

Florida Department of Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Mimi A. Drew Secretary

CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:

U.S. Army Corps of Engineers c/o Eric Summa Jacksonville District Post Office Box 4970 Jacksonville, Florida 32232-0019 **PERMIT INFORMATION:** Permit Number: File No. 0294455-001-JC

Project Name: AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement

County: St. Johns

Issuance Date: 10/20/2010

Expiration Date of Construction Phase: 10/20/2020

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.

ACTIVITY DESCRIPTION:

The project is to maintain the Atlantic Intracoastal Waterway (AIWW) in the vicinity of Matanzas Inlet at the previously authorized and maintained depths by dredging approximately 250,000 cubic yards of material every other year for the duration of the permit. Dredging is authorized to a depth of -14 feet Mean Lower Low Water (MLLW), which includes a design depth of -12 feet MLLW, plus 2 additional feet of allowable over dredge.

The beach-quality dredged material will be pumped directly onto the beach via a submerged pipeline. The dredged material will be placed along 3,100 feet of beach, south of Matanzas Inlet, between DEP monuments R-205 and R-208, in St. Johns County. The berm will be constructed to an elevation of +8.0 ft NGVD, and width of the berm will not exceed 150 ft.

Joint Coastal Permit AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement Permit No. 0294455-001-JC Page 2 of 21

The pipeline from the dredge to the beach placement site will be submerged along the AIWW, cross the AIWW south of Rattlesnake Island, proceed along the Summer Haven River beneath the State Road A1A bridge, and cross the river and the adjacent barrier island to reach the beach at a point approximately 500 feet north of R-205.

ACTIVITY LOCATION:

The project area is located in St. Johns County and Flagler County; the area to be dredged is located at Sections 13 and 24, Township 9 South, Range 30 East and the beach placement site is located at Section 31, Range 30 and 31 East, Township 9 South. The maintenance dredging will extend from Station 20+00 in Channel Cut SJ-59 through Cut SJ-61, in St. Johns County, and Cut F-2, in Flagler County, all within the Atlantic Intracoastal Waterway, in the vicinity of Matanzas Inlet, Class II waters. The beach placement site is located south of Matanzas Inlet, in St. Johns County, between DEP monuments R-205 and R-208, Atlantic Ocean, Class III waters.

PROPRIETARY AUTHORIZATION:

The beach placement 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 the Department the responsibility to review and take final action on this request for proprietary authorization in accordance with Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21 and Section 62-343.075, 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 Florida Inlet Navigation District (FIND) 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 **maintenance 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

Joint Coastal Permit AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement Permit No. 0294455-001-JC Page 3 of 21

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

AGENCY ACTION:

The above named Permittee is hereby authorized to construct the work outlined in the activity description and activity 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 Coordination 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;
 - 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 will not affect 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 noncompliance;
 - 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, *Florida Statutes*.
- 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 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).
- 2. **Pre-Construction Submittals.** At least fourteen (14) days prior to the date of the preconstruction conference the Permittee shall submit final plans and specifications for 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 one (1) electronic copy of the final specifications. The plans and specifications shall be accompanied by a memo 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.

- 3. At least 7 days prior to the pre-construction conference referenced below or at least 21 days prior to the commencement of construction, the Permittee shall submit to the Department for review the following items:
 - a. *Turbidity monitoring qualifications*. Construction at the project site shall be monitored closely by an individual with professional experience in monitoring turbidity for beach nourishment or beach disposal projects. This is required to assure that turbidity levels do not exceed the compliance standards established in this permit. 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 to the Department to confirm their credentials.
 - b. A written summary of the construction schedule, the specific type of dredge equipment to be used, the anticipated volume of material to be dredged and the disposal sites that may be utilized.
 - c. A plan view of all staging areas, overlaid on a recent aerial photograph if available.
 - d. A copy of the Contractor's Environmental Protection Plan, or equivalent, that provides project-specific details of the Best Management Practices (BMPs) that will be implemented to prevent erosion, turbidity and the release of hazardous substances at the dredge/scow, disposal sites and staging areas. For construction during marine turtle nesting season, a description of how vessel lighting will be minimized during nighttime operations, in adherence to Specific Condition No. 12 below.
 - e. *Shorebird Monitor Qualifications*. Credentials of trained, dedicated individual(s) with proven shorebird identification skills and avian survey experience, who will

serve as shorebird monitors, shall be submitted directly to the FWC Regional Biologist, as well as the Department.

