



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
SOUTHEAST DISTRICT OFFICE
400 NORTH CONGRESS AVE., THIRD FLOOR
WEST PALM BEACH, FL 33401
561-681-6600

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

January 21, 2014

Florida Inland Navigation District
c/o Mark Crosley, Managing Member
1314 Marcinski Road
Jupiter, FL 33477
Email: mcrosley@aicw.com

File No.: 50-0294306-002
Applicant: Florida Inland Navigation District- ICWW Port of Palm Beach

Dear Mr. Crosley:

Enclosed is Environmental Resource Permit No. 50-0294306-002, issued pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.).

Appeal rights for you as the permittee and for any affected third party are described in the text of the permit along with conditions which must be met when permitted activities are undertaken. Please review this document carefully to ensure compliance with both the general and specific conditions contained herein. As the permittee, you are responsible for compliance with these conditions. **Please ensure all construction personnel associated with your activity review and understand the attached drawings and conditions.** Failure to comply with this permit may result in liability for damages and restoration, and the imposition of civil penalties up to \$10,000.00 per violation per day pursuant to Sections 403.141 and 403.161, F.S.

In addition, please ensure the construction commencement notice and all other reporting conditions are forwarded to the appropriate office as indicated in the specific conditions.

If you have any questions about this document, please contact me at (561) 681-6656 or by email at Kelly.Egan@dep.state.fl.us.

Sincerely,

Environmental Specialist III
Submerged Lands & Environmental
Resources Program



Permit Review Checklist

(A summary of the required monitoring and reporting activities for your project)

Pre-Construction Requirements

Activity	Date Due	Date Completed
<input type="checkbox"/> Contact DEP to Schedule Pre-construction Meeting	Prior to construction	_____
<input type="checkbox"/> Evidence that SFWMD File No. 50-04766-P has been Modified	Prior to construction	_____
<input type="checkbox"/> Submit Pre-Construction Notice Form to DEP	48 Hrs. Before Construction	_____
<input type="checkbox"/> Temporary Erosion & Turbidity Control Structures in Place	Prior to construction	_____

Construction Requirements

Activity	Date Due	Date Completed
<input type="checkbox"/> Permit with All Attachments Kept at the Work Site	Permit shall be available on-site for DEP inspector at all times	_____
<input type="checkbox"/> Permanent Erosion & Turbidity Control Structures in Place	Structures should be inspected daily	_____
<input type="checkbox"/> Turbidity Monitoring	As necessary, submitted weekly	_____
<input type="checkbox"/> Report Changes to Permitted Drawings / Plans / Activities	Contact DEP before any changes	_____

Post-Construction & Mitigation Requirements

Activity	Date Due	Date Completed
<input type="checkbox"/> Commencement of Required Mitigation for Hardbottom Impacts	Within 30 days of construction commencement	_____
<input type="checkbox"/> Restore Construction / Staging Areas	14 days after construction	_____
<input type="checkbox"/> Mitigation Success	Please see the attached monitoring Schedule for your project	_____
<input type="checkbox"/> "Completion and Certification (As-Built) Form" signed & sealed by P.E. and sent to DEP	30 days after construction	_____

For the above criteria that require you to contact Department, please contact the FDEP- Southeast District Office, Environmental Resources Permitting Section, 400 North Congress Avenue, 3rd Floor, West Palm Beach, FL 33401; Attention: Melissa Gil; Phone: 561-681-6636; E-mail: Melissa.Gil@dep.state.fl.us

PLEASE NOTE: As the property owner/permittee, you are ultimately responsible for ensuring that the required conditions of your permit are complied with and timely reported to the Department. Please ensure that any designated contractors or agents acting on your behalf are familiar with these requirements.

Seagrass & Hardbottom Mitigation, Monitoring, and Reporting Schedule

Seagrass Impacts & Mitigation:

To offset unavoidable impacts to 5.82-acres of seagrass habitat, the permittee shall use a total of 1.397 Functional Gain Units (FGU) from the existing Snook Islands Natural Area (SINA) as permitted in SFWMD Permit No. 50-04766-P (Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet, Exhibit B). There are 13.767 FGUs available at SINA, 75% of which (10.325 FGUs) may be used by FIND. Once the 1.397 FGUs are deducted from the SINA mitigation, 8.928 FGUs will remain available to FIND.

Hardbottom Impacts & Mitigation:

To offset unavoidable impacts to 0.15-acres of hardbottom habitat, the permittee shall install 0.12 acres (5,227 sq.ft.) of artificial reef substrate (surplus precast concrete structures) to an area within the Palm Beach County Sugar Sands Artificial Reef Area, in accordance with the attached 11-page Peanut Island ICWW Deeping Project Hardbottom Mitigation Plan (Revised 12/19/2013). Monitoring shall be conducted as follows

Activity	Date Due *All reports to be submitted w/in 30 days following monitoring event	Date Completed
<input type="checkbox"/> Time-zero monitoring event	Within 30 days following completion of hardbottom mitigation	_____
<input type="checkbox"/> 1st year – 1st annual monitoring event	1 year following Time-zero event	_____
<input type="checkbox"/> 2nd year – 2nd annual monitoring event	2 years following Time-zero event	_____
<input type="checkbox"/> 3rd year – 3rd annual monitoring event	3 years following Time-zero event	_____



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GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Permittee/Authorized Entity:

Florida Inland Navigation District
c/o Mark Crosley, Managing Member
1314 Marcinski Road
Jupiter, FL 33477
Email: mcrosley@aicw.com

Project Name:

FIND-ICWW Port of Palm Beach Dredge

Authorized Agent:

Taylor Engineering, Inc.
c/o Lori Brownell, Project Manager
Email: LBrownell@taylorentengineering.com

Compliance Project Manager:

Melissa Gil, Environmental Specialist II
Phone: (561) 681-6636; E-mail: Melissa.Gil@dep.state.fl.us

Environmental Resource Permit - Granted

State-owned Submerged Lands Authorization –Granted

U.S. Army Corps of Engineers Authorization –Separate Corps Authorization Required

Permit No.: 50-0294306-002

Permit Issuance Date: 1/21/14

Permit Construction Phase Expiration Date: 1/21/19

**Consolidated Environmental Resource Permit
and
State-owned Submerged Lands Authorization**

Permittee /Grantee): FIND-ICWW Port of Palm Beach Dredge

Permit No: 50-0294306-002

PROJECT LOCATION

The activities authorized by this Permit and state-owned submerged lands authorization are located within the Intracoastal Waterway, Class III Waters, adjacent to P.C.N. 00-43-42-34-00-000-3000 (FIND-Owned Peanut Island Dredged Material Management Area (DMMA)) located north of the Port of Palm Beach and west of the Lake Worth Inlet (Section 34, Township 42 South, Range 43 East), in Palm Beach County (between Latitude N 26° 46' 46.73", Longitude W 80° 02' 44.78" Latitude N 26° 46' 17.10", Longitude W 80° 02' 59.82").

PROJECT DESCRIPTION

The permittee is authorized to dredge approximately 95,580 yd³ of submerged lands to a depth of minus 15 feet below mean low water, with a two foot over dredge allowance, per the attached drawings within the Intracoastal Waterway, Class III Waters. Authorized activities are depicted on the attached exhibits.

The authorized activities shall impact 5.82 acres of seagrass (*H. decipiens*-5.60 acres, *H. johnsonii*-0.05 acres, *H. decipiens/H. Johnsonii*- 0.15acres, *H. wrightii*- 0.01 acres and *H. wrightii/ H. johnsonii*-0.01 acres). To offset unavoidable impacts to 5.82-acres of seagrass habitat, the permittee shall use a total of 1.397 Functional Gain Units from the existing Snook Islands Natural Area (SINA) as permitted in SFWMD Permit No. 50-04766-P, per the attached 1-page Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet (Exhibit B).

Additionally, the authorized activities shall impact 0.15 acres of hardbottom habitat. To offset unavoidable impacts to 0.15-acres of hardbottom habitat, the permittee shall install 0.12 acres (5,227 sq.ft.) of artificial reef substrate (surplus precast concrete structures) to an area within the Palm Beach County Sugar Sands Artificial Reef Area, in accordance with the attached 11-page Peanut Island ICWW Deeping Project Hardbottom Mitigation Plan (Exhibit C).

The water depths within the navigational channel are currently between -8-feet and -21-feet at mean low water increasing in depth to the south near the Port of Palm Beach. All watercraft associated with the construction of the permitted structure shall only operate within waters of sufficient depth (one-foot clearance from the deepest draft of the vessel to the top of submerged resources) so as to preclude bottom scouring or prop dredging. Construction equipment/tools and materials shall be transported to and from the site via barge and upland roadways and all equipment/tools and materials shall be stored on the barge and uplands.

Pursuant to Section 18-21.011(3)(c), F.A.C., severance fees are not required, as the material is being placed on public property and used for public purposes.

The standard manatee conditions shall be adhered to during all in water work. All waterbodies, including the adjacent submerged aquatic vegetation outside the specific limits of construction authorized by this permit shall be protected from erosion, siltation, sedimentation, and/or scouring. Due to the nature of the project site, turbidity curtains may not be feasible; therefore, a temporary mixing zone is allowed under this permit to occur up to 150 meters down current of the construction activity (barge location). When feasible, turbidity curtains shall be placed around the dredge to prevent spoil from entering surface waters and ensure that any turbidity resulting from this project will be contained within the project boundaries. Turbidity shall be monitored and recorded outside of the turbidity curtains and at the edge of the mixing zones to ensure that turbidity levels do not exceed 29 NTUs above ambient background levels.

The project described above may be conducted only in accordance with the terms, conditions and attachments contained in this permit. The issuance of this permit does not infer, nor guarantee, nor imply that future permits or modifications will be granted by the Department.

AUTHORIZATIONS

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

State-owned Submerged Lands Authorization

The activity is located on submerged lands owned by the State of Florida. It therefore also requires authorization, from the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 Florida Statutes (F.S.) and Chapter 258, F.S.

As staff to the Board of Trustees, the Department has determined that the activity is located within Easement No. 29099, and qualifies for a Letter of Consent, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein.

Federal Authorization

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Your proposed activity as outlined on your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **may be required** from the Corps. A copy of your permit application has been forwarded to the Corps for their review. The Corps will issue their authorization directly to you or contact you if additional information is needed. If you have not heard from the Corps within 30 days from the date your application was received at the local FDEP Office, contact the Corps at 561-472-3530, for status and further information. **Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.**

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

Water Quality Certification

This permit also constitutes a: water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT /SOVEREIGNTY SUBMERGED LANDS CONDITIONS

The activities described must be conducted in accordance with:

- **The Specific Conditions**
- **The General Conditions**
- **The General Conditions for Sovereignty Submerged Lands Authorization**
- **The limits, conditions and locations of work shown in the attached drawings**
- **The term limits of this authorization**

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit and sovereignty submerged lands authorization, as described.

SPECIFIC CONDITIONS- PROJECT FORMS & ATTACHMENTS

(1) The attached 1-page permit checklist; the attached project drawings (sheets 1 through 11); the attached 1-page "Standard Manatee Conditions for In-Water Work, 2011" (Exhibit A); the attached 1-page Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet (Exhibit B); the attached 11-page Peanut Island ICWW Deeping Project Hardbottom Mitigation Plan (Exhibit C) and DEP forms 62-330.310(3), 62-330.310(1); 62-330.310(2); 62-330.340(1); and 62-330.350(1), which may be downloaded at <http://www.dep.state.fl.us/water/wetlands/erp/forms.htm> become part of this permit. If the permittee does not have access to the Internet, please contact the Department at (561) 681-6636 to request the aforementioned forms and/or document(s).

