



Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

## CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

**PERMITTEE/AUTHORIZED ENTITY:**

City of Venice  
c/o Ms. Lois Edwards  
Coastal Technology Corporation  
3625 20<sup>th</sup> Street  
Vero Beach, FL 32960

Permit/Authorization No.: 0211217-001-JC

Date of Issue: February 14, 2005

Expiration Date of Construction Phase:  
February 14, 2015

County: Sarasota

Project: City of Venice Beach Nourishment  
Project

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 applicant, the City of Venice, applied on February 26, 2003 to the Department of Environmental Protection for a permit/water quality certification and authorization to use sovereign submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) to conduct a federally authorized beach nourishment project along approximately 3.2 miles of the Gulf Coast shoreline of Manasota Key south of Venice Inlet. Approximately 900,000 cubic yards of beach compatible material will be dredged from five, offshore borrow areas (1A, 1B, 2A, 2B and 7A.), and placed on the shoreline between 300 feet north of R-116 and R-133. The design berm elevation is at +9.3 feet (NGVD 1929). The berm width is 160 feet (50 feet zero slope plus 110 feet at 1:30 slope) seaward of the ECL at the northern end of the project, and continues southward for approximately 13,000 feet. From this point, the berm width tapers to approximately 130 feet in width (20 feet zero slope plus 110 feet at 1:30 slope) over a distance of 250 feet. The berm continues at 130 feet in width to approximately 350 feet south of R-133 and from this point transitions to match the existing beach for the remaining 200 feet to the southern end of the project area. The project includes maintenance and extension of existing stormwater outfall pipes (Outfalls 1, 2, 4, 7 and 10) along

*"More Protection, Less Process"*

*Printed on recycled paper.*

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 2 of 26**

dated September 2002. The project previously impacted 7.3 acres of net hardbottom (4.76 acres of offshore hardbottom plus 2.54 acres of offshore scattered hardbottom). The estimated 7.3 acres of hardbottom impact will be mitigated by the construction of 7.3 acres of artificial reef within six months of completion of the beach project construction.

The applicant has also requested a variance (File No. 0211217-002-EV) from Rule 62-4.244(5)(c), F.A.C., to temporarily establish an expanded mixing zone of 300 meters offshore and 1,000 meters alongshore from the point of sand discharge onto the beach placement area.

**ACTIVITY LOCATION:**

The nourishment activity is located in south Sarasota County, Sections 1, 2, 12, 13, 19, Township 39 South, Range 18 East, Gulf of Mexico, Class III Waters. The northern limit of the nourishment is approximately 400 feet north of R-116, and the southern limit is at R-133. The borrow areas are located approximately 5.5 to 8 miles offshore of Siesta Key and Casey Key in approximately 28 to 30 feet of water. The three mitigation reefs, totaling 7.3 acres, shall be distributed along the project area shoreline in water depths ranging from approximately 12 to 14 feet. The exact locations for reef placement shall be determined at a later date by field investigations, and provided for the Department's approval in the final Mitigation Reef Plan and Construction Specifications.

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.

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund, 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 Department has 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. In addition to the above, this proprietary authorization has been reviewed in accordance with Chapter 253, Chapter 18-21, Section 62-343.075, F.A.C., and the policies of the Board of Trustees.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 3 of 26**

As staff to the Board of Trustees, the Department has reviewed the activity described above, and has determined that the beach placement activities, the one-time use of the borrow areas, the pipeline corridor, stormwater outfall extensions seaward of the erosion control line and placement of four mitigation artificial reefs qualify for a letter of consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Therefore, consent is hereby granted, pursuant to Chapter 253.77, F.S., to perform these activities on the specified sovereign submerged lands.

A copy of this authorization has been sent to the U. S. Army Corps of Engineers (USACOE) for review. The USACOE may require a separate permit. Failure to obtain this authorization prior to construction could subject you to enforcement action by that agency. You are hereby advised that authorizations also may be required by other federal, state, and local entities. This authorization does not relieve you from the requirements to obtain all other required permits and authorizations.

The above named permittee is hereby authorized to construct the work shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof. **This permit and authorization to use sovereign submerged lands is subject to the limits, conditions, and locations of work shown in the attached drawings, and is also subject to the General Conditions and Specific Conditions, which are a binding part of this permit and authorization.** You are advised to read and understand these drawings and conditions prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a contractor, the contractor also should read and understand these drawings and conditions prior to commencing the authorized activities.

**GENERAL CONDITIONS:**

1. All activities authorized by this permit shall be implemented as set forth in the plans and specification approved as a part of this permit, and all conditions and requirements of this permit. The permittee shall notify the Department in writing of any anticipated deviation from the permit prior to implementation so that the Department can determine whether a modification of the permit is required pursuant to section 62B-49.008, Florida Administrative Code.
2. If, for any reason, the permittee does not comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department with a written report containing the following information: a description of and cause of noncompliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 4 of 26**