4. **Pre-Construction Conference.** The Permitee 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:

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: JCPCompliance@dep.state.fl.us

DEP Northeast District Office Submerged Lands & Environmental Resources 7825 Baymeadows Way Suite B200 Jacksonville, FL 32256-3560

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: marine.turtle@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. A permit modification would be required for the placement of dredged material outside of the approved placement area (between DEP monuments R-205 and R-208). In order to apply for placement north of FDEP reference monument R-202, at the location of the breach, the Permittee must demonstrate that the coastal system has recovered to the conditions of 2003-2007, which existed prior to the opening of the breach.

- 6. Sediment quality will be assessed as outlined in the Sediment QA/QC Plan approved September 27, 2010. Any occurrences of unacceptable material will be handled according to the protocols set forth in the Sediment QA/QC Plan. The sediment testing results shall be submitted to FDEP within 120 days following the completion of beach construction.
- 7. The Permittee is responsible for all monitoring requirements in this permit, unless FIND, the local sponsor for this project, executes a Local Sponsor Agreement with the Department. If executed, that agreement may transfer some or all of the monitoring requirements from the Corps to the local sponsor, as well as the elevation surveys in the coquina rock outcrop area. However, if the local sponsor 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.
- 8. The Permittee and the Department, within their respective authorities and funding, shall ensure that beach compatible dredged material is placed on Florida's beaches, consistent with Florida's beach management plan adopted pursuant to Chapter 161, F.S. and other beneficial uses criteria as may be specified by the Department and applicable federal standards.
- 9. In the event that the dredged material is deemed unsuitable for beach placement, a modification to this permit or separate authorization will be required to use an upland disposal site (e.g., Dredged Material Management Area SJ-1). The application shall include a signed report on the disposal site suitability from the project engineer. The report shall specifically state that the dikes, weirs and associated outfall structures at the disposal sites are functional and adequate to contain and treat the discharge generated by the dredging activities authorized by this permit, as well as the design storm event (25-yr, 24-hr). The report shall also include a brief summary of the engineer's site inspection addressing, as applicable, the calculated capacity, available freeboard, the visual integrity of embankments, the condition of inlet/outfall pipes, weir structures and details of the maintenance events reviewed by the engineer prior to authorizing the use of the disposal sites for the subject dredging event. The application shall include appropriate plan and cross-section figures as necessary. In addition, a standard operating procedure (SOP) or operational protocol (OP) shall be provided for the use of an upland disposal site (DMMA SJ-1). The protocol shall include maintenance, routine inspections, surface water monitoring, among other requirements.

Marine Turtle Protection Conditions

10. **Pre-Construction Meeting.** A meeting between representatives of the contractor, the Service, the FWC, and the permitted sea turtle surveyor prior to the commencement of work on this project must be held. 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.

- 11. **Marine Turtle Nest Surveys.** Sea turtle nesting surveys shall be initiated 65 days prior to sand placement or by April 15, whichever is later. Nesting surveys must continue through the end of the project or through November 30, whichever is earlier. Hatchling and emerging success monitoring will involve checking nests beyond the completion date of the daily early morning nesting surveys. The monitoring shall be conducted as follows:
 - a. Sea turtle nesting surveys and egg relocations will only be conducted by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to FAC 68E-1. Nesting surveys must be conducted daily between sunrise and 9 a.m.
 - b. 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. 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 will be relocated. 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 daily inundation by high tides or known to routinely experience severe erosion and egg loss, or subject to artificial lighting. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests.
 - ii. Sea turtle nests deposited where the project activities have ceased or will not occur for 65 days 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 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.

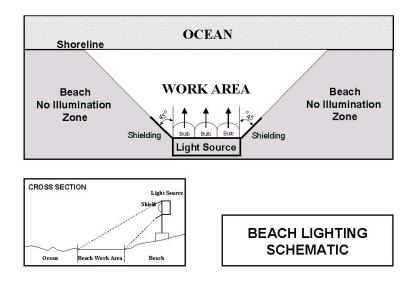
iii. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of three additional nesting seasons if placed material still remains on the beach. Monitoring of nesting activity in the seasons following construction shall include daily report sheets noting all 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 submitted to the Tequesta office with a copy to the Tallahassee office by January 15 of the following year.

