval by the FWC Regional Species Conservation Biologist (contact information attached) as needed. All sources of human disturbance (including pedestrians, pets, and vehicles) shall be prohibited in the buffer zone.

a. The Bird Monitor shall keep breeding sites under sufficient surveillance to determine if birds appear agitated or disturbed by construction or other activities in adjacent areas. If birds do appear to be agitated or disturbed by these activities, then the width of the buffer zone shall be increased immediately to a sufficient size to protect breeding birds.

b. Reasonable and traditional pedestrian access should not be blocked where breeding birds will tolerate pedestrian traffic. This is generally the case with lateral movement of beachgoers 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 Permittee shall work with the FWC Regional Species Conservation Biologist to determine if pedestrian access can be accommodated without compromising nesting success.

c. Designated buffer zones shall be marked with posts, twine and signs stating “Do Not Enter, Important Nesting Area” or similar language around the perimeter that includes the name and a phone number of the entity responsible for posting. Posts should not exceed 3 feet in height once installed. Symbolic fencing (twine, string or rope) should be placed between all posts at least 2.5 feet above the ground and rendered clearly visible to pedestrians. If pedestrian pathways are approved by the FWC Regional Species Conservation Biologist within the 300-foot buffer zone, these should be clearly marked. The posting shall be 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. No construction activities, pedestrians, movement of vehicles, or stockpiling of equipment shall be allowed within the buffer area.

e. Travel corridors shall be designated and marked outside the buffer areas so as not to cause disturbance to breeding birds. Heavy equipment, other vehicles, or pedestrians may transit past breeding areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the breeding site. When flightless chicks are present within or adjacent to travel corridors, movement of vehicles shall be accompanied by the Bird Monitor who shall ensure no chicks are in the path of the moving vehicle and no tracks capable of trapping flightless chicks result.

f. To discourage nesting within the travel corridor, it is recommended that the Permittee should maintain some activity within these corridors on a daily basis, without disturbing
any nesting shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction.

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

21. **Marine Turtle Nest Surveys and Relocation.** Sand placement may occur during the marine turtle nesting season, May 1 through October 31, provided the following marine turtle protection conditions are met except where such work is prohibited by the managing agency or under applicable local land use codes.

22. For sand placement projects that occur during the period from May 1 through October 31, daily early morning (before 9 a.m.) surveys shall be conducted, and eggs shall be relocated per the requirements below (a. to c.). *(Note: sea turtle monitors shall not enter posted shorebird buffer areas to conduct monitoring or to relocate nests.)*

Marine turtle nesting surveys shall be initiated 65 days prior to sand placement activities or by April 15 whichever is later and shall comply with the following requirements ones.

a. Nesting surveys and nest marking shall only be conducted by persons with prior experience and training in these activities and who are 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 permit holder in the project area. Nesting surveys shall be conducted daily between sunrise and 9 a.m. (this is for all time zones). The contractor shall not initiate work until daily notice has been received from the marine turtle permit holder that the morning survey has been completed. Surveys shall 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 marine turtle protection measures.

b. Only those nests in the area where sand placement occurs shall be relocated. Nest relocation shall not occur upon completion of sand placement. 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 shall 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 daily inundation by high tides or known to routinely experience severe erosion and egg loss, or that are subject to artificial lighting. Nest relocations in association with
construction activities shall cease when sand placement activities no longer threaten nests.

c. Nests deposited within areas where construction activities have ceased or will not occur for 65 days, or nests laid in the nourished berm prior to tilling, shall be marked and left in place 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 a secondary marker at a point as far landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. No activity shall occur within this area nor shall any activities occur that could result in impacts to the nest. Nest sites shall be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the project activity.

23. **Marine Turtle or Nest Encounters.** Upon locating a dead or injured sea turtle adult, hatchling or egg that may have been harmed or destroyed as a direct or indirect result of the project, the Permittee shall be responsible for notifying STSSN at SeaTurtleStranding@myfwc.com. Care shall be taken in handling injured sea turtles or eggs to ensure effective treatment or disposition, and in handling dead specimens to preserve biological materials in the best possible state for later analysis. In the event a sea turtle nest is excavated during construction activities, the permitted person responsible for egg relocation for the project shall be notified immediately so the eggs can be moved to a suitable relocation site.