3. This permit does not eliminate the necessity to obtain any other applicable licenses or permits which may be required by federal, state, local, special district laws and regulations. This permit is not a waiver or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of sovereignty land of Florida seaward of the mean high-water line, or, if established, the erosion control line, unless herein provided and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State. The permittee is responsible for obtaining any necessary authorizations from the Board of Trustees of the Internal Improvement Trust Fund prior to commencing activity on sovereign lands or other state-owned lands.
5. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.
6. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. The issuance of this permit does not convey any vested rights or any exclusive privileges.
7. This permit or a copy thereof, complete with all conditions, attachments, plans and specifications, modifications, and time extensions shall be kept at the work site of the permitted activity. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.
8. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel with proper identification and at reasonable times, access to the premises where the permitted activity is located or conducted for the purpose of ascertaining compliance with the terms of the permit and with the rules of the Department and to have access to and copy any records that must be kept under conditions of the permit; to inspect the facility, equipment, practices, or operations regulated or required under this permit; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 5 of 26**

9. At least forty-eight (48) hours prior to commencement of activity authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written notice of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the permittee and the contractor, if one is to be used, have read the general and specific conditions of the permit and understand them.
10. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the State Historic Preservation Officer and the Bureau of Beaches and Coastal Systems.
11. Within 30 days after completion of construction or completion of a subsequent maintenance event authorized by this permit, the permittee shall submit to the Bureau of Beaches and Coastal Systems and the appropriate District office of the Department a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permit have been verified; the activities authorized by the permit have been performed in compliance with the plans and specifications approved as a part of the permit, and all conditions of the permit; or shall describe any deviations from the plans and specification, and all conditions of the permit. When the completed activity differs substantially from the permitted plans, any substantial deviations shall be noted and explained on two copies of as-built drawings submitted to the Department.

**SPECIFIC CONDITIONS:**

1. No work shall be conducted until and unless the Department issues a Final Order of Variance (File No. 0211217-002-EV) from Rule 62-4.244(5)(c), F.A.C. to establish an expanded mixing zone for the project. Upon issuance, the Variance shall only be valid during construction activities for the first nourishment event authorized under this permit. If an expanded mixing zone will be needed for subsequent nourishment events, based in part on new sand sources, the permittee would have to apply for a new variance and a modification to this permit.
2. If historical or archaeological artifacts such as, but not limited to, Indian canoes, arrow heads, pottery or physical remains, are discovered at any time within the project site, the permittee shall immediately stop all activities which disturb the soil and notify the Department's Southwest District Office and the Bureau of Historic Preservation, Division of Historical Resources, R. A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250.
3. No work shall be performed on private upland property until and unless the required construction easements from upland property owners have been obtained. The beach fill area to be constructed seaward of the established Erosion Control Line shall remain sovereign lands and shall be accessible to the general public. Additionally, the resulting additions to upland property are also subject to a public easement for traditional uses of the sandy beach consistent with uses

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 6 of 26**

that would have been allowed prior to the need for the restoration project in accordance with Chapter 161.141, Florida Statutes.

4. 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 and to the DEP Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

5. The permittee shall obtain a Notice to Proceed (NTP) from the Department prior to commencement of the first nourishment event and each subsequent nourishment event. At least 30 days prior to the requested date of issuance of the NTP, the permittee shall submit the following items (as appropriate for each event) for review and approval by the Department:

a. A detailed ***Physical Monitoring Plan***, as described in Specific Condition No. 28 (Physical Monitoring section). Required for initial NTP only.

b. Final ***Biological Monitoring Plan***, as described in Specific Condition No. 27. Required for initial NTP only.

c. A ***Mitigation Plan*** as described in Specific Condition No. 27. Required for initial NTP only.

d. Final ***Sediment Quality Control / Quality Assurance Plan***, as required by Rule 62B-41.008(1)(k)4.b., F.A.C. Once approved by the Department, compliance with the Plan shall be a specific condition of this permit and must be incorporated in the relevant Terms and Conditions of the construction contracts. The Plan shall include project-specific sediment quality specifications for grain size distribution, color, and carbonate composition to ensure that the sediment from the borrow sites will meet the standards in Rule 62B-41.007(2)(j), F.A.C., for the exclusion of non-compatible fill material. The Plan shall provide quality control procedures for excavating sediment from within the authorized horizontal and vertical limits of the permitted borrow sites; for monitoring and reporting the quality of sediment as it is placed on the beach; and for altering construction operations if the sediment does not comply with the project specific sediment quality specifications or stopping the dredging operation if the specifications cannot be attained. Further, the Plan shall provide procedures for testing the quality of the sediment after it is placed and methods for remediation of any areas of fill material that do not comply with the sediment quality specifications.

e. Two hard copies and an electronic copy of detailed ***final construction plans and specifications*** for all authorized activities, including a vessel operations plan and plans and specifications for the outfall modifications. These documents shall be

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 7 of 26**

signed and sealed by the design engineer who must be registered in the State of Florida, and shall bear the certifications specified in Rule 62B-41.007(4), F.A.C. The plans and specifications shall include a description of the beach construction methods to be utilized and drawings and surveys which show all biological resources and work spaces (e.g., anchoring area, pipeline corridors, staging areas, boat access corridors, etc.) to be used for this project.

f. ***Turbidity monitoring qualifications.*** Construction at the project site shall be monitored closely to assure that turbidity levels do not exceed the compliance standards established in this permit. Accordingly, an individual familiar with beach construction techniques and turbidity monitoring shall be present at all times when fill material is discharged on the beach. This individual shall have authority to alter construction techniques or shut down the dredging or beach construction operations if turbidity levels exceed the compliance standards established in this permit. The names and qualifications of those individuals performing these functions along with 24-hour contact information shall be submitted for approval.

g. ***Biological monitoring qualifications.*** The names and qualifications of those individuals performing the biological monitoring shall be submitted for Department approval. All biological monitoring required by this permit shall be conducted by individuals having a good working knowledge of marine fish, marine turtles, algae, coral, and sponge taxonomy.