(2) If the attached permit drawings conflict with the specific conditions, then the specific conditions shall prevail.

SPECIFIC CONDITIONS - PRIOR TO CONSTRUCTION

(3) After selection of the contractor to perform the authorized activities and prior to the initiation of any work authorized by this permit, the permittee (or authorized agent) and the contractor shall attend a pre-construction conference with a representative of the Department. It shall be the responsibility of the permittee to contact this project's compliance project manager, Melissa Gil, by email Melissa.Gil@dep.state.fl.us, or by phone (561) 681-6636, to schedule the pre-construction conference.

(4) The permittee shall ensure that the permit conditions are explained to all construction personnel working on the project and for providing each contractor and subcontractor with a copy of this permit before the authorized work begins.

(5) Prior to the initiation of any dredging authorized by this permit, floating turbidity curtains with weighted skirts that extend to within one foot of the bottom shall be placed around the project site, when feasible. Additionally, staked erosion control devices shall also be installed around the perimeter of the proposed spoil management area to ensure that turbid discharges into wetlands or surface waters do not occur.

(6) The permittee shall be required to submit a Maintenance of Marine Traffic Plan. This plan is to be approved prior to issuance of the Notice to Proceed, must clearly demonstrate how the contractor will avoid disruption of ongoing traffic to the maximum extent possible.

(7) Prior to construction, the permittee shall obtain a minor modification to SFWMD Permit No. 50-04766-P. The permit modification shall indicate the number of seagrass Functional Gain Units required for the authorized activities in this permit, subtracted from the total available number of seagrass Functional Gain Units for the Snook Island Natural Area project, as funded by F.I.N.D.

SPECIFIC CONDITIONS – IMPACTS & MITIGATION REQUIREMENTS

(8) The authorized activities shall impact 5.82 acres of seagrass. To offset unavoidable impacts to 5.82-acres of seagrass habitat, the permittee shall use a total of 1.397 Functional Gains Units from the existing Snook Islands Natural Area (SINA) as permitted in SFWMD Permit No. 50-04766-P, per the attached 1-page Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet (Exhibit B).

(9) Additionally, the authorized activities shall impact 0.15 acres of hardbottom habitat. To offset unavoidable impacts to 0.15-acres of hardbottom habitat, within 30 days of commencing dredging activities, the permittee shall install 0.12 acres (5,227 sq.ft.) of artificial reef substrate (surplus precast concrete structures) to an area within the Palm Beach County Sugar Sands Artificial Reef Area, in accordance with the attached 11-page Peanut Island ICWW Deeping Project Hardbottom Mitigation Plan (Exhibit C).

(10) Within 30 days after completing construction of the artificial reef, the permittee shall submit to the Department a Time Zero report. The report shall include the construction date and the total volume of material installed. The report shall contain photographs, taken from referenced locations, to represent the entire site. Additionally, a drawing shall be included to show the location and direction of the camera. Subsequent monitoring reports shall be submitted annually for a period of 3 years, the first report being due one year after the Time Zero Report. The annual reports shall include the number of functional groups, a list of all species observed, the percent-coverage of native species observed, and explanations if survivorship is trending toward failure. The reports shall include photographs from the locations referenced in the Time Zero Report. The reports shall be sent via e-mail to the Department's assigned Compliance Project Manager, Melissa Gil (Melissa.Gil@dep.state.fl.us).

(11) In order for the artificial reef to be deemed successful, the artificial reef must achieve a minimum of 80% of major groups of organisms (functional groups) coverage that is currently found at the impact site and shall be present by the end of the first 3 years after placement.

(12) The responsibility to determine if the artificial reef is meeting the permit-specified success criteria shall not fall solely on the Department. Within the first 2 years after placement, if the permittee becomes aware that the project is not meeting the success criteria and probably will not meet the criteria based on site observations, then the permittee shall notify the Department at the email address in Specific Condition No. 3. The permittee shall then submit an alternative planting plan to the Department for review and approval.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

(13) The work authorized by this permit shall not be conducted on any property, other than that owned by the permittee, without the prior written approval of that property owner.

(14) All storage or stockpiling of tools or materials (i.e. lumber, pilings, debris, etc.) shall be limited to uplands. All construction equipment/tools and materials shall be transported to and from the site upland roadways and all equipment/tools and materials shall be stored on the uplands.

(15) Best management practices shall be employed during all phases of this project. All water bodies, adjacent submerged aquatic vegetation, and/or adjacent wetland resources outside the specific limits of construction authorized by this permit shall be protected from erosion, siltation, sedimentation, and/or scouring.

(16) A temporary mixing zone is authorized with this permit to occur up to 150-meters down current of the dredging location. If turbidity is visible outside of the 150-meter mixing zone, then turbidity levels shall be monitored as required in Specific Condition No's. 20 through 22.

(17) Dredging shall be conducted from a shallow draft barge with a fully loaded draft of no more than 8 feet. All watercraft associated with the construction of the permitted structure shall only operate within waters of sufficient depth (one-foot clearance from the deepest draft of the vessel to the top of submerged resources) so as to preclude bottom scouring, prop dredging, or damage to submerged resources.

(18) The material shall be mechanically or hydraulically dredged and deposited onto the existing Peanut Island DMMA. Return water shall not be discharged into areas outside of the authorized mixing zone.

(19) All areas to be dredged shall be in accordance with the attached permit drawings and shall not exceed the areas and depths indicated on those drawings.

SPECIFIC CONDITIONS – MONITORING/REPORTING REQUIREMENTS

(20) Turbidity levels outside the 150-meter temporary mixing zone shall not exceed 29 NTU's above background levels. The following measures shall be taken immediately by the permittee whenever turbidity levels within waters of the State surrounding the project site exceed 29 NTUs above background:

- a. Notify the Department at (561) 681-6636 at the time the violation is first detected.
- b. Immediately cease all work contributing to the water quality violation.
- c. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, install more turbidity containment devices, and repair any non-functional turbidity containment devices.
- d. Perform turbidity monitoring.
- e. Resume construction activities once turbidity levels outside turbidity curtains fall below 29 NTUs.

(21) Turbidity Monitoring. Water turbidity levels shall be monitored every four hours if a turbidity plume is observed outside the limits of the authorized mixing zones. Samples shall be taken one foot above the bottom, mid-depth, and one-foot below the surface at monitoring stations located as follows:

- a. Approximately 100 feet up-current of the work sites and clearly outside the influence of construction activities. (This shall serve as the natural background sample against which other turbidity readings shall be compared.)
- b. Immediately outside the authorized 150-meter mixing zone surrounding the work sites and within the densest portion of any visible turbidity plume. (This sample shall serve as the compliance sample.)

(22) Turbidity Monitoring Reports. During dredging activities, the permittee or permittee's contractor shall collect the following turbidity monitoring data at the frequency and water depths directed by Specific Condition #21:

- a. Date and time of sampling event
- b. Turbidity sampling results (background NTUs, compliance NTUs, and the difference between them)
- c. Description of data collection methods
- d. An aerial map indicating the sampling locations
- e. Depth of sample(s)
- f. Weather conditions at times of sampling
- g. Tidal stage and direction of flow

Data shall be collected in a turbidity log and shall include a statement by the individual responsible for implementation of the sampling program attesting to the authenticity, precision, limits of detection, and accuracy of the data. The turbidity log shall be scanned and sent on a weekly basis to the Department's compliance project manager, Melissa Gil, by email at Melissa.Gil@dep.state.fl.us. The subject line of the email shall include the project name, permit number, and the title "Turbidity Monitoring Reports."

SPECIFIC CONDITIONS – MANATEE CONDITIONS

(23) During all in-water work, the permittee shall comply with the standard manatee protection construction conditions listed in the attached 1-page "Standard Manatee Conditions for In-Water Work, 2011".

(24) To reduce the possibility of injuring or killing a manatee during construction, dredging shall not be performed during the following time of year: November 15- March 31.

(25) When in water work is being performed, at least one person shall be designated as a manatee observer. That person shall have experience in manatee observation and be equipped with polarized sunglasses to aid in observation. The manatee observer must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Movement of a work barge or other associated vessels, shall not be performed after sunset, when the potential of spotting manatees is negligible.

SPECIFIC CONDITIONS – PROTECTION OF HISTORICAL RESOURCES

(26) If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at 850/245-6333 or 800/847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

(1) All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

(2) A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

(3) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

(4) At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

(5) Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

(6) Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:

- a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex – "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
- b. For all other activities – "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
- c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

(7) If the final operation and maintenance entity is a third party:

- a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.

- b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

(8) The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

(9) This permit does not:

- a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
- b. Convey to the permittee or create in the permittee any interest in real property;
- c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
- d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

(10) Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

(11) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

(12) The permittee shall notify the Agency in writing:

- a. Immediately if any previously submitted information is discovered to be inaccurate; and
- b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

(13) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

(14) If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well

as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

(15) 15. 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 binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.

(16) The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

(17) This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

(18) A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

GENERAL CONDITIONS FOR SOVEREIGNTY SUBMERGED LANDS AUTHORIZATION

Any use of sovereignty submerged lands is subject to the following general conditions are binding upon the applicant and are enforceable under Chapter 253, F.S. and Chapter 258, F.S.

(1) Sovereignty submerged lands may be used only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use will constitute a violation. Violation of the authorization will result in suspension or revocation of the applicant's use of the sovereignty submerged lands unless cured to the satisfaction of the Board of Trustees.

(2) Authorization under Rule 18-21.005, F.A.C., conveys no title to sovereignty submerged lands or water column, nor does it constitute recognition or acknowledgment of any other person's title to such land or water.

(3) Authorizations under Rule 18-21.005, F.A.C., may be modified, suspended or revoked in accordance with its terms or the remedies provided in Sections 253.04, F.S. and Chapter 18-14, F.A.C.

(4) Structures or activities will be constructed and used to avoid or minimize adverse impacts to resources.

(5) Construction, use, or operation of the structure or activity will not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.

(6) Structures or activities will not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity will be modified in accordance with the court's decision.

(7) Structures or activities will not create a navigational hazard.

(8) Structures will be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional.

(9) Structures or activities will be constructed, operated, and maintained solely for water dependent purposes.

(10) The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

(11) Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

(12) Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

(13) All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

(14) This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

NOTICE OF RIGHTS

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

Petition for Administrative Hearing

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

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

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

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 14 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding

initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

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

Mediation

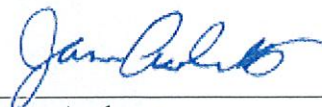
Mediation is not available in this proceeding.

