ST. LUCIE COUNTY, FLORIDA

COASTAL STORM RISK MANAGEMENT PROJECT

FINAL INTEGRATED FEASIBILITY STUDY AND ENVIRONMENTAL ASSESSMENT

APPENDIX E
Real Estate Plan

US Army Corps
of Engineers
Jacksonville District

This page intentionally left blank

TABLE OF CONTENTS

SECTIONS	Page No
1. STATEMENT OF PURPOSE	E-1
2. PROJECT AND STUDY AUTHORIZATION	E-1
3. PROJECT LOCATION	E-2
4. PROJECT DESCRIPTION	E-3
5. REAL ESTATE REQUIREMENTS	E-10
6. STANDARD ESTATES	E-10
7. NON STANDARD ESTATES	E-11
8. FEDERALLY GOVERNMENT OWNED LAND	E-12
9. NON-FEDERALLY OWNED LAND	E-12
10.NON FEDERAL OPERATION/MAINTENANCE RESPONSIBILITIES	E-12
11.NON FEDERAL SPONSOR'S AUTHORITY TO PARTICIPATE IN PROJECT	E-12
12. NAVIGATION SERVITUDE	E-12
13. ATTITUDE OF THE LANDOWNERS	E-12
14. MINERALS	E-13
15. HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)	E-13
16. INDUCED FLOODING	E-13
17. ZONING ORDINANCES	E-13
18. RELOCATIONS ASSISTANCE (Public Law 91-646)	E-13
19. RELOCATIONS, ALTERATIONS, VACATIONS AND ABANDONMENTS	E-13
20. STANDING TIMBER AND VEGETATIVE COVER	E-13

21. RECREATION RESOURCES E-13

22. CULTURAL RESOURCES E-13

23. OUTSTANDING RIGHTS E-14

24. MITIGATION E-13

25. ACQUISITION/ADMINISTRATIVE COSTS E-14

26. SUMMARY OF PROJECT REAL ESTATE COSTS E-14

27. ACQUISITION SCHEDULE E-15

28. REAL ESTATE CHART OF ACCOUNTS E-15

EXHIBIT A: NON FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY ASSESSMENT E-16

EXHIBIT B: RISK LETTER E-18

EXHIBIT C: SAMPLE CONSOLIDATED JOINT COASTAL PERMIT E-20

EXHIBIT D: SAMPLE SOVEREIGN SUBMERGED LANDS EASEMENT E-37

EXHIBIT E: SAMPLE MEMORANDUM OF AGREEMENT E-40

LIST OF FIGURES

FIGURE E-1 – Project Location Map E-2
FIGURE E-2 – Project Study Area Map E-3
FIGURE E-3 – Project Area Maps E-5
FIGURE E-4 – Borrow Area Map E-9

REAL ESTATE PLAN

1. STATEMENT OF PURPOSE

This Real Estate Plan (REP) is in support of the St. Lucie County, Florida Coastal Storm Risk Management (CSRM) Feasibility Study and Environmental Assessment. The study focuses on the erosion problems and potential storm vulnerability of structures on the southern portion of Hutchinson Island along the shoreline bordering the Atlantic Ocean in St. Lucie County, Florida.

This Real Estate Plan is tentative in nature and is intended for planning purposes only. Both the final real property lines and estimates of value are subject to change even after approval of this report.

2. PROJECT AND STUDY AUTHORIZATION

A Reconnaissance Study (Section 905(b), WRDA 1986 Analysis) was initiated on 25 February 2002 as an initial response to two Resolutions by the Committee on Transportation and Infrastructure of the U.S. House of Representatives. The two resolutions are listed below:

Resolution Docket 2634 St. Lucie County, Florida Shore Protection dated 11 April 2000 states: *"Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review the report of the Chief of Engineers for Fort Pierce Beach, Florida, published as House Document 84, 89th Congress, 1st Session, and other pertinent reports with a view to determining if modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of shore protection and hurricane and storm damage reduction to the shoreline areas in St. Lucie County in the area north of the Ft. Pierce Inlet, the southern five miles of St. Lucie County, and adjacent shorelines."*

Resolution Docket 2757 St. Lucie County, Florida Shore Protection dated 23 July 1998 states: *"Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review the report of the Chief of Engineers for Fort Pierce Beach, Florida, published as House Document 84, 89th Congress, 1st Session, and other pertinent reports with a view to determining if modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of shore protection and hurricane and storm damage reduction to the shoreline areas in St. Lucie County from the current project for Ft. Pierce Beach, Florida southward to the Martin County Line."*

The final St. Lucie County, Florida Section 905(b) Reconnaissance Study was approved on 1 August 2003 and resulted in the finding that there was a Federal interest in proceeding into the feasibility phase.