6. At least 7 days prior to commencement of the dredging and beach fill placement activities for each nourishment event authorized by this permit, 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 Department staff representatives. The permittee shall provide written notification, at least 14 days in advance of the meeting, to the following offices advising of the date, time, and location of the pre-construction conference.

DEP Bureau of Beaches & Coastal Systems  
ATTN: JCP Compliance Officer  
Mail Station 300  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000  
phone: (850) 487-4471  
fax: (850) 488-5257

DEP, Southwest District Office  
Submerged Lands & Environmental Resources  
Program  
3804 Coconut Palm Drive  
Tampa, FL 33619  
Phone: 813-744-6100

Imperiled Species Management Section  
Florida Fish & Wildlife Conservation  
Commission

Florida Fish & Wildlife Conservation  
Commission  
Division of Marine Fisheries

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 8 of 26**

620 South Meridian Street  
Tallahassee, Florida 32399-1600  
phone: (850) 922-4330  
fax: (850) 921-4369

Artificial Reef Program,  
620 S. Meridian Street  
Tallahassee, FL 32399

7. In order to offset impacts to an estimated 7.3 acres of nearshore hardbottom communities associated with the previous seaward spreading of fill beyond the estimated equilibrium toe of fill (ETOF), the permittee shall construct 7.3 acres of low relief artificial reef as mitigation. Mitigation reef construction shall occur within six months after the completion of the initial nourishment event authorized by this permit. If mitigation is delayed, an increase in the required mitigation shall occur at the rate of 0.2 acres per year of delay to address time lag associated with recovery of lost habitat. Furthermore, if post-construction monitoring reveals impacts to hardbottom communities (due to either burial or sedimentation) in excess of the initial 7.3 acres, the permittee shall construct additional mitigation reef acreage at a ratio of 2:1 in order to compensate for the associated time lag.

8. The mitigative artificial reef shall be constructed of limestone boulders and shall simulate a flat hardbottom with approximately 0.3 to 0.6 meters (1 to 2 feet) of vertical relief. The maximum vertical dimension of the boulders (at repose) shall be no more than 1.5 m and not less than 1 m, and shall have an average vertical dimension of approximately 1.2 m. The artificial reef shall be constructed in a sandy area with sand thickness not less than one half foot and not more than two feet. The artificial reef shall remain at least 15 m (50 feet) away from the nearest hardbottom community, including sand-covered hardbottom with emergent epibenthos.

9. Plans and Specifications for the construction of the Mitigation Reef shall be submitted to the Department for approval no later than 60 days prior to artificial reef construction. A separate Notice to Proceed from the Department shall be required prior to commencement of artificial reef construction. The construction plans for the Mitigation Reef shall include, but are not limited to, a location map, description of construction materials and methods, a stability analysis indicating sand thickness in the selected mitigation area(s), location of adjacent hardbottom communities and location of work spaces (e.g., anchoring area, staging areas, boat/barge access corridors, etc.).

10. The stability analysis of the nearshore artificial reef(s) shall evaluate the resistance of the boulders to sliding along the sand bottom and/or tipping under the influence of storm waves. The report shall demonstrate that the engineer used due diligence in applying established engineering practices in the analysis and the design of the artificial reef, and that the design specifications are consistent with Department guidelines and general practices used in the construction of artificial reefs along the Gulf Coast of Florida.

11. A notice of completion of artificial reef construction shall be submitted to the BBCS within 30 days of construction completion. This notice shall include an as-built survey of the

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 9 of 26**

artificial reef. Monitoring of the artificial reef shall be conducted and reported according to Specific Condition 27.

12. Pursuant to Chapter 370.25, Florida Statutes (F.S.), the permittee shall require the selected artificial reefs contractor to complete the attached *MATERIAL CARGO MANIFESTO* form required by the FWC, Division of Marine Fisheries Artificial Reef Program. This form shall be maintained on board the vessel during transport of artificial reef material over state waters.

13. Following construction of the artificial reef(s), the permittee shall complete the *MATERIALS PLACEMENT REPORT* on the form attached. Within 30 days following construction, the completed form shall be submitted to the Florida Fish & Wildlife Conservation Commission, Division of Marine Fisheries, Artificial Reef Program, 620 S. Meridian Street, Tallahassee, FL 32399 and a copy e-mailed to the JCP Compliance Officer, Bureau of Beaches & Coastal Systems. In addition to attaching the completed form, please indicate on the e-mail that the information is being submitted for the City of Venice Beach Maintenance Project, Permit No. 0211217-001-JC, as required by Specific Condition 13.

14. Use of the borrow areas authorized under this permit is limited to use in the first nourishment event only. Subsequent nourishment events under this permit will require a permit modification and possibly a new sovereign submerged lands authorization to authorize an alternative sand source.

15. The permittee shall construct and maintain a shore-parallel sand dike at the beach placement area at all times during hydraulic discharge on the beach to meet turbidity standards prescribed by this permit.