Judicial Review

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

Executed in Palm Beach County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



1/21/14

Jason Andreotta
Program Administrator
Submerged Lands & Environmental
Resource Program

Attachments:

Permit checklist, 1 page

Project Drawings and Design Specs., 11 pages

Exhibit A, Standard Manatee Conditions for In-Water Work, 2011, 1 page

Exhibit B, Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet, 1 page

Exhibit C, Peanut Island ICWW Deeping Project Hardbottom Mitigation Plan, 11 pages

As-built Certification and Request for Conversion to Operational Phase Form 62-330.310(1)*

Request for Transfer to the Perpetual Operation Entity Form 62-330.310(2)*

Request to Transfer Permit Form 62-330.340(1)*

Commencement Notice Form 62-330.350(1)*

*Can be downloaded at: <http://www.dep.state.fl.us/water/wetlands/erp/forms.htm>

Copies furnished to:

Samantha Rice, USACOE Palm Beach Gardens, Samantha.L.Rice@usace.army.mil

Paul Davis, Palm Beach County ERM, pdavis@co.palm-beach.fl.us

Mary Duncan, FFWCC Bureau of Imperiled Species Management, mary.duncan@MyFWC.com

Lori Brownell, Waterfront Engineering, Taylor Engineering, Inc.

LBrownell@taylorengineering.com

FILING AND ACKNOWLEDGMENT

FILED, on this date, under 120.52(7) of the
Florida Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.

Benny Luedihs

1/21/2014

Clerk

Date



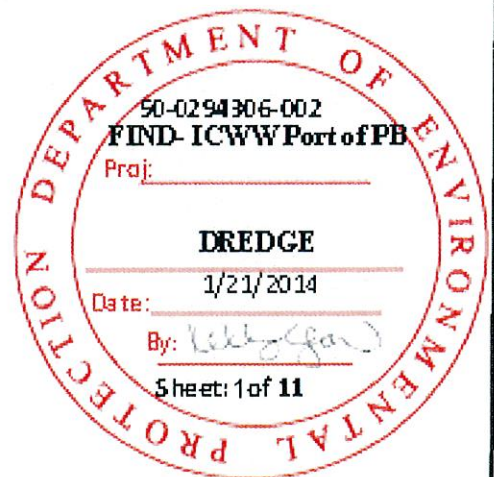
BLUE HERON BLVD.

CHANNEL
RIGHT OF WAY

LIMITS OF DREDGING (TYP)

F.I.N.D.
PEANUT ISLAND DMMA
(CAPACITY = 289,000 CY)

SECTION 34
TOWNSHIP 42S
RANGE 43E



QUAD REFERENCE:
USGS 7.5' QUADRANGLE MAP
RIVIERA BEACH, FLORIDA 1946
PHOTOREVISED 1983

0 1,000' 2,000'
SCALE: 1" = 1,000'

NOTE:
PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT
MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
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JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

FIGURE E1
LOCATION MAP
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT	DRAWN BY	SHEET	DATE
C2011-068	CAS	1 of 11	FEB 2013

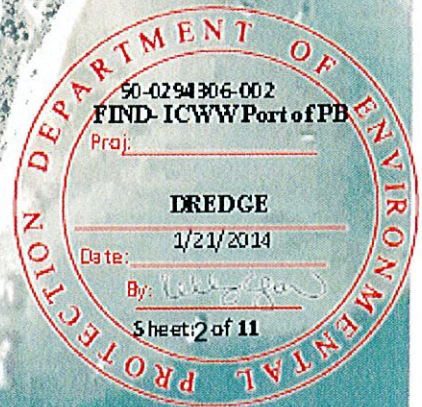
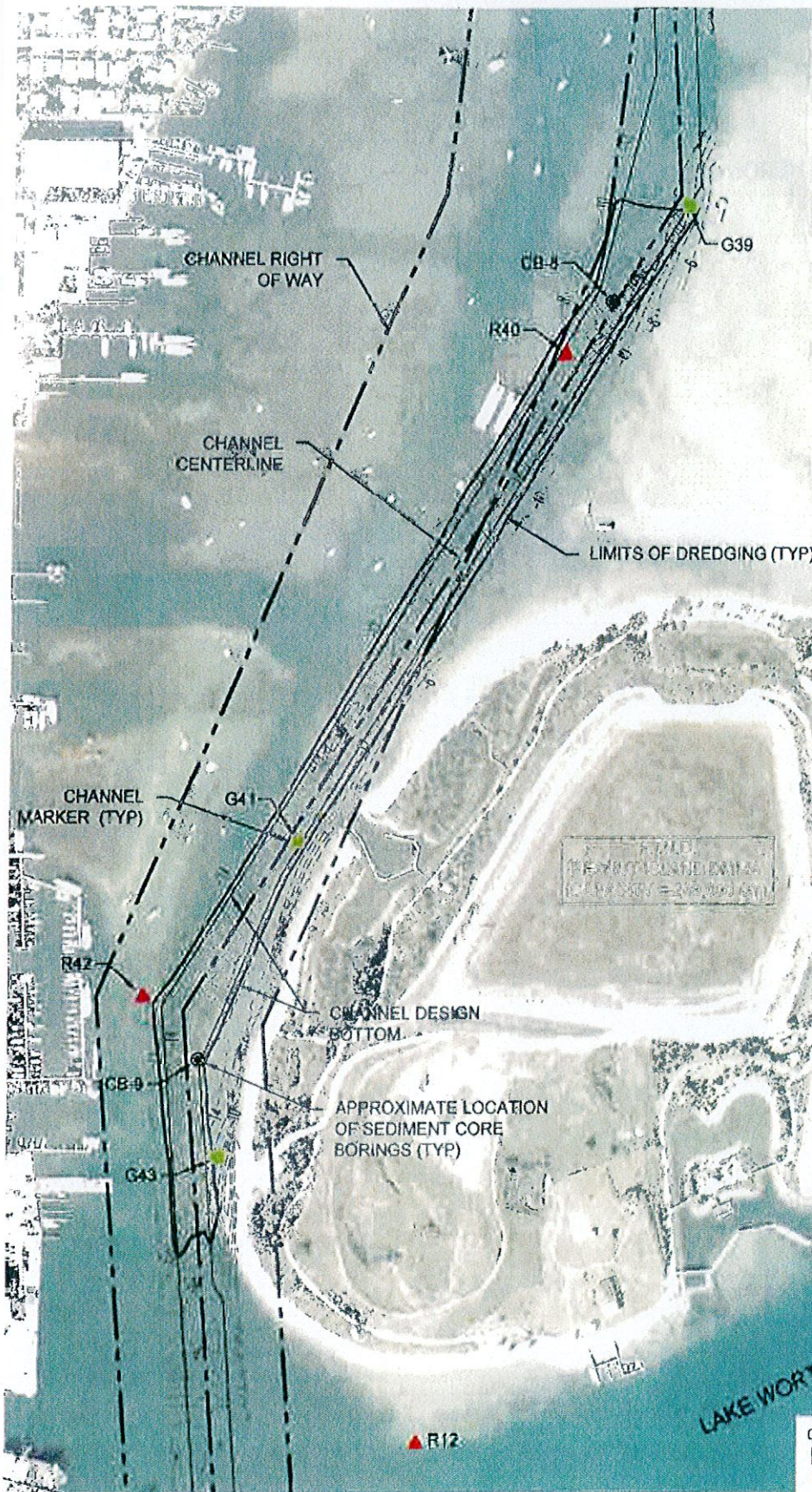
SEAL
[Signature] 7/6/13
LORI S. BROOKS, P.E. # 00025 DATE

PROJECT SUMMARY

CUT LENGTH	3,555 FT
PROJECT AREA	12.24 AC
	532,963 SF
DREDGE VOLUME	95,580 CY

PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009.
2. BATHYMETRIC SURVEY: USACE, AUGUST 2010 INTRACOASTAL WATERWAY; JACKSONVILLE TO MIAMI, FLORIDA; CUTS P-34 THRU P-39 & P-52 THRU P-59; EXAMINATION SURVEY FY10; 10-FOOT PROJECT (10-113).
3. PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).



0 500' 1,000'
SCALE: 1" = 500'

TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256

CERTIFICATE OF AUTHORIZATION #4515

FIGURE E2
PROJECT OVERVIEW
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT C2011-068 DRAWN BY CAS SHEET 2 of 11 DATE FEB 2013

SEAL

[Signature] 3/6/13
LC: N. S. BROWNELL P.E. # 60025 DATE

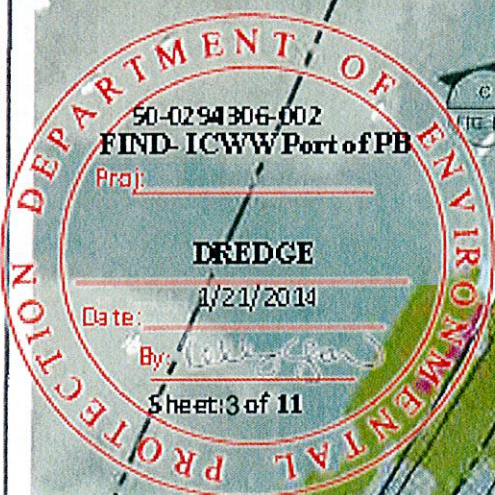
BENTHIC RESOURCES WITHIN DREDGING AREA

	FEATURE NAME	CHANNEL BOTTOM	SIDE SLOPES
	HALOPHILA DECIPIENS	4.30	1.30
	HALOPHILA JOHNSONII	0.04	0.01
	H. DECIPIENS/H. JOHNSONII	0.12	0.03
	HALODULE WRIGHTII	0.00	0.01
	H. WRIGHTII/H. DECIPIENS	0.00	0.00
	H. WRIGHTII/H. JOHNSONII	0.00	0.01
	HARDBOTTOM	0.02	0.01
	SAND BOTTOM	3.55	1.57
	SHELL HASH BOTTOM	0.11	0.15
	HARDBOTTOM DOMINATED BY MACROALGAE	0.07	0.05
	MACROALGAE DOMINATED SAND/SHELL HASH	0.57	0.34
	TOTAL (ACRES)	8.77	3.49

LEGEND

- GREEN CHANNEL MARKER
- RED CHANNEL MARKER
- SEDIMENT CORE BORING
- LIMITS OF DREDGING

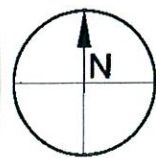
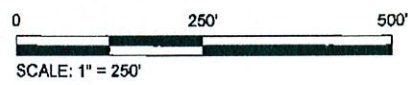
1:08 PM 1/21/2014 DEPT. OF ENVIRONMENTAL PROTECTION 1:08 PM 1/21/2014 DEPT. OF ENVIRONMENTAL PROTECTION



MATCHLINE A

PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009
 2. BENTHIC HABITAT ASSESSMENT: SCHEDA/PINNACLE GROUP, DECEMBER 2011 (FIELD WORK PERFORMED SEPTEMBER 2011)
- PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).



TAYLOR ENGINEERING INC.