Table 1. Marine Turtle Monitoring for Beach Restoration Projects

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 nonfill 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 nonfilled areas should be noted. If possible, the location of all marine turtle 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.

Joint Coastal Permit AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement Permit No. 0294455-001-JC Page 11 of 21

12. **Project Lighting**. 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 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, as illustrated below.



- 13. **Equipment Storage**. Staging areas for construction equipment for sand placement shall be located off the beach to the maximum extent practicable from April 15 to October 31.
 - 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.
- 14. **Fill Restrictions**. During 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.
 - a. If the 500 feet is not feasible for the project, an agreed upon distance shall be decided on during the preconstruction meeting.
 - b. Once the beach has been cleared 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.
- 15. **Beach Maintenance.** All derelict concrete, metal, and coastal armoring material and other debris shall be removed from the beach prior to any dredged material placement 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. 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.
- 16. **Tilling Requirements** Immediately after completion of the each fill placement event and prior to March 1 for 3 subsequent years if placed sand still remains on the beach, the beach shall be tilled as described below or the applicant 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 36 inches. All tilling activity must be completed prior to March 1.
 - b. An annual summary of compaction surveys and the actions taken shall be submitted to the FWC.
 - c. 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.

- 17. **Compaction Requirements**. 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.
 - 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 (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.
 - c. 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.
 - d. 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 March 1. 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. **Escarpment Surveys**. 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.
- 19. **Marine Turtle or Nest Encounters**. Upon locating a dead, injured, or sick endangered or threatened sea turtle specimen, initial notification must be made to the FWC at 1-888-404-FWCC. 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, 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

- 20. **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 will be submitted to the FWC Regional Biologist for review at least 21 days prior to construction. Shorebird Monitors will use the following survey protocols:
 - a. *Nesting Season Surveys*. Shorebird Monitors should review and become familiar with the general information and data collection protocols outlined on the FWC's Beach-Nesting Bird Website (<u>http://myfwc.com/shorebirds/</u>). An outline of what data should be collected, including downloadable field data sheets, is available on the website.
 - i. The nesting season is generally 1 April 1 September, but some nesting may occur through September.
 - ii. Nesting season surveys shall begin on April 1 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 earlier. If project activities continue after August 31 and active nests or fledglings remain on the

beach, then weekly surveys of the project site shall continue until all hatchlings have fledged.

- iii. 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.
- iv. 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.
- v. 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.
- vi. If an ATV or other vehicle is needed to cover large project areas, the vehicle must be operated at a speed <6 mph, shall be run at or below the high-tide line, and the Shorebird Monitor will stop at no greater than 200 meter intervals to visually inspect for nesting activity.
- Vii. Once breeding is confirmed by the presence of a scrape, eggs, or young, the Bird Monitor will notify the Regional Nongame Biologist of the FWC at (352) 732-1225 within 24 hours.
- viii. All breeding activity will be reported to the Beach-Nesting Bird website within one week of data collection.
- ix. Observations of non-breeding shorebirds should be reported to the Shorebird-Seabird Occurrence Database, as described below.
- 21. **Buffer Zones and Travel Corridors**. Within the project area, the permittee shall establish a 300 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.
 - a. The width of the buffer zone shall be increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.
 - b. Site-specific buffers may be implemented upon approval by 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 300-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-approved 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.
 - ii. 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 approved by FWC Regional Biologist for that region.
- 22. **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.

- 23. **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".
- 24. **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 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 Conditions

- 25. 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.
- 26. 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.
- 27. 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.
- 28. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

- 29. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336).
- 30. 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. Awareness signs that have already been approved for this use by the FWC must be used (see MyFWC.com). One sign which reads "*Caution Boaters: Watch for Manatees*" must be posted. A second sign measuring at least 81/2" 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.

WATER QUALITY MONITORING REQUIRED:

- 31. Turbidity shall be monitored follows:
 - Units: Nephelometric Turbidity Units (NTUs).
 - Frequency: Every 4 hours during daylight operation, starting approximately 30 minutes after the beginning of daily operations.
 - Location: Background: At surface, mid-depth, and 2 meters above bottom, clearly outside the influence of any artificially generated turbidity plume.

Dredge Site: approximately 500 meters from the suction head, in the opposite direction of the prevailing current flow.