16. The permittee shall require the dredging contractor to have electronic positioning equipment that continuously measures the vertical and horizontal location of the dredge at all times during construction dredging operations. The horizontal positioning equipment shall be installed on the dredge so as to monitor the actual location of the dredge equipment and be interfaced with the depth-monitoring device. This equipment shall provide a permanent record of the position referenced to State Plane Coordinates and NGVD. The Contractor shall provide telemetry of the instantaneous dredging positioning and digging functions of the project dredges that accommodates electronic charting functions by the Permittee at a remotely located system. As part of the final report, the permittee shall provide a daily record of the position of the dredge equipment which includes the dredge area limits with actual and maximum authorized dredge depth referenced to state plane coordinates and NGVD. Vertical and horizontal accuracy of the positioning equipment shall also be reported.

17. No pipeline shall be placed over hardbottom or emergent hardbottom communities. A pre-placement video survey of the pipeline corridors shall be conducted to verify that the pipeline corridors contain only unconsolidated bottom (sand and/or shell hash). During the pre-

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 10 of 26**

placement survey, divers shall install surface buoys to delineate the placement corridor over unconsolidated bottom. If any deviations to the demarcated corridor occur during pipeline installation, scientific divers will investigate the corridor for potential damage to hardbottom communities. If damage to hardbottom organisms is detected, the permittee shall immediately attempt to remediate the damage, and then report the damage and remediation efforts to the Department (via e-mail to the JCP Compliance Officer). Significant impacts to hardbottom communities resulting from pipeline placement shall require mitigation, subject to approval by the Department.

18. A 200-foot “no dredging and no anchoring” buffer zone shall be employed from the edge of the delineated hardbottom resources. If a hopper dredge is used for the excavation of the borrow areas, a total buffer of 150 meters (457 feet) from the edge of the delineated hardbottom resources shall be employed as a “no-overflow zone” over which the hopper dredge shall be restricted from overflowing effluent.

19. The wood retaining wall at Outfall 5 (Flamingo Drive) shall be adjusted to conform to the width and slope of the beach fill berm throughout the life of the fill project. The wall side panels shall be adjusted to align vertically with the seaward slope of the berm. Seaward exposed sections of the wall shall be removed at such time as a complete section between successive pile bents becomes exposed seaward of the mean high water location.

20. Outfall extensions (outfalls 1, 2, 4, 7, & 10) shall be located as landward as possible to prevent the potential of creating an impediment to lateral pedestrian access and probable damage during a storm event. Seaward exposed sections of the pipe shall be removed at such time as a complete section between successive pile bents becomes exposed seaward of the mean high water location.

21. At Outfall 7, the permittee shall measure the performance of the experimental weir section in the dry retention area. The experimental weir shall be constructed and operated simultaneously with the outfall extension. When the outfall pipe becomes clogged with sand and the weir proves to be acceptable, the outfall shall then be removed. However, should the weir prove to be unacceptable, sand may be removed from the outfall pipe to allow for reliable drainage of uplands. This Joint Coastal Permit does not authorize any stormwater treatment system or adjustments thereto. Construction, alteration, operation, or abandonment of any stormwater treatment system would require an Environmental Resource Permit.

22. In order to ensure that marine turtles are not adversely affected by construction activities, the following conditions shall be followed in order to protect nesting marine turtles:

- a. All fill material placed shall be sand that is similar to that already existing at the beach site in both coloration and grain size distribution and suitable for marine turtle nesting. All such fill material shall be free of construction debris, rocks, or other foreign matter, and shall meet the criteria specified in 62B-41.007, F.A.C.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 11 of 26**

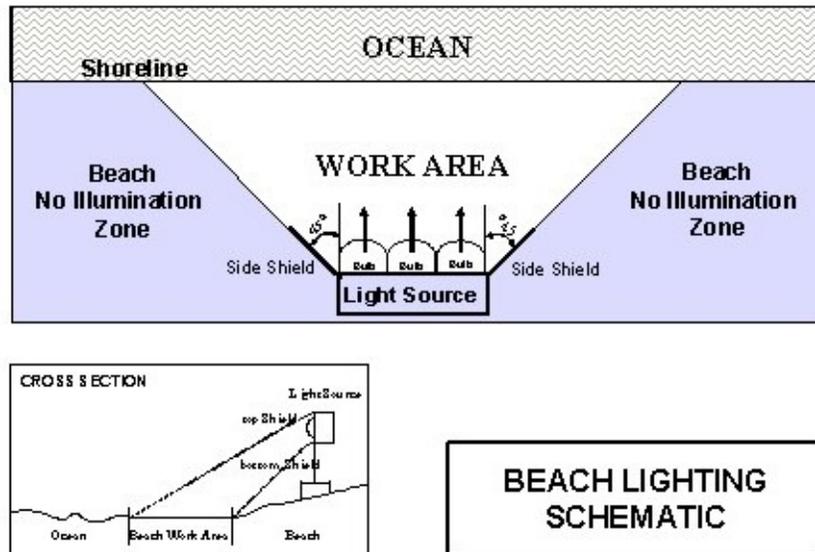
- b. Construction-related activities are authorized to occur on the nesting beach (seaward of existing coastal armoring structures or the dune crest) under the following conditions:
- i. A daily marine turtle nest survey of the nesting beach in the vicinity of the project (including areas of beach access) shall be conducted if any portion of the beach nourishment project occurs during the period from April 1 through November 30. Nesting surveys must be initiated 65 days prior to nourishment or by April 1, whichever is later and continue until September 1. Hatching and emerging success monitoring shall continue through October 31.
  - ii. No construction activity may commence until completion of the marine turtle survey each day. While nourishment activities may proceed over a 24-hour period, no new construction activities should proceed on a section of beach after 9 PM and before the morning sea turtle survey unless a nighttime nesting survey has been conducted in that area to ensure no nesting turtles or unmarked nests are present.
  - iii. It is the responsibility of the permittee to ensure that the project area and access sites are surveyed for marine turtle nesting activity. All nesting surveys, nest relocations screening or caging activities etc. 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 permit issued by the Fish and Wildlife Conservation Commission (FWC), pursuant to Florida Administrative Code 68E-1.