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CERTIFICATE OF AUTHORIZATION # 4815












FIGURE E3A (WITH AERIAL)
BENTHIC RESOURCES WITHIN LIMITS OF DREDGING
(NORTH)
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT: C2011-068 DRAWN BY: CAS SHEET: 3 of 11 DATE: FEB 2013





SEAL

LORI S. BROWNELL P.E. # 80025 DATE: 3/6/13

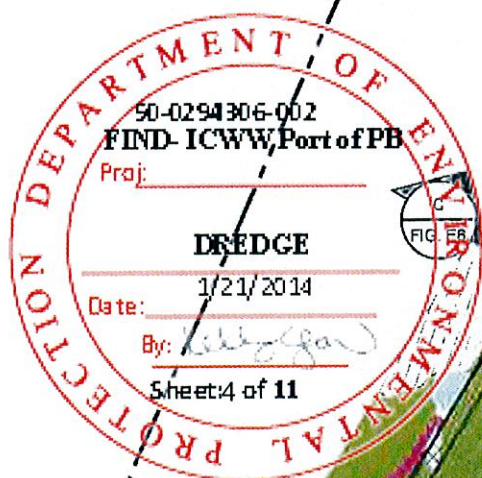
BENTHIC RESOURCES WITHIN DREDGING AREA

	FEATURE NAME	CHANNEL BOTTOM	SIDE SLOPES
	HALOPHILA DECIPIENS	4.30	1.30
	HALOPHILA JOHNSONII	0.04	0.01
	H. DECIPIENS/H. JOHNSONII	0.12	0.03
	HALODULE WRIGHTII	0.00	0.01
	H. WRIGHTII/H. DECIPIENS	0.00	0.00
	H. WRIGHTII/H. JOHNSONII	0.00	0.01
	HARDBOTTOM	0.02	0.01
	SAND BOTTOM	3.55	1.57
	SHELL HASH BOTTOM	0.11	0.15
	HARDBOTTOM DOMINATED BY MACROALGAE	0.07	0.05
	MACROALGAE DOMINATED SAND/SHELL HASH	0.57	0.34
	TOTAL (ACRES)	8.77	3.49

LEGEND

-  GREEN CHANNEL MARKER
-  RED CHANNEL MARKER
-  SEDIMENT CORE BORING
-  LIMITS OF DREDGING

CHANNEL RIGHT OF WAY



MATCHLINE A



PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009
2. BENTHIC HABITAT ASSESSMENT: SCHEDA/PINNACLE GROUP, DECEMBER 2011 (FIELD WORK PERFORMED SEPTEMBER 2011)
3. PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).



TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

FIGURE E3B (WITHOUT AERIAL)
BENTHIC RESOURCES WITHIN LIMITS OF DREDGING (NORTH)
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT C2011-068 DRAWN BY CAS SHEET 4 of 11 DATE FEB 2013

SEAL

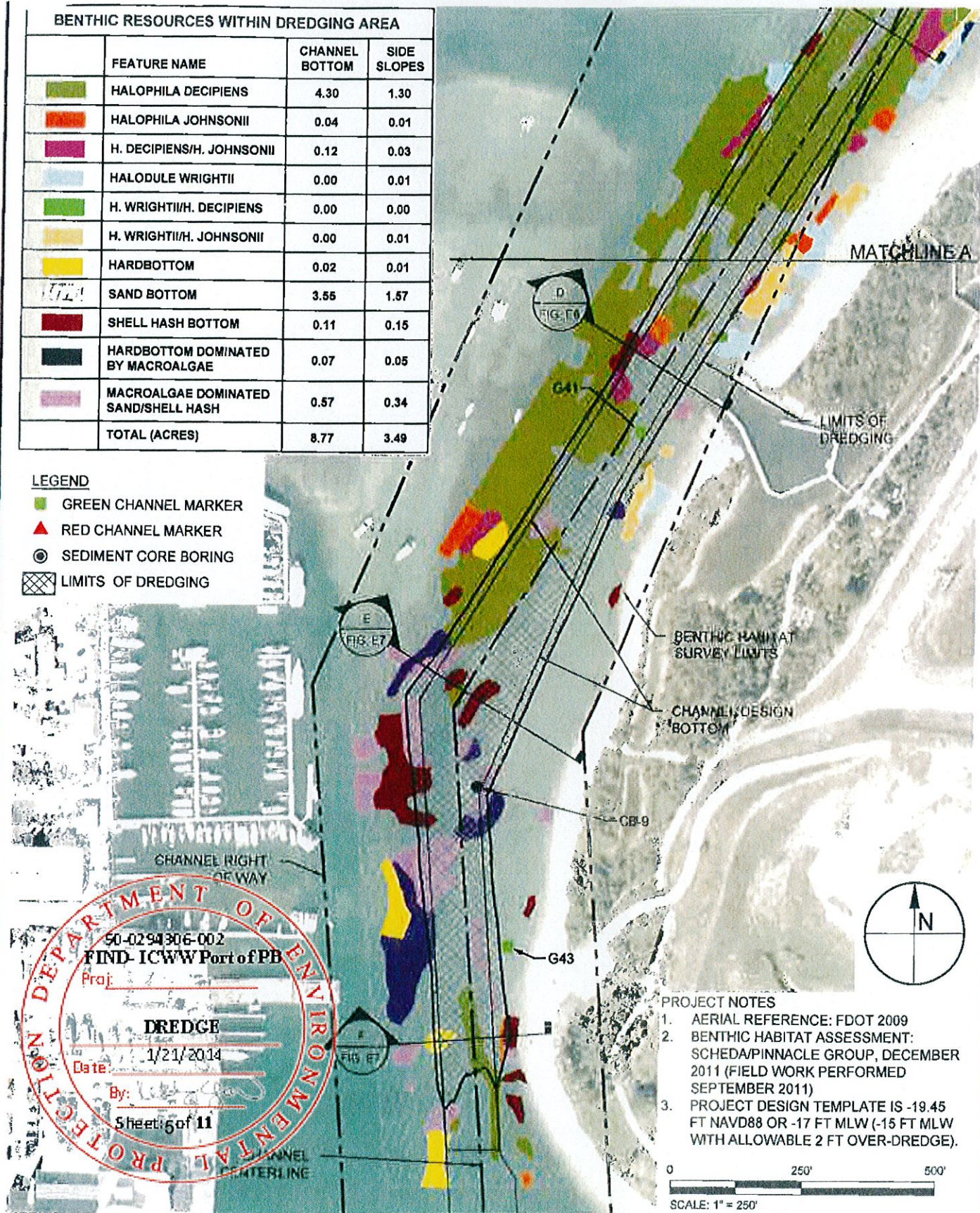
[Signature] 2/4/13
LORI B. BROWNELL P.E. # 60025 DATE

BENTHIC RESOURCES WITHIN DREDGING AREA

	FEATURE NAME	CHANNEL BOTTOM	SIDE SLOPES
	HALOPHILA DECIPIENS	4.30	1.30
	HALOPHILA JOHNSONII	0.04	0.01
	H. DECIPIENS/H. JOHNSONII	0.12	0.03
	HALODULE WRIGHTII	0.00	0.01
	H. WRIGHTII/H. DECIPIENS	0.00	0.00
	H. WRIGHTII/H. JOHNSONII	0.00	0.01
	HARDBOTTOM	0.02	0.01
	SAND BOTTOM	3.55	1.57
	SHELL HASH BOTTOM	0.11	0.15
	HARDBOTTOM DOMINATED BY MACROALGAE	0.07	0.05
	MACROALGAE DOMINATED SAND/SHELL HASH	0.57	0.34
	TOTAL (ACRES)	8.77	3.49

LEGEND

- GREEN CHANNEL MARKER
- RED CHANNEL MARKER
- SEDIMENT CORE BORING
- LIMITS OF DREDGING



50-0294306-002

FIND- ICWW Port of PB

Proj:

DREDGE

1/21/2014

Date:

By:

Sheet 5 of 11

PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009
2. BENTHIC HABITAT ASSESSMENT: SCHEDA/PINNACLE GROUP, DECEMBER 2011 (FIELD WORK PERFORMED SEPTEMBER 2011)
3. PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

0 250' 500'

SCALE: 1" = 250'

TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256

CERTIFICATE OF AUTHORIZATION # 4815

FIGURE E4A (WITH AERIAL)
BENTHIC RESOURCES WITHIN LIMITS OF DREDGING
(SOUTH)
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT C2011-068 DRAWN BY CAS SHEET 5 of 11 DATE FEB 2013

SEAL

LORI S. BROWNELL P.E. # 60025 DATE 3/6/13

BENTHIC RESOURCES WITHIN DREDGING AREA

	FEATURE NAME	CHANNEL BOTTOM	SIDE SLOPES
	HALOPHILA DECIPIENS	4.30	1.30
	HALOPHILA JOHNSONII	0.04	0.01
	H. DECIPIENS/H. JOHNSONII	0.12	0.03
	HALODULE WRIGHTII	0.00	0.01
	H. WRIGHTII/H. DECIPIENS	0.00	0.00
	H. WRIGHTII/H. JOHNSONII	0.00	0.01
	HARDBOTTOM	0.02	0.01
	SAND BOTTOM	3.55	1.57
	SHELL HASH BOTTOM	0.11	0.15
	HARDBOTTOM DOMINATED BY MACROALGAE	0.07	0.05
	MACROALGAE DOMINATED SAND/SHELL HASH	0.57	0.34
	TOTAL (ACRES)	8.77	3.49

LEGEND

- GREEN CHANNEL MARKER
- ▲ RED CHANNEL MARKER
- SEDIMENT CORE BORING
- LIMITS OF DREDGING

CHANNEL RIGHT OF WAY

CHANNEL CENTERLINE

MATCHLINE A

LIMITS OF DREDGING

BENTHIC HABITAT SURVEY LIMITS

CHANNEL DESIGN BOTTOM

CB-9

G43



PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009
2. BENTHIC HABITAT ASSESSMENT: SCHEDA/PINNACLE GROUP, DECEMBER 2011 (FIELD WORK PERFORMED SEPTEMBER 2011)
3. PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

0 250' 500'
SCALE: 1" = 250'

50-0294306-002

FIND-ICWW Port of PB

Proj:

DREDGE

Date: 1/21/2014

By: *[Signature]*

Sheet: 6 of 11

TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256

CERTIFICATE OF AUTHORIZATION # 4615

FIGURE E4B (WITHOUT AERIAL)
BENTHIC RESOURCES WITHIN LIMITS OF DREDGING
(SOUTH)
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT: C2011-068 DRAWN BY: CAS SHEET: 6 of 11 DATE: FEB 2013

SEAL

[Signature] 3/6/13
LORRY BROWNELL P.E. # 00025

DATE

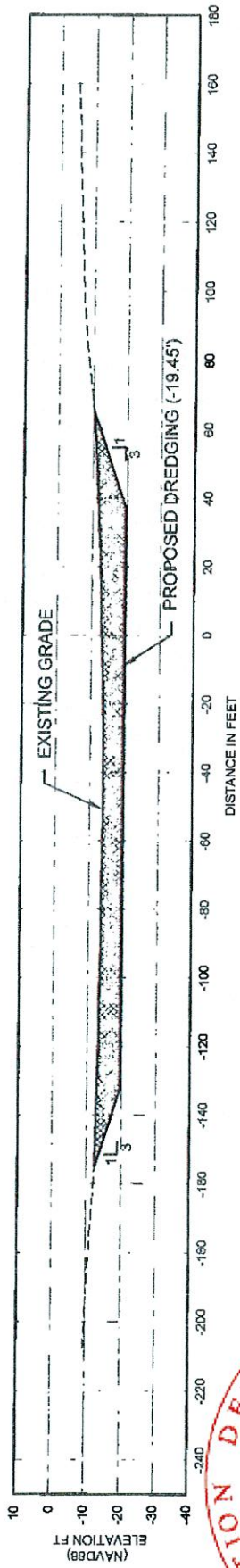


FIG. E3
A
CHANNEL CUT - TYPICAL SECTION
 SCALE: 1" = 50'
 V-SCALE: 1" = 50'