Beach Site: approximately 1,000 meters upcurrent of the point where the return water from the dredged discharge reenters the Atlantic Ocean and at the same distance offshore as the corresponding compliance sample.

Compliance: At surface, mid-depth, and 2 meters above bottom, within the densest portion of any visible turbidity plume generated by this project.

Dredge Site: Samples shall be collected 150 meters downcurrent from the dredge head, in the densest portion of any visible turbidity plume.

Beach Site: Samples shall be collected 150 meters downcurrent from the discharge point within the densest portion of any visible turbidity plume.

Any project-associated discharge other than dredging or placement on the beach (e.g., scow leakage or runoff from temporary containment area) should be monitored as close to the source as possible (no mixing zone) every hour until background turbidity levels return 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 or their contractor first becomes aware of the discharge. The subject line of the email shall state "PROJECT-ASSOCIATED DISCHARGE-OTHER", and include the Project Name and the Permit Number.

- 32. The **compliance** locations given above shall be considered the limits of the temporary mixing zone for turbidity allowed during construction. If monitoring reveals turbidity levels at the **compliance** sites that are greater than 29 NTUs above the corresponding background turbidity levels, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the Department's Bureau of Beaches and Coastal Systems (BBCS) in Tallahassee 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 Northeast District office in Jacksonville.
- 33. Turbidity Reports. All turbidity monitoring data shall be submitted within one week of analysis, along with documents containing the following information:
 - a. time of day samples were taken;
 - b. dates of sampling and analysis;
 - c. depth of water body;
 - d. depth of each sample;
 - e. antecedent weather conditions, including wind direction and velocity;
 - f. tidal stage and direction of flow;
 - g. water temperature;
 - h. a map indicating the sampling locations, dredging and discharge locations, and direction of flow;
 - i. a statement describing the methods used in collection, handling, storage and analysis of the samples;

- j. 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 data;
- k. 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 (JCPCompliance@dep.state.fl.us) and to the Department's Northeast District office. In the subject line of the reports, 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. When submitting this information to the Department, on the cover page to the submittal and at the top of each page, state: "This information is provided in partial fulfillment of the turbidity monitoring requirements in Permit No. 0294455-001-JC, for the AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement project."

- 34. Turbidity Meter Calibration: The instruments used to measure turbidity shall be fully calibrated within one month of the commencement of the project, and at least once a month throughout the project. Calibration shall be verified each morning prior to use, and after each time the instrument is turned on, using a turbidity "standard" that is different from the one used during calibration.
- 35. In accordance with General Condition No. 12, the Permittee shall include a written statement of completion following each event. The following information shall be included:
 - a. The permit number (0294455-001-JC); and project name (AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement);
 - b. The specific location of the dredging and placement;
 - c. The date on which dredging began and the date of completion;
 - d. A table identifying any violations of turbidity standards that occurred during dredging or disposal, the probable causes of the violations, and corrective measures taken to reduce turbidity;
 - e. The quality and quantity of material dredged; and
 - f. A calculation of the total volume of material that was dredged below the maximum authorized depth of -14 feet MLLW based on a comparison of surveys conducted immediately before and immediately after construction.

Joint Coastal Permit AIWW Maintenance Dredging Near Matanzas Inlet and Beach Placement Permit No. 0294455-001-JC Page 21 of 21

36. Per General Condition No. 12, the Department hereby notifies the Permittee that a copy of any as-built drawings required of the contractor or survey performed by the Corps is requested upon completion of the dredging event. The as-built or record drawings should be based on the Department permit construction drawings and should be clearly labeled as "As-Built" or "Record" drawings. Any deviations from the project description, project location or attached permit drawing shall be identified by the Permittee. Within 90 days of completion of dredging, if an as-built drawing or immediate post-construction survey has not been provided to the Department, then the Permittee shall submit a summary of all occurrences where final dredged depth was deeper than -14 feet MLLW, based on a comparison of surveys conducted immediately before and immediately after construction, including maximum dredge depths, locations, size of the areas and associated volumes.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Michael R. Barnett, P.E., Chief Bureau of Beaches and Coastal Systems

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.

10-20-2010

Deputy Clerk

Prepared by _____ Stephanie Gudeman

Attachments: Permit Drawings (17 pages) Sediment QA/QC Plan (Approved September 27, 2010)