**Joint Coastal Permit  
 City of Venice Beach Nourishment Project  
 Permit No. 0211217-001-JC  
 Page 12 of 26**

iv. Only those nests that may be affected by construction activities shall 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.

v. Nest relocations in association with construction activities shall cease when construction activities no longer threaten nests. Nests deposited within areas where construction activities have ceased or will not occur for 70 days shall be marked and left in place unless other factors threaten the success of the nest. Such nests will be marked and the actual location of the clutch determined. A circle with a radius of ten (10) feet, centered at the clutch, shall be marked by stake and survey tape or string. No construction activities shall enter this circle and no adjacent construction shall be allowed which might directly or indirectly disturb the area within the staked circle.

c. From May 1 through October 31, all project lighting shall be limited to the immediate area of active construction only and shall be the minimal lighting necessary to comply with U.S. Coast Guard, EM 385-1-1, and/or OSHA requirements. Stationary lighting on the beach and all lighting on the dredge shall be minimized through reduction, shielding, lowering, and appropriate placement of lights to minimize illumination of the nesting beach and water (see Figure 1).



**Figure 1 FWC Beach Lighting Schematic**

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 13 of 26**

d. From May 1 through October 31, staging areas for construction equipment shall be located off the beach. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities. 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.

e. Immediately after completion of the beach fill placement event and prior to April 1 for 3 subsequent years if placed sand still remains on the beach, the beach shall be tilled as described below. During the 3 years following each fill placement event, the permittee shall 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. At a minimum, the protocol provided below shall be followed. If required, the area shall be tilled to a depth of 24 inches. All tilling activity must be completed prior to April 1. An annual summary of compaction surveys and the actions taken shall be submitted to the FWC. If the project is completed during 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. A report on the results of compaction monitoring shall be submitted to the FWC prior to any tilling actions being taken. This condition shall be evaluated annually and may be modified if necessary to address sand compaction problems identified during the previous year.

i. 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).

ii. 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 lay 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.

iii. If the average value for any depth exceeds 500 psi for any two or more adjacent stations, then that area shall be tilled prior to April 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

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 14 of 26**

exceeding 500 psi are present randomly within the project area, tilling shall not be required.

f. Visual surveys for escarpments along the beach fill area shall be made immediately after completion of the beach nourishment project and prior to April 1 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:

i. 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.

ii. 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 1. Any escarpment removal shall be reported relative to R-monument. The height and extent of any scarps adjacent to the outfall pipes shall also be listed.

iii. 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.

g. A lighting survey shall be conducted from the nourished berm in the project area prior to May 1 of the first nesting season following nourishment and action taken to ensure that no lights or light sources are visible from the newly elevated beach. A report summarizing all lights visible, using standard techniques for such surveys to FWC by May 15 of the first nesting season following the beach nourishment. This report shall specify all compliance and enforcement actions completed.

h. The applicant shall arrange a meeting between representatives of the contractor, the Department, the FWC, and the permitted person responsible for egg relocation at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures.

i. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of two additional nesting seasons. Monitoring of nesting activity in the

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 15 of 26**

three seasons following construction shall include daily surveys and any additional measures authorized by the FWC.

i. Reports submitted 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.

ii. 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 Table 1. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets). All reports should be submitted by January 15 of the following year.

**Table 1 - Marine Turtle Monitoring for Beach Restoration Projects**

The following monitoring is required for beach restoration projects. Reports summarizing the nesting should be submitted to the Tequesta office with a copy to the Tallahassee office by January 15 of the subsequent year. Data for nesting activity on the nourished beach and on an equal length of beach that is not nourished shall be reported separately, and should include numbers of nests lost to erosion or washed out. Summaries of nesting activity shall be submitted in electronic format (Excel spreadsheets).

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.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 16 of 26**

- j. 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.
  - k. In the event a hopper dredge is utilized for sand excavation, all conditions in the NMFS Biological Opinion for hopper dredging in the Gulf of Mexico must be followed, and the FWC shall be sent copies of the reports specified in the Biological Opinion.
  - l. 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.
23. In order to ensure that shorebirds are not adversely affected by construction activities, the following conditions shall be followed in order to protect shorebirds:
- a. If construction occurs in February through September, shorebird surveys shall be conducted in the project area. Surveys should be conducted by trained, dedicated individuals using accepted, appropriate ecological survey procedures (for example, see *“Breeding Season Population Census Techniques for Seabirds and Colonial Waterbirds Throughout North America”* at URL: <http://www.pwrc.usgs.gov/cwb/manual/>). Surveys shall assess the presence of wintering migrants, specifically the piping plover as well as colonial (least terns, skimmers, etc.) and solitary (Wilson’s plover, snowy plover, etc.) nesting shorebirds.
    - i. Surveys for nesting shorebirds shall begin on February 1 or 45 days prior to construction commencement, whichever is later, and be conducted daily throughout the construction period or through September if no shorebird nesting activity is observed.
    - ii. For projects conducted in piping plover habitat from February 1 through April 30, surveys to detect piping plovers or concentrations of other wintering or migratory shorebirds should begin 14 days prior to construction commencement and be conducted once every 2 weeks.
    - iii. Each shorebird species observed, a rough estimate of numbers of each species, the location of the birds, and their activity (e.g., foraging, resting, nesting, courtship behavior) should be logged and reported to the FWC Regional Wildlife

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 17 of 26**

Diversity Conservation Biologist at (863) 648-3205 monthly. The applicant shall contact the FWC Regional Biologist within 24 hours if nesting shorebirds are documented within the construction area.