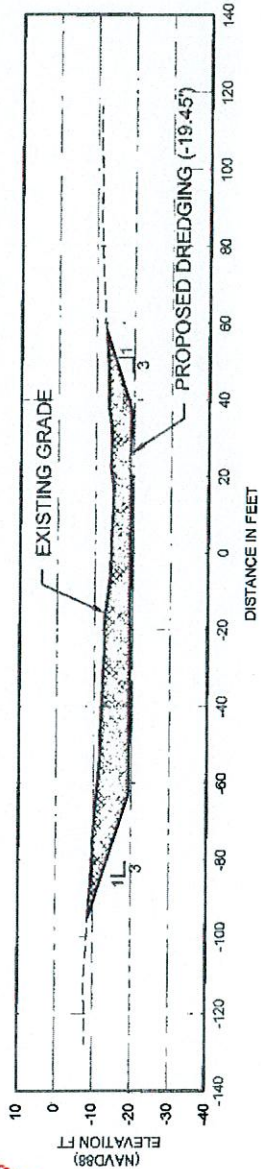
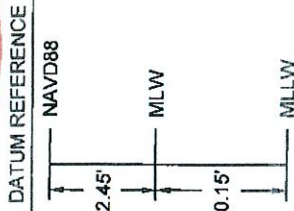
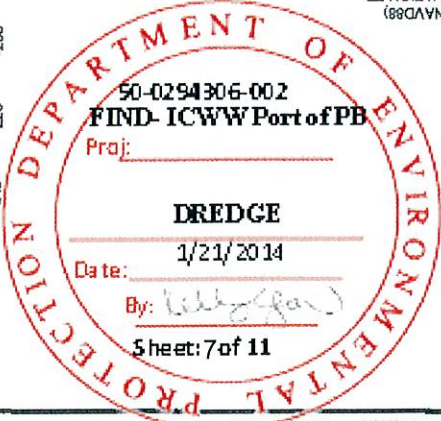


FIG. E3
B
CHANNEL CUT - TYPICAL SECTION
 SCALE: 1" = 50'
 V-SCALE: 1" = 50'



DESIGN REFERENCE: NAVD88

NOV. 2011 TIDAL DATUMS AT PORT OF W. PALM BEACH, LAKE WORTH
 CONTROL TIDE STATION: 8721604 TRIDENT PIER, PORT CANAVERAL
 LENGTH OF SERIES: 9 MONTHS
 TIME PERIOD: FEBRUARY 2008 - OCTOBER 2008
 TIDAL EPOCH: 1983-2001

TAYLOR ENGINEERING INC.
 10151 DEERWOOD PARK BLVD.
 BLDG. 300, SUITE 300
 JACKSONVILLE, FL 32256
 CERTIFICATE OF AUTHORIZATION # 4815

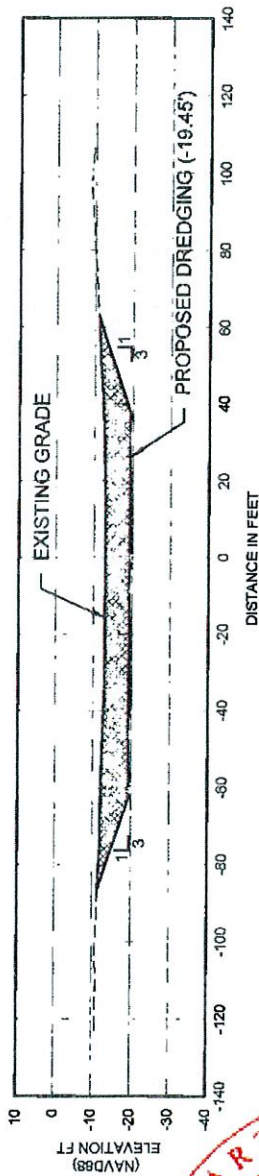
FIGURE E5
DREDGE PROFILES 1
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT	C2011-068
DRAWN BY	CAS
SHEET	7 of 11
DATE	FEB 2013

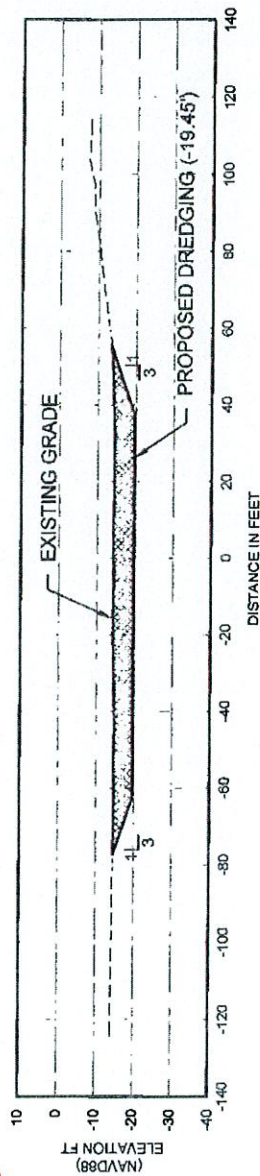
[Signature]
 DATE

NOTE:
 PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT
 MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

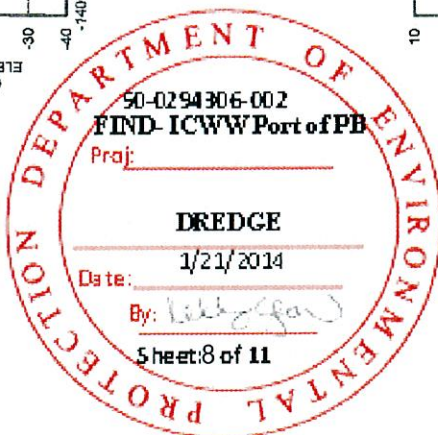
PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT IN FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW.



C
FIG. E3
CHANNEL CUT - TYPICAL SECTION
SCALE: 1" = 50'
V-SCALE: 1" = 50'



D
FIG. E4
CHANNEL CUT - TYPICAL SECTION
SCALE: 1" = 50'
V-SCALE: 1" = 50'



DATUM REFERENCE

NAV88

MLW

MLLW

DESIGN REFERENCE: NAV88

NOV. 2011 TIDAL DATUMS AT PORT OF W. PALM BEACH, LAKE WORTH
CONTROL TIDE STATION: 8721604 TRIDENT PIER, PORT CANAVERAL
LENGTH OF SERIES: 9 MONTHS
TIME PERIOD: FEBRUARY 2008 - OCTOBER 2008
TIDAL EPOCH: 1983-2001

TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION # 4815

FIGURE E6
DREDGE PROFILES 2
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

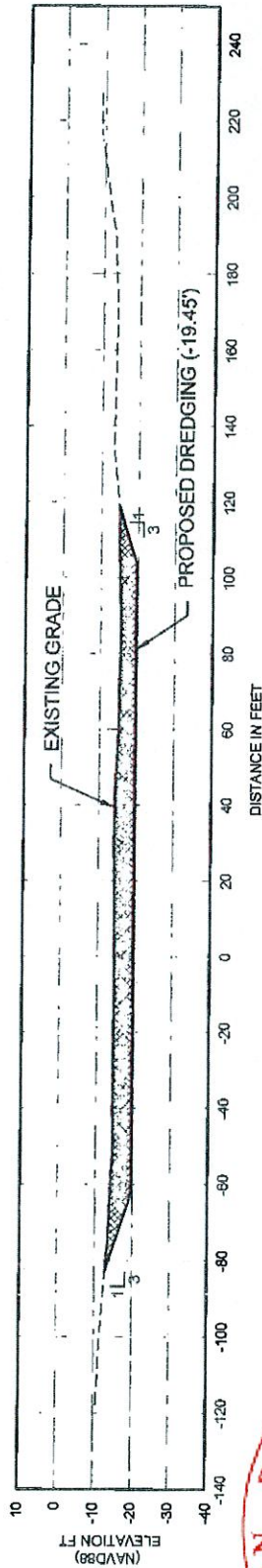
PROJECT	C2011-068
DRAWN BY	CAS
SHEET	8 of 11
DATE	FEB 2013

[Signature]
LORI S. BROWNELL P.E. # 60055
DATE

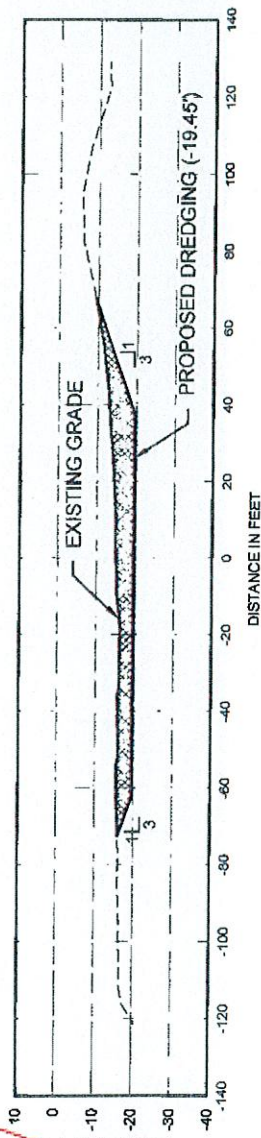
NOTE:
PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT
MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

THESE DRAWINGS ARE NOT IN FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW.

PRELIMINARY DRA



CHANNEL CUT - TYPICAL SECTION
 SCALE: 1" = 50'
 V-SCALE: 1" = 50'



CHANNEL CUT - TYPICAL SECTION
 SCALE: 1" = 50'
 V-SCALE: 1" = 50'

50-0294306-002
FIND- ICWW Port of PB
DREDGE
1/21/2014
Sheet: 9 of 11

DESIGN REFERENCE: NAVD88

NOV. 2011 TIDAL DATUMS AT PORT OF W. PALM BEACH, LAKE WORTH
 CONTROL TIDE STATION: 8721604 TRIDENT PIER, PORT CANAVERAL
 LENGTH OF SERIES: 9 MONTHS
 TIME PERIOD: FEBRUARY 2008 - OCTOBER 2008
 TIDAL EPOCH: 1983-2001

TAYLOR ENGINEERING INC.
 10151 DEERWOOD PARK BLVD.
 BLDG. 300, SUITE 300
 JACKSONVILLE, FL 32256
 CERTIFICATE OF AUTHORIZATION #4315