24. **Equipment Storage and Placement.** All construction pipes that are placed on the beach shall be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system. Pipes placed parallel to the dune shall be no farther seaward than 5 to 10 feet away from the toe of the dune. Temporary storage of pipes shall be off the beach to the maximum extent possible. If it will be necessary to extend construction pipes past a known shorebird nesting site or over-wintering area for piping plovers, then whenever possible those pipes should 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.

25. **Project Lighting.** Direct lighting of the beach and nearshore waters shall be limited to the immediate construction area during the sea turtle nesting season and shall comply with safety requirements. Lighting on offshore or onshore equipment shall be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the water’s surface and nesting beach while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of lighting equipment shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect 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 (Figure below).
26. **Fill Restrictions.** During the sea turtle nesting season, the contractor shall not extend the beach fill more than 500 feet along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. An exception to this may occur if there is permitted sea turtle surveyor present on-site to ensure no nesting and hatching sea turtles are present within the extended work area. If the 500 feet is not feasible for the project, the Permittee may submit a request for an alternate distance to FWC, and FWC shall decide if that distance is acceptable during the preconstruction meeting. Once the beach has been cleared and the necessary nest relocations have been completed, the contractor shall be allowed to proceed with the placement of fill during daylight hours until dusk at which time the 500-foot length limitation shall apply.

27. **Compaction Sampling.** Sand compaction shall be monitored in the area of sand placement immediately after completion of the project and prior to April 15th for three (3) subsequent years. Compaction shall be monitored in accordance with a protocol agreed to by the FWS, FWC and the Permittee. The requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post-construction compaction levels. Out-year compaction monitoring and remediation are not required if placed material no longer remains on the beach.

At a minimum, the protocol provided under a. and b. below shall be followed. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area shall be tilled immediately prior to the following date listed above. If values exceeding 500 psi are distributed throughout the project area but in no case do those values exist at two adjacent stations at the same depth, then consultation with the FWC or FWS 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.

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 at each depth (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lie over less compact layers. Replicates shall be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth shall be averaged to produce final values for each depth at each station. Reports shall include all 18 values for each transect line, and the final 6 averaged compaction values.

c. No compaction sampling shall occur within 300 feet of any shorebird nest.

d. Any vehicles operated on the beach in association with compaction surveys shall operate in accordance with the FWC’s Best Management Practices for Operating Vehicles on the Beach (http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/).

28. **Tilling Requirements.** If tilling is required as specified above, the area shall be tilled to a depth of 36 inches. All tilling activity shall be completed prior to the marine turtle nesting season. If tilling occurs during shorebird nesting season (See 18b above), shorebird surveys prior to tilling shall be required per the Shorebird Conditions included within this document. It is the responsibility of the contractors to avoid tilling, scarp removal, or dune vegetation planting in areas where nesting birds are present. Each pass of the tilling equipment shall be overlapped to allow thorough and even tilling. If the project is completed during the marine turtle nesting season, tilling shall not be performed in areas where nests have been left in place or relocated. If compaction measurements are taken, a report on the results of the compaction monitoring shall be submitted electronically to FWC at marinerturtle@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 observed 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. 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 avoid all vegetated areas 3 square feet or greater with a 3-foot buffer around the vegetated areas. 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.

e. Any vehicles operated on the beach in association with tilling shall operate in accordance with the FWC’s Best Management Practices for Operating Vehicles on the Beach (http://myfwc.com/conservation/you-conserve/wildlife/beach-driving/).