- b. Within the project area, the permittee shall establish a 300 ft-wide buffer zone around any location where shorebirds have been engaged in courtship or nesting behavior, or around areas where piping plovers occur or winter migrants congregate in significant numbers. Any and all construction activities, including movement of vehicles, should be prohibited in the buffer zone.
- i. The width of the buffer zone shall be increased if birds appear agitated or disturbed by construction or other activities in adjacent areas.
  - ii. Site-specific buffers may be implemented upon approval by FWC as needed.
  - iii. Designated buffer zones must be posted with clearly marked signs around the perimeter. These markings shall be maintained until nesting is completed or terminated, the chicks fledge, or piping plovers or winter migrants depart.
  - iv. No construction activities or stockpiling of equipment shall be allowed within the buffer area.
  - v. 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.
  - vi. Where such a travel corridor must be established within the project area it should avoid critical areas for shorebirds (known nesting sites, wintering grounds,
  - vii. 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.
  - vii. 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 the FWC Wildlife Diversity Conservation Biologist for that region.
- c. 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

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 18 of 26**

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 FEDERAL MIGRATORY BIRD ACT”.

d. All tilling and scarp removal activities should be conducted outside the shorebird nesting season. If necessary, contractors should contact the FWC Regional Wildlife Diversity Conservation Biologist to obtain data on known shorebird nesting areas. It is the responsibility of the contractors to avoid tilling, scarp removal, or dune vegetation planting in areas where nesting birds are present.

i. 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.

ii. 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. 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 sand shall be placed seaward of a known shorebird nesting site during the shorebird nesting season.

24. In order to ensure that manatees are not adversely affected by construction activities, the following conditions shall be followed in order to protect manatees:

a. The permittee shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel are responsible for observing water-related activities for the presence of manatee(s).

b. 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 of 1972, The Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act.

c. Siltation barriers shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exist from essential habitat.

d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 19 of 26**

e. If manatee(s) are seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project area of its own volition.

f. Any collision with and/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 (1-904-232-2580) for north Florida or Vero Beach (1-561-562-3909) in south Florida.

**MONITORING REQUIRED:**

**25. Water Quality - Turbidity (Nephelometric Turbidity Units (NTUs))**

**Frequency:** Every 4 hours during all dredging and disposal operations.

**Location:**

**Dredge Site:** Background: At mid-depth, at least 300 meters upcurrent from the dredge and clearly outside the influence of any turbidity generated by the project.

Compliance: At surface and mid-depth, no more than 150 meters downcurrent from the dredge within the densest portion of any visible turbidity plume.

**Fill Site:** Background: At mid-depth, at least 300 meters upcurrent from discharge point (i.e., where runoff from discharge pipe reenters the Gulf) and clearly outside the influence of any turbidity generated by the project.

Intermediate: At surface and mid-depth, no more than 150 meters downcurrent and no more than 150 meters offshore from the discharge point within the densest portion of any visible turbidity plume.

Compliance: At surface and mid-depth, no more than 1,000 meters downcurrent and no more than 300 meters offshore from the discharge point within the densest portion of any visible turbidity plume.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 20 of 26**

All monitoring data shall be submitted within one week of analysis with documents containing the following information: (1) permit number; (2) dates of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations; (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data. The data from the Intermediate monitoring sites, located inside the expanded mixing zone, shall be tabulated separately from the Compliance data. Each category of turbidity monitoring data shall be clearly identified as "Compliance measurements at 150 meters from dredge", "Compliance measurements at 1000 meters from beach discharge point", or "Intermediate measurements at 150 meters from beach discharge point". **Each exceedance of 29 NTUs shall be highlighted in the table and discussed in the report.** Monitoring reports shall also include the following information for each sample that is taken:

- (a) time of day samples taken;
- (b) depth of water body;
- (c) depth of sample;
- (d) antecedent weather conditions;
- (e) tidal stage and direction of flow; and
- (f) wind direction and velocity.

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 site greater than or equal to 29 NTUs above 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 BBCS's JCP Compliance Officer and DEP SW District office in Tampa.

Monitoring reports shall be submitted to the BBCS in Tallahassee and to the DEP SW District office in Tampa. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the DEP, please clearly include, at the top of each page or as a cover page to the submittal: **"This information is provided in partial fulfillment of the monitoring requirements in Permit No. 0211217-001-JC for the City of Venice Beach Nourishment Project."**

## **26. Biological Monitoring and Mitigation**

Biological monitoring of the project is required to evaluate potential direct and secondary resource impacts on nearshore and offshore hardbottom communities attributable to the project. Monitoring shall specifically address assessment of the dynamics of the equilibrium toe of fill. The monitoring data is necessary in order for both the project sponsor(s) and the Department to regularly observe and assess, with quantitative measurements, any adverse effects which have

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 21 of 26**

occurred, and the need for any adjustments, modifications, remediation, or mitigative response to the project. The scientific monitoring process also provides the project sponsor and the Department information necessary to plan, design, and optimize subsequent follow-up projects, potentially reducing the need for and costs of unnecessary work, as well as potentially reducing any environmental impacts that may have occurred or be expected.