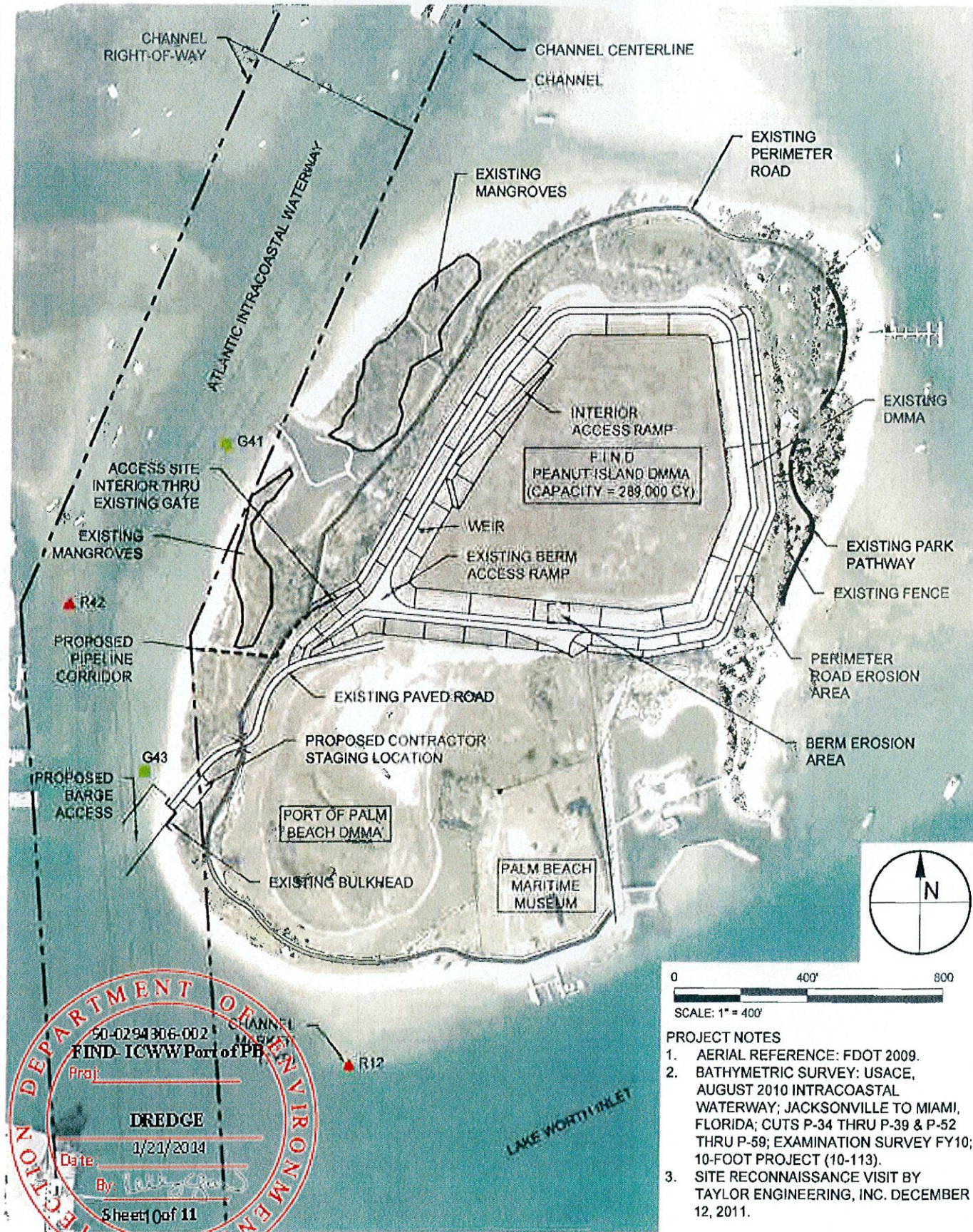
FIGURE E7
DREDGE PROFILES 3
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

NOTE:
 PROJECT DESIGN TEMPLATE IS -19.45 FT NAVD88 OR -17 FT
 MLW (-15 FT MLW WITH ALLOWABLE 2 FT OVER-DREDGE).

PROJECT	C2011-068	SEAL
DRAWN BY	CAS	
SHEET	9 of 11	
DATE	FEB 2013	

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT IN FINAL FORM. BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW.

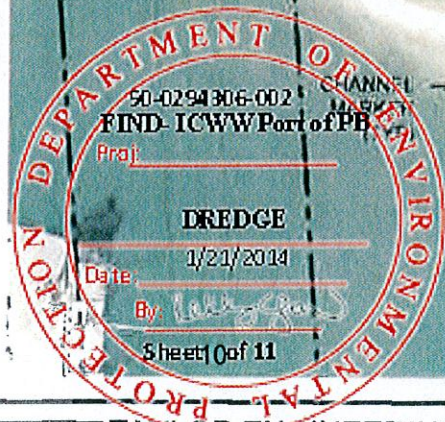
DATE



0 400' 800'
SCALE: 1" = 400'

PROJECT NOTES

1. AERIAL REFERENCE: FDOT 2009.
2. BATHYMETRIC SURVEY: USACE, AUGUST 2010 INTRACOASTAL WATERWAY; JACKSONVILLE TO MIAMI, FLORIDA; CUTS P-34 THRU P-39 & P-52 THRU P-59; EXAMINATION SURVEY FY10; 10-FOOT PROJECT (10-113).
3. SITE RECONNAISSANCE VISIT BY TAYLOR ENGINEERING, INC. DECEMBER 12, 2011.



TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FL 32256

CERTIFICATE OF AUTHORIZATION # 4815

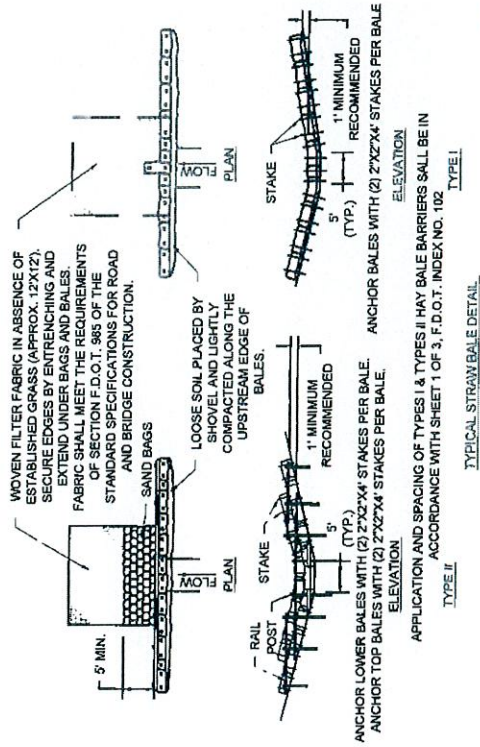
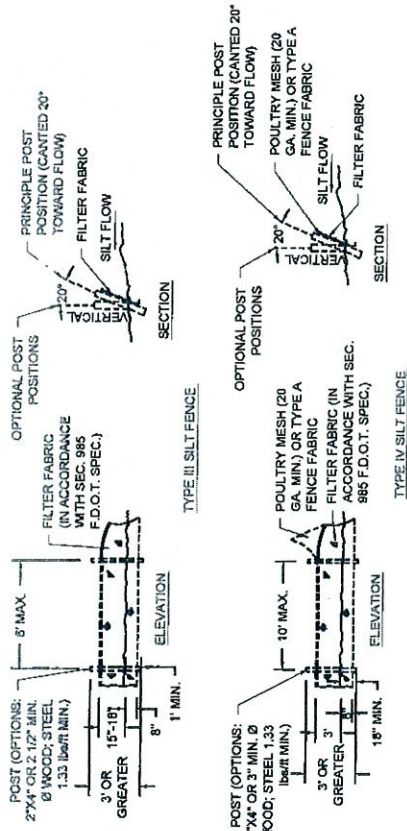
FIGURE E8
EXISTING F.I.N.D. PEANUT ISLAND DMMA
ICWW DEEPENING IN VICINITY OF PORT OF PALM BEACH
PALM BEACH COUNTY, FLORIDA

PROJECT C2011-068 DRAWN BY CAS SHEET 10 of 11 DATE FEB 2013

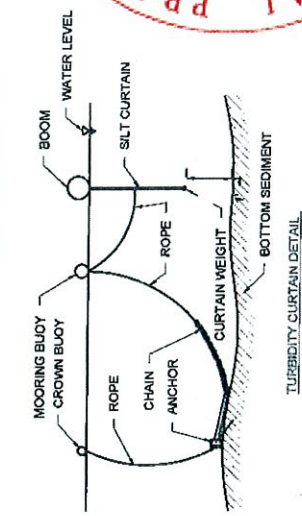
SEAL

LORI S. BROWNELL P.E. # 30025

DATE



PORT OF PALM BEACH COUNTY ENGINEERING INC.
 50-0294306-002
FIND- ICWW Port of PB
 Proj: _____
DREDGE
 Date: 1/21/2014
 By: *[Signature]*
 Sheet 1 of 11



TAYLOR ENGINEERING, INC.
 10151 DEERWOOD PARK BLVD.
 BLDG. 300, SUITE 300
 JACKSONVILLE, FL 32256
 CERTIFICATE OF AUTHORIZATION # 4815

FIGURE E9
 EROSION CONTROL DETAILS
 SILT FENCE INSTALLATION IN VICINITY OF PORT OF PALM BEACH
 PALM BEACH COUNTY, FLORIDA

PROJECT	C2011-068
DRAWN BY	CAS
SHEET	11 of 11
DATE	FEB 2013

[Signature]
 LORI B. BROWNELL P.E. # 60025
 DATE

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT IN FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK
2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. 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.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. 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.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

Exhibit A
(1 page)

Florida Inland Navigation District- Snook Island Mitigation Area Seagrass Balance Sheet- FDEP 1/21/2014

Project Name	District	County	Permit No.	Date Permit Issued	Seagrass FG Units Available	Seagrass FG* Units Required (Direct)	Seagrass FG Units Required (Secondary)	Comments
Beginning Balance:					13.7670			
Balance w/ 75% reduction:					10.3253			
WW- Peanut Dredge	SED	PB	FDEP 50-0294306-002	1/21/2014		1.397		Project proposes to impact 5.82 ac of seagrass
Remaining per Habitat Type					8.9283	1.397	0	

Required for a project is equal to the Functional Loss as calculated by UMAM for any future projects.

On Permit 50-04766-P, FIND contributed 75 percent of the funding for the construction of Snook Islands Natural Area.

**Peanut Island ICWW Deepening Project
Hardbottom Mitigation Plan
Revised 12/19/2013**

Introduction

To offset lost ecological functions resulting from removal of hardbottom as part of the ICW channel deepening construction around Peanut Island, FIND proposes to construct artificial reefs site in (to the extent practical) locations comparable to the impact. Palm Beach County has an existing, successful artificial reef program with diverse self-sustaining reefs at various locations within Lake Worth Lagoon and in the nearshore Atlantic Ocean. As the project impacts occur in Lake Worth Lagoon, FIND proposes construction of artificial reefs in the Palm Beach County Sugar Sands Artificial Reef Area (Figure 1). This area has proven to develop hard coral communities on artificial substrates. See attachments for descriptions of the communities published by Palm Beach County staff.

Required Mitigation Area

UMAM Calculation of Impact and Mitigation are provided in attachments.

$$\text{Functional Loss (FL)} = 0.021$$

$$\text{Relative Function Gain (RFL)} = 0.172$$

$$\text{FL} / \text{RFL} = 0.0221 / 0.172 = 0.12 \text{ acres (5,227 sf) of hardbottom mitigation required}$$

Reef location and Materials

The Sugar Sands Artificial Reef Area (Figure 1, including site corners) has current permits from the FDEP and USACE for use as an artificial reef site. FIND proposes to add artificial reef substrate (surplus precast concrete structures) to an area of the Sugar Sands site not previously used. Approximate location of the reef is shown in Figure 2. FIND contractors will work closely with Carman Vare, Palm Beach County, to define suitable placement area acceptable to Palm Beach. Magnetometer scans of the area will locate any buried utilities, which the project construction will avoid. A diver visual inspection will verify that the site does not include any artificial substrate and comprises clean sand (no seagrass). At an appropriate staging area and prior to deployment, FIND will stockpile material conforming to the standards for artificial reef substrate in The FWC recommended: **Guidelines for Marine Artificial Reef Materials 2nd Edition** accessible at:

http://www.gsmfc.org/pubs/SFRP/Guidelines_for_Marine_Artificial_Reef_Materials_January_2004.pdf

The material in the staging area will be available for inspection by federal and state agency staffs 30 days before installation. The placement site borders will remain at least 75 ft from existing artificial reefs. FIND and its contractors will coordinate closely with Carmen Vare, Palm Beach County Environmental Program Supervisor during the site selection process. FIND will submit detailed artificial reef construction plans and an approval letter from Palm Beach County to the FDEP at least 30 days prior to construction.