29. Escarpment Surveys. Visual surveys for escarpments along the project area shall be made immediately after completion of the sand placement project, weekly during sea turtle nesting season, and during March 15 to April 15 for three (3) subsequent years if sand from the project still remains on the beach. Weekly reports shall be submitted by Friday each week to marineturtle@myfwc.com. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of at least 100 feet shall be leveled and the beach profile shall be reconfigured to minimize scarp formation by April 15. Any escarpment removal shall be reported to FWC by location. If the project is completed during the sea turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. If, during the nesting and hatching season, there is any subsequent reformation of escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet, the Permittee shall immediately contact FWC to determine the appropriate action to be taken. If it is determined that escarpment leveling is required during the nesting or hatching season, the FWS or FWC shall 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 occurs during shorebird breeding season (See 18b), shorebirds surveys shall be required per the Shorebird Conditions included within this document prior to removal. (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 observed 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/).

30. All Terms and Conditions in the U.S. Fish and Wildlife Service Programmatic Piping Plover Biological Opinion, dated May 22, 2013, shall be met as required in that document.

Post-construction Shorebird Protection Conditions:

31. If beach cleaning will occur on the nourished beach, a minimum of 30% of the biotic material within the wrack line will be left on the beach post-cleaning 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.

Post-construction Monitoring and Reporting Marine Turtle Protection Conditions:

32. Reports on all marine turtle nesting activity shall be provided for the initial marine turtle nesting (May 1 through September 15) and hatching (through October 31) season as follows:

a. For the initial nesting season, the number and type of emergences (nests or false crawls) shall be reported per species in accordance with the Table 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 initial nesting season, reproductive success shall be reported per species in accordance with the Table below. Reproductive success shall be reported for all sea turtle nests if possible. Otherwise a statistically significant number of nests for each species shall be reported.

c. In the event that the reproductive success documented by species meets or exceeds required criteria (outlined in Table below) for each species, 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, applicable project permit numbers and dates of construction.

Data shall be reported for the nourished areas in accordance with the Table below and shall 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 MTP@myfwc.com. All summaries shall be submitted by January 15 of the following year. The FWC Excel spreadsheet is available upon request from MTP@myfwc.com.
Table. Marine Turtle Monitoring:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Duration</th>
<th>Variable</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nesting Success</td>
<td>Year of construction, one year to two or three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year</td>
<td>Number of nests and non-nesting emergences by day by species</td>
<td>40% or greater</td>
</tr>
<tr>
<td>Hatching Success</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet criterion based on previous year</td>
<td>Number of hatchlings by species to completely escape egg</td>
<td>Average of 60% or greater (data must include washed out nests)</td>
</tr>
<tr>
<td>Emergence Success</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach and variable does not meet success criterion based on previous year</td>
<td>Number of hatchlings by species to emerge from nest onto beach</td>
<td>Average must not be significantly different than the average hatching success</td>
</tr>
<tr>
<td>Disorientation</td>
<td>Year of construction and one to three years post construction if placed sand remains on beach</td>
<td>Number of nests and individuals that misorient or disorient</td>
<td></td>
</tr>
<tr>
<td>Lighting Surveys</td>
<td>Two surveys the year following construction, one survey between May 1 and May 15 and second survey between July 15 and August 1</td>
<td>Number, location and photographs of lights visible from nourished berm, corrective actions and notifications made</td>
<td>100% reduction in lights visible from nourished berm within one to two month period</td>
</tr>
<tr>
<td>Compaction</td>
<td>Not required if the beach is tilled prior to nesting season each year placed sand remains on beach</td>
<td>Shear resistance</td>
<td>Less than 500 psi</td>
</tr>
<tr>
<td>Escarpment Surveys</td>
<td>Weekly during nesting season for up to three years each year placed sand remains on the beach</td>
<td>Number of scars 18 inches or greater extending for more than 100 feet that persist for more than 2 weeks</td>
<td>Successful remediation of all persistent scarps as needed</td>
</tr>
</tbody>
</table>

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

[Signature]

Martin K. Seeling, Administrator
Beaches, Inlets & Ports Program
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.

_________  ____________________________  10/17/13
Deputy Clerk  Date

Prepared by _______________ Liz Yongue ____________________________.

Attachments:  Approved Permit Drawings (15 pages)
               QA/QC Plan (approved October 2012)