Prior to issuance of the Notice to Proceed, the permittee shall submit a detailed Biological Monitoring Plan and a Mitigation Plan subject to review and approval by the Department. The approved Biological Monitoring and Mitigation Plans can be revised at any later time by written request of the permittee and with the written approval of the Department, or by the request of the Department in case of necessary adjustment according to new data. If, subsequent to approval of the Monitoring Plan, there is a request for modification of the permit, the Department may require revised or additional monitoring and mitigation requirements as a condition of approval of the permit modification. As guidance for obtaining Department approval, the plan shall generally contain the following items:

- a. Establish permanent monitoring sites for nearshore and offshore hardbottom communities and the mitigation reef. Each site shall have one or more 150-meter long, cross-shore monitoring transects beginning from the preconstruction landward nearshore edge of the hardbottom seaward. Similar sites shall be established south of the project site to monitor hardbottom in adjacent areas. Video surveys and *in situ* estimations shall be used for the nearshore and offshore biological monitoring surveys. The permittee shall place 0.5m<sup>2</sup> quadrats along each of 150-meter long transect for *in situ* estimations. The following information shall be collected along each transect: the current position of the nearshore edge of the hardbottom; surveys of the 0.5m<sup>2</sup> quadrats (as outlined below); and still photographs (taken at permanently established photo quadrats) to document status of scleractinian corals, octocorals, and other prominent organisms observed. Within each 0.5m<sup>2</sup> quadrat, the surveys shall estimate cover by macroalgae and other organisms, number and dimensions of scleractinian corals and octocorals, cover and thickness of loose sediments, and physical relief of hardbottom.

The permittee shall conduct diver surveys, using continuous DGPS recording, along the nearshore edge of the hardbottom to document the changes in the sand/hardbottom border due to the equilibration of the toe of fill.

Monitoring of hardbottom communities adjacent to borrow areas shall measure turbidity, sedimentation, and stress indications of hardbottom fauna and flora. Sites must be established in close proximity to the border between borrow area and hardbottom. Any exceedence of stress indicators, turbidity, or sedimentation rate above the threshold identified in the Monitoring and Mitigation Plan shall be immediately reported to FDEP BBCS and the dredging shall cease until conditions have returned to normal.

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 22 of 26**

Nearshore hardbottom monitoring, including cross-shore transects and sand/hardbottom border surveys, shall be conducted during the summer prior to construction and then in years 1, 2, 3, and 5 after construction.

Reports shall include survey data, data regarding condition of organisms, data analysis and their interpretation. All reports shall be provided within 60 days of the completion of survey, but no later than November 1 of that year. The reports shall include accurate estimates of the extent of damage to hardbottom communities not previously restored, and failed restoration efforts. The final report shall also propose mitigation for any residual damage to the hardbottom community.

b. Aerial photography shall be taken annually for five years, during the summer, at the time of the best visibility in nearshore waters, from an altitude that would allow the photographs to clearly show **both** the shoreline and sand/hardbottom border. Aerial photography shall also include the artificial reefs.

c. Pipeline corridors shall be video surveyed prior to pipeline placement to confirm the absence of hardbottom communities within the corridor.

d. Monitoring reports and data shall be submitted to the Bureau of Beaches and Coastal Systems, JCP Compliance Officer, in Tallahassee. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the permit. When submitting any monitoring information to the Bureau, please include a transmittal cover letter clearly labeled with the following at the top of each page: **"This monitoring information is submitted in accordance with Item No. [XX] of the approved Biological Monitoring Plan for Permit No. 211217-001-JC (City of Venice Beach Nourishment Project) for the monitoring period [XX].** Both hard copies and electronic copies, formatted as pdf. Files, on CD or DVD, shall be provided.

e. The permittee shall conduct physical monitoring, as stated below, to assess the performance of the project and sediment dynamics over the period of record represented by the surveys. Results of physical monitoring data shall also be used to determine the extent of biological impacts. Physical monitoring data shall be compared to the hardbottom edge survey. Any net increase in hardbottom impacts seaward of the initial (preconstruction) location of the nearshore edge of the hardbottom and within the approved biological monitoring distance shall be attributed to the project due to cross-shore sediment transport seaward of the applicant's estimated depth of closure.

**27. Physical monitoring**

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 23 of 26**

Pursuant to 62B-41.005(16), F.A.C., physical monitoring of the project is required through acquisition of project-specific data to include, at a minimum, topographic and bathymetric surveys of the beach, offshore, and borrow site areas, aerial photography, and engineering analysis. The monitoring data is necessary in order for both the project sponsor(s) and the Department to regularly observe and assess, with quantitative measurements, the performance of the project, any adverse effects which have occurred, and the need for any adjustments, modifications, or mitigative response to the project. The scientific monitoring process also provides the project sponsor and the Department information necessary to plan, design, and optimize subsequent follow-up projects, potentially reducing the need for and costs of unnecessary work, as well as potentially reducing any environmental impacts that may have occurred or be expected.

**Prior to issuance of the Notice to Proceed, the permittee shall submit a detailed Monitoring Plan subject to review and approval by the Department.** The Monitoring Plan shall indicate the project's predicted design life.