Design and Construction

Palm Beach County has requested that the artificial reef provide the same “look and feel” as existing artificial reefs adjacent to the site. FIND will coordinate closely with Carmen Vare, Palm Beach County, on final material selection and design. However, discussions with Mr. Vare have provided the following general conceptual design:

Jersey barriers or other similar size material will provide a base for the artificial reef. The intent of the layer is to provide a support for a sand, more planar layer to create shelf-like structure. Relatively planar materials (e.g. 35 ft 14” x 14” concrete telephone poles) will create a reef shelf on top of the bottom support layer, sufficiently close together to allow the placement of 1 ft – 2 ft diameter limestone boulders as the top layer of the reef. (Figure 3: See Conceptual Reef Design – Detail). Palm Beach County will recommend boulder density. Assuming a 35 ft x 35 ft square for a reef unit (1,225 sf using the example materials), units 35 ft on a side and one unit 35 x 18 unit and 10-20 ft corridors between the units will provide more than the required mitigation area (see Figure 4: Conceptual Reef Unit Size and Spacing)

$$\text{Mitigation Reef Area} = (1,225 \text{ sf} \times 3) + (1,225 \times 0.5) + (10 \times 35 \times 3) = 5337.5 \text{ sf} \\ (3 \text{ units}) + (1/2 \text{ unit}) + (10 \text{ ft corridors})$$

The size of a unit will be determined by the size of the available materials. The total number of reef units and internal corridors will meet or exceed the required square foot total. If Jersey Barriers are not available other materials such as culvert junction boxes or other materials of similar scale to the Jersey Barrier can be used in a similar fashion.

The corridors between the reef units are included in the mitigation calculations because the open bottom is part of the reef community resource.

The total height of the reef is expected to be 6-9 ft, depending on the materials available for construction. Materials and final designs will be developed with the help of Mr. Carmen Vare, Palm Beach County, who will approve the final design.

The construction crew will include divers and barge-based workers. Buoys placed prior to the arrival of the barge will mark the corners of the site. The barge will locate as necessary to place materials as needed to create the required design. The work crew will move the barge as construction proceeds. Placement of buoys and barge location will employ GPS with sub-meter accuracy. The barge operator will then deploy the materials from the edge of the barge using a crane or other suitable equipment to deploy the material one or a few pieces at a time. Divers will guide final placement in communication with the barge crew and periodically inspect the deployment results to verify that the material remains within the site boundaries and remain within an elevation of ten feet. As the Sugar Sands site lies at 25 – 30 ft deep, the elevation meets the criteria in 62-341.600 F.A.C General Permit for the construction of artificial reefs 1(d) governing the elevation of the reef. The objective of the deployment is to create a set of relatively contiguous artificial reefs covering 0.12 acres (5,227 sf). At completion of construction all buoys will be removed. Construction is expected to require one day, but may extend to a second day depending on the method of deployment and the weather.

During construction, best management practices will include the use of one full time, independent, FWC-approved observer for observers for manatees, marine turtles, and smalltooth sawfish. If any of these species comes within 50 ft of the barge, all work must stop until the animal has moved away. Divers will also watch for these species and notify the topside crew to stop work if they see any of these species. The contractor will not harass or otherwise act in ways meant to cause the animal to move away. Work will recommence after the animal has moved away.

The site substrate is clean sand and the material is clean concrete. When the material reaches the bottom, very localized and temporary turbidity may occur, but the work will generate no turbidity plume. Therefore, no turbidity curtains or monitoring is warranted.

Final inspection of the deployment (which will occur within five working days of deployment) will include GPS location of the outer edges of the artificial reef and final elevations, as well as any other notes or observations. A final report submitted to the state and federal environmental permitting staffs and Palm Beach County will detail the construction activity and final inspection findings.

Within 30 days of placement of the reef material, FIND “shall notify the National Ocean Service, National Oceanographic and Atmospheric Association, U.S. Department of Commerce, Rockville, Maryland, and the Florida Fish and Wildlife Conservation Commission, Division of Marine Fisheries Management, via e-mail at artificialreefdeployments@myfwc.com of the precise location of the reef” (62-341.600 General Permit for the Construction of Artificial Reefs).

Monitoring

The baseline monitoring effort, which will establish baseline conditions and sampling locations for success monitoring will occur as soon as possible (within 30 days) post-construction. Baseline efforts will include

- Establishment of four fixed monitoring transects and four permanent quadrat sampling sites along each transect.
- Collection of video along each transect and photographs at each of four fixed quadrat monitoring locations along each transect. Transect locations shall be preselected at the post-construction baseline monitoring effort to span the east-west and north-south dimensions of the reef.

Approximately 50 non-overlapping frame-grabbed images will be extracted from each transect video. A unique set of 20 random points shall be generated at the time of frame-grabbing and stored with each set of images so that the same points are assessed during each monitoring event. This also ensures that each person examining a particular image will view the same points, thereby allowing for double-blind counting for quality assurance and control purposes. Ten percent (10%) of the images shall be counted by two scorers to assess inter-observer variability. Calculation of percent biological cover percent cover (projected to the surface) will be performed for each image according to the following functional groups/categories:

- macroalgae (identification and percent cover of two dominant species within quadrat),
- microalgae/cyanobacteria,
- encrusting calcareous algae, sponges (genus level), with a separate assessment of percent cover of boring sponge (*Cliona* spp),
- tunicates (with identification of dominant genera),
- zoanthids (genus level), hydroids,
- wormrock (*Phragmatopoma lapidosa*),
- octocorals (genus level), and
- scleractinian corals (species level).

- solitary tunicates, urchins, and
- holothuroids within the quadrat.

The remainder of each video transect shall be reviewed for qualitative changes in benthic community cover/composition in comparison to the pre-construction surveys, previous annual surveys, and the reference sites.

During each survey, a 0.25 square meter (0.5 m by 0.5 m) gridded quadrat will be sampled by the diver/biologist at each location selected at the baseline monitoring event. A list of the locations of the quadrats along each transect with a description of the quadrat location/benthic community shall be provided to the FDEP and USACE after transect establishment.

Within each quadrat, visual estimate of percent cover and genus/species identification shall be performed *in situ* for the following functional groups:

- macroalgae (identification and percent cover of two dominant species within quadrat),
- microalgae/cyanobacteria,
- encrusting calcareous algae, sponges (genus level), with a separate assessment of percent cover of boring sponge (*Cliona* spp),
- tunicates (with identification of dominant genera),
- zoanthids (genus level), hydroids,
- wormrock (*Phragmatopoma lapidosa*),
- octocorals (genus level), and
- scleractinian corals (species level).
- solitary tunicates, urchins, and
- holothuroids within the quadrat.

Individual counts shall be conducted for all octocorals, scleractinian corals, and sponges (not including *Cliona* spp., which shall be assessed for percent cover). Maximum and average algal height of the two dominant microalgae species shall also be recorded. Average algal height shall be estimated by five measurements.

The maximum physical relief of hardbottom from the lowest point to highest point in the quadrat shall be measured to the nearest centimeter.

Success monitoring will occur annually for at least two (3) years post-construction.

Because artificial reefs are among the most common type of mitigation that successfully offsets loss of ecological functions due to hardbottom impacts, the time lag was determined to be short (3 years) to replace lost ecological functions for the relatively simple macroalgae / turf algae dominated community found in the impact areas. Note that artificial reefs at the proposed site have developed coral reef communities. Based on those results, the proposed artificial reefs are expected eventually to provide much more complex hardbottom habitat than that lost in the channel deepening.

Each transect shall be sampled using digital video in progressive scan mode, and survey date and location coordinates will be superimposed on the final deliverable. The diver shall swim at a speed of approximately 20 meters/6 minutes (~3.5 meters/minute) with a constant camera distance of 25 cm above bottom during the portions of the transect to be quantitatively analyzed. For the remainder of the 150-meter transect, the diver shall swim at a speed of 20 meters/5 minutes (~4-5 meters/minute) with a constant camera distance of 25 cm. If the diver is moved off the transect by surge or current, the diver shall return to the point where he/she was disturbed by the wave action, and resume filming at that point. The video transects shall be reviewed during the course of the survey to ensure that there are no gaps in the data due to diver error and that the quality of the video is acceptable for video analysis.

Any missing video transect data or poor quality video shall be re-filmed during the course of the event.

Landscape panoramic views shall be recorded with the digital video camera at the start and end of each transect, and at each interruption of the transect by a sand gap/recommencement at the start of the next piece of substrate. Additionally, close-up video of the tag marking the eyebolt at the start and end of each transect shall be filmed for a frame of reference for the observer viewing the video record. Close-up digital still video and/or photographs shall be obtained of representative benthos along each transect to aid in identification during video analysis. Still photographs shall be obtained using the digital video camera or digital still camera at all quadrat locations and hard coral colonies (if observed) along the transect. Voucher sampling of macroalgae shall be conducted as needed to assist with video identification of macroalgae genera.

Lag Time for Community Development

Because artificial reefs are among the most common type of mitigation that successfully offsets loss of ecological functions due to hardbottom impacts, the time lag was determined to be short (3 years) to replace lost ecological functions for the relatively simple macroalgae / turf algae dominated community found in the hardbottom impact areas.

Success Criteria

Evaluation of the artificial reef(s) success as mitigation will occur via the results of the annual biological monitoring. A UMAM analysis, pursuant to rule (Ch. 62-345, F.A.C.), will be performed using the collected quantitative and qualitative data from both the biological monitoring and mitigation reef(s) monitoring. If UMAM scoring indicates that ecological functions have been effectively offset, the mitigation reef(s) will be deemed a success. UMAM factors include acreages of both impact and mitigation sites, as well as scoring of ecological functions lost or provided at the impact and mitigation sites, respectively. Functions will be assumed offset if 80% of species found in the impact site shall be present in the mitigation site by the time of the completion of the monitoring period; 2) percent cover by the major groups of organisms (functional groups) in the mitigation site shall be no less than it was in the impact site.

Reporting

All data deliverables shall be provided within 90 days after completion of each mitigation reef survey.

The deliverables will include the following data on CD:

- _ all digital video transects and frame-grabbed images from all transects
- _ PointCount files and associated data (i.e. PTS files, MGR files, cd.dat files)
- _ Excel spreadsheets of PointCount data (raw data and summary files)
- _ Excel spreadsheets of *in situ* quadrat data
- _ Spatial GIS shapefiles of transects

A report summarizing the monitoring (permanent transects, quadrats) and analyses will be prepared. The report shall include appropriate graphics/tables, statistical analysis of the collected data, and assessment of ecological functions provided by the mitigation as compared to those provided at the impact site. The report shall be provided within 90 days after completion of the survey in both hard copy and digital format.

If after three (3) annual monitoring events, it is determined that the installed mitigation reef(s) do not adequately offset lost ecological functions, FIND will consult with FDEP and USACE, identify probable causes, take agreed upon corrective actions, and as appropriate extend monitoring for one to two additional annual monitoring events.