The approved Monitoring Plan can be revised at any later time by written request of the permittee and with the written approval of the Department. If subsequent to approval of the Monitoring Plan there is a request for modification of the permit, the Department may require revised or additional monitoring requirements as a condition of approval of the permit modification. As guidance for obtaining Department approval, the plan shall generally contain the following items:

- a. Topographic and bathymetric profile surveys of the beach and offshore shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project. Thereafter, monitoring surveys shall be conducted annually for a period of three (3) years, then biennially until the next beach nourishment event or the expiration of the project design life, whichever occurs first. The monitoring surveys shall be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. If the time period between the immediate post-construction survey and the first annual monitoring survey is less than six months, then the permittee may request a postponement of the first monitoring survey until the following spring/summer. A prior design survey of the beach and offshore may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

The monitoring area shall include profile surveys that extend throughout the fill project and to a minimum of 3000 feet south of the fill area. In addition, two (2) intermediate profile surveys shall be obtained at midpoint between R126 & R127 and the midpoint between R-130 & R-131 to evaluate the changes associated with Outfall #8 and the Venice Municipal Fishing Pier. All beach profiles shall extend seaward 3000 feet from MHW or to a depth of -30 feet NGVD, whichever is less. All work activities and deliverables shall be conducted in accordance with the latest update of the Bureau of

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 24 of 26**

Beaches and Coastal Systems (BBCS) *Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.*

- b. Bathymetric surveys of the borrow area(s) shall be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project concurrently with the beach and offshore surveys required above. Thereafter, monitoring surveys of the borrow areas shall be dependent on their location. Borrow sites located in tidal inlet shoals or in nearshore waters above the depth of closure for littoral transport processes shall be at two (2) year intervals concurrently with the beach and offshore surveys required above. These biennially monitoring surveys are not required for borrow sites located below the depth of closure for littoral transport processes. A prior design survey of the borrow area may be submitted for the pre-construction survey if consistent with the other requirements of this condition.

Survey grid lines across the borrow area(s) shall be spaced to provide sufficient detail for accurate volumetric calculations but spaced not more than a maximum of 500 feet apart, and shall extend a minimum of 500 feet beyond the boundaries of the borrow site. Work activities and deliverables shall be consistent with the BBCS Monitoring Standards for Beach Erosion Control Projects, Section 01200.

- c. Aerial photography of the beach shall be taken concurrently with the post-construction survey and each annual and biennial monitoring survey required above, as close to the date of the beach profile surveys as possible. The limits of the photography shall include the surveyed monitoring area as described above. All work activities and deliverables shall be conducted in accordance with the latest update of the BBCS *Monitoring Standards for Beach Erosion Control Projects, Section 02000.*
- d. The permittee shall submit an engineering report and the monitoring data to the BBCS within 90 days following completion of the post-construction survey and each annual or biennial monitoring survey.

The report shall summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. Profile data from the original restoration project reveals the existence of erosion hot spots. The report shall also address these hot spots and their causes.

In addition, the report shall include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project, and summarize and discuss all activities (i.e. any work that is done on an outfall/s such as if the outfall was either extended, retracted, modified, clogged with sand, and/or damaged) with outfalls 1, 2, 4, 7, & 10. If the outfall is to be extended, retracted, and/or modified please site the grounds why the action has taken place (i.e. maintainability, public safety, section of the pipe becomes exposed seaward of the Mean High Water

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 25 of 26**

damaged) with outfalls 1, 2, 4, 7, & 10. If the outfall is to be extended, retracted, and/or modified please site the grounds why the action has taken place (i.e. maintainability, public safety, section of the pipe becomes exposed seaward of the Mean High Water (MHW), erosion/scour, and/or avoidance of upland flooding), and what measures were taken to rectify the previous described action. If damage has occurred to the previous mentioned outfalls, please give an engineering description as to why the damaged occurred, what damage to the beach system was imposed by the debris, and what measures were taken to reconstruct or repair the damaged structure.

Appendices shall include plots of survey profiles and graphical representations of volumetric and shoreline position changes for the monitoring area. Results shall be analyzed for patterns, trends, or changes between annual surveys and cumulatively since project construction. Engineering drawings shall be submitted if and when outfall/s are extended, retracted or modified.

- e. Monitoring reports and data shall be submitted to the Bureau of Beaches and Coastal Systems in Tallahassee. Failure to submit reports and data in a timely manner constitutes grounds for revocation of the permit. When submitting any monitoring information to the Bureau, please include a transmittal cover letter clearly labeled with the following at the top of each page: **"This monitoring information is submitted in accordance with Item No. [XX] of the approved Monitoring Plan for Permit No. 211217-001-JC for the monitoring period [XX]."**

Monitoring reports shall be submitted to the Bureau of Beaches and Coastal Systems in Tallahassee and to the DEP Southwest District office. Failure to submit reports in a timely manner constitutes grounds for revocation of the permit. When submitting this information to the DEP, please clearly include, at the top of each page or as a cover page to the submittal: **"This information is provided in partial fulfillment of the monitoring requirements in Permit No. 021122-001-JC, City of Venice Beach Nourishment Project."**

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



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

**Joint Coastal Permit  
City of Venice Beach Nourishment Project  
Permit No. 0211217-001-JC  
Page 26 of 26**

**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.

Sandra Powell      2/14/05  
Deputy Clerk                      Date

17 pages attached.