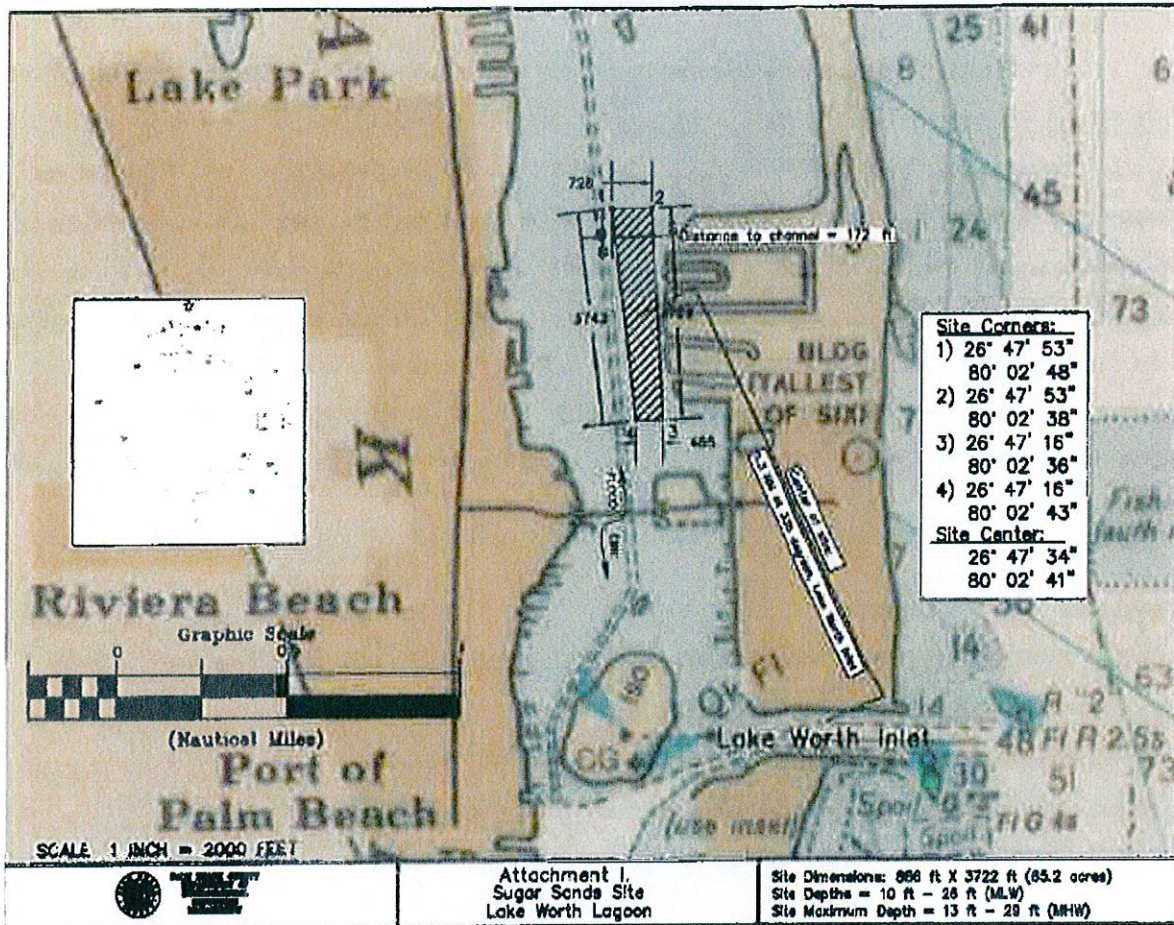


Figure 1. Location of Sugar Sands Artificial Reef Site in Lake Worth Lagoon



Figure 2. Proposed Location of 0.12 Acre Mitigation Reef in the Sugar Sands Artificial Reef Site

WATER SURFACE



APPROX. 26'

14" X 14" SQUARE COLUMN (LIGHT POLES AND
OTHER PRE-CAST STRUCTURES DEPENDING
ON AVAILABILITY)

2'Ø (1'Ø MIN) LIMESTONE
SPECIFIC GRAVITY: 240 LB/FT³

PRE-CAST JERSEY BARRIER OR SIMILAR SIZED MATERIAL

EXISTING BOTTOM



TAYLOR ENGINEERING INC.

10151 DEERWOOD PARK BLVD.

BLDG. 300, SUITE 300

JACKSONVILLE, FL 32256

CERTIFICATE OF AUTHORIZATION # 4915

FIGURE 3

CONCEPTUAL REEF DESIGN DETAILS

Permit Application No. 50-0294306-002

PROJECT

DRAWN BY

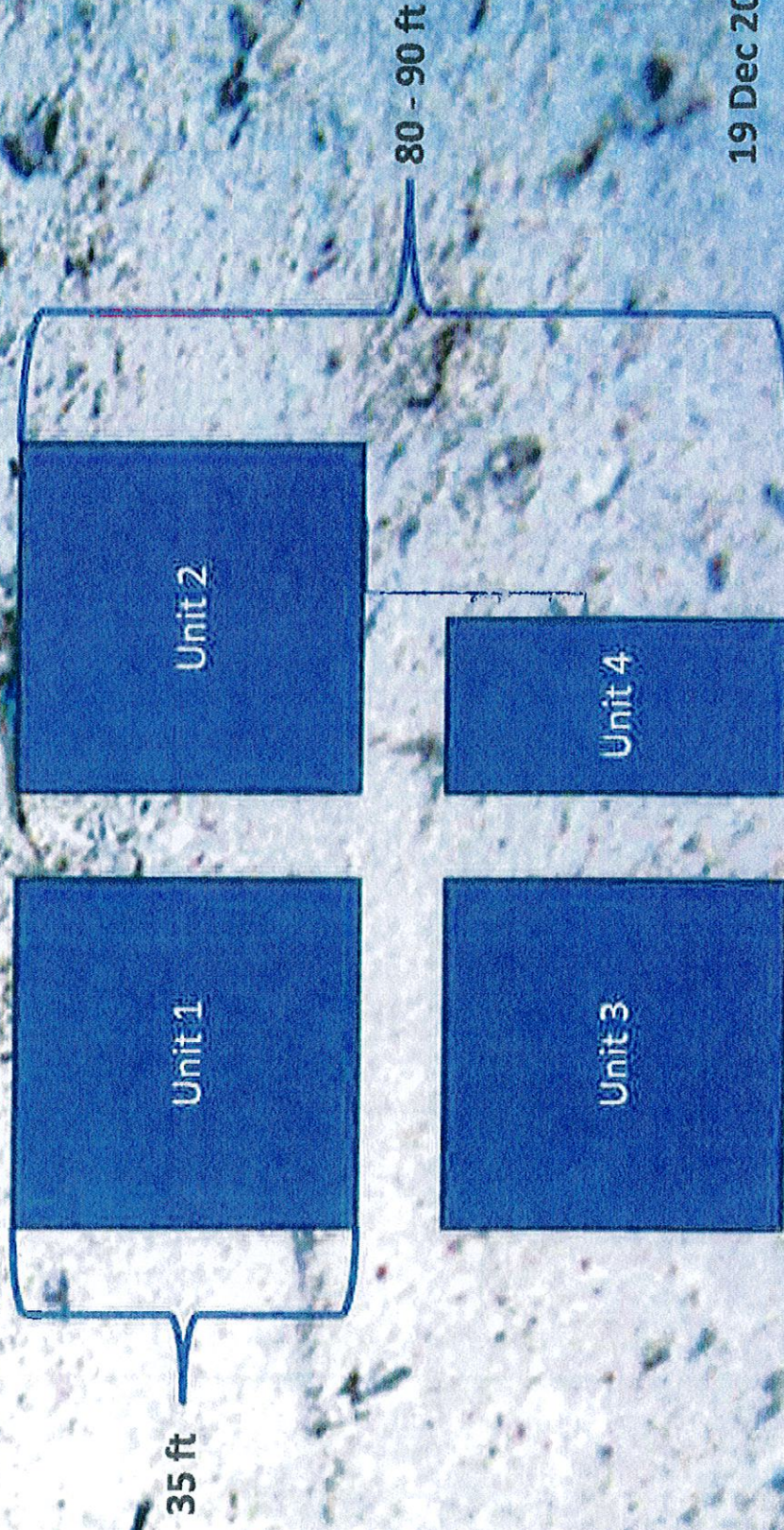
SHEET

DATE

DEC 2013

PRELIMINARY DRAWINGS: THESE DRAWINGS ARE NOT IN FINAL FORM, BUT ARE BEING TRANSMITTED FOR AGENCY REVIEW.

Conceptual Reef Unit Size and Spacing



Permit Application No. 50-0294306-002
ICWW Deepening, Vicinity of Port of Palm Beach
Hardbottom Mitigation Plan

19 Dec 2013





**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

SOUTHEAST DISTRICT OFFICE
3301 GUN CLUB ROAD, MSC 7210-1
WEST PALM BEACH, FL 33406
561-681-6600

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

CLIFFORD D. WILSON III
INTERIM SECRETARY

December 24, 2014

Florida Inland Navigation District
c/o Mark Crosley, Managing Member
1314 Marcinski Road
Jupiter, FL 33477
Sent via Email: mcrosley@aicw.com

Re: File Name: Florida Inland Navigation District- ICWW Port of Palm Beach
File No.: 50-0294306-003
Modification of File No.: 50-0294306-002

Dear Mr. Crosley:

Your request to modify this permit has been received and reviewed by Department staff. This modification clarifies when dredging may be performed.

PROJECT LOCATION

The project is located within the Intracoastal Waterway, Class III Waters, adjacent to P.C.N. 00-43-42-34-00-000-3000 (FIND-Owned Peanut Island Dredged Material Management Area (DMMA)) located north of the Port of Palm Beach and west of the Lake Worth Inlet (Section 34, Township 42 South, Range 43 East), in Palm Beach County (between Latitude N 26° 46' 46.73", Longitude W 80° 02' 44.78" Latitude N 26° 46' 17.10", Longitude W 80° 02' 59.82").

The above modification is not expected to adversely affect water quality and will not be contrary to the public interest provided the following **SPECIFIC CONDITION** is amended and added to the permit as issued. Please note that additions are underlined and deletions are stricken:

SPECIFIC CONDITIONS

(24) To reduce the possibility of injuring or killing a manatee during construction, backhoe / excavator dredging activities will be permitted to take place 24 hours per day, except between shall not be performed during the following time of year: November 15 and March 31, during which time, backhoe / excavator dredging activities will only be permitted during daylight hours. The use of clamshell dredge will be prohibited at night throughout the year; while hydraulic dredging activities will be permitted to take place 24 hours per day throughout the year.

Since the proposed modification is not expected to result in any adverse environmental impact or water quality degradation, the permit is hereby modified as requested. By copy of this letter, we are notifying all necessary parties of the modifications.

This letter of approval does not alter the original expiration date of January 21, 2019, and does not change the original General or Specific Conditions (except as modified herein), or monitoring requirements of the permit (except as modified herein). This letter must be attached to the original permit.

NOTICE OF RIGHTS

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

Petition for Administrative Hearing

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

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

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

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

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

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

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

Judicial Review

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

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



12/24/14

Jason Andreotta
Program Administrator
Submerged Lands & Environmental
Resources Program

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FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7),
Florida Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.



Clerk

Date