The authority for conducting this feasibility study is contained in a memorandum dated 1 August 2003 from USACE South Atlantic Division (SAD) stating the following:

"The Section 905(b) analysis for St. Lucie County, Florida, and the letter of intent are approved for proceeding into the feasibility phase of planning for the five southernmost miles of the study area."

3. PROJECT LOCATION

St. Lucie County is located along the east coast of south-central Florida, approximately 225 miles south of Jacksonville and 100 miles north of Miami (**Figure E-1 – Project Location**). The St. Lucie County, Florida shoreline consists of a 25-mile-long narrow barrier island named Hutchinson Island, bordered by the Atlantic Ocean to the east, and the Indian River Lagoon (Atlantic Intracoastal Waterway) to the west. Hutchinson Island is split by Fort Pierce Inlet into North Hutchinson Island and South Hutchinson Island.

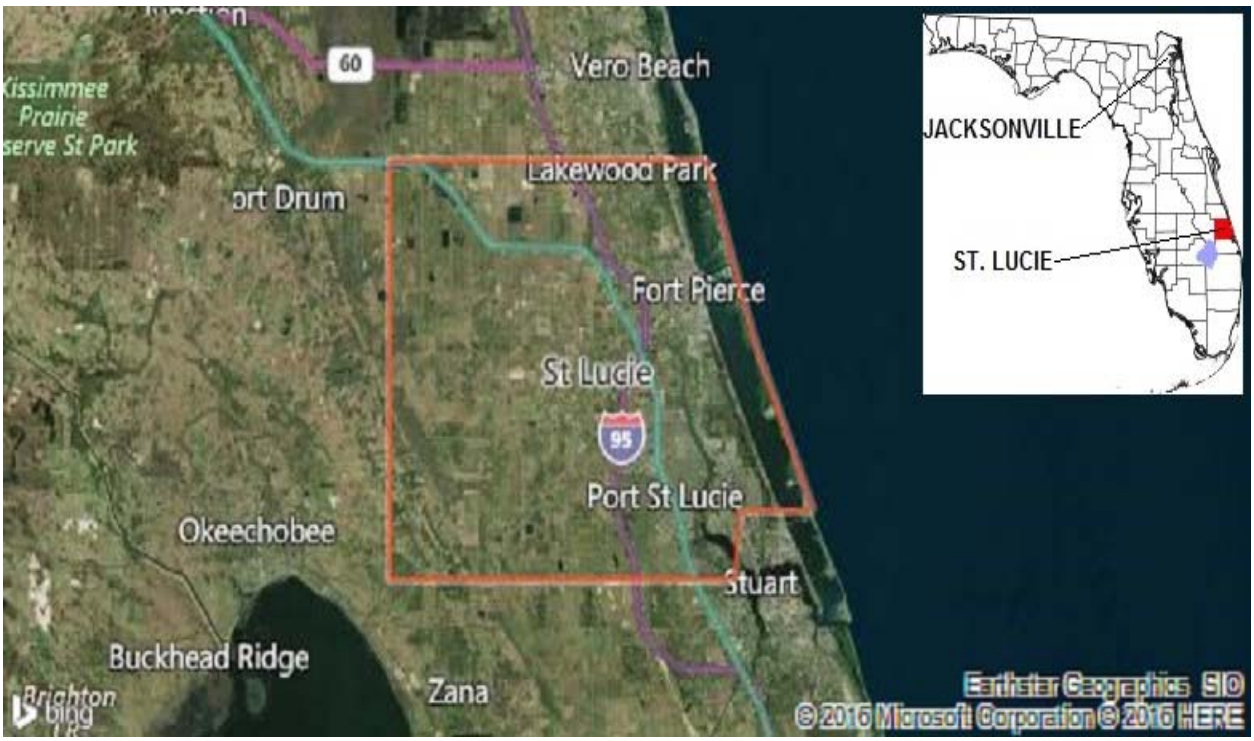


Figure E-1 Project Location

4. PROJECT DESCRIPTION

a. The study area is a 5 mile stretch of shoreline which is located on Hutchinson Island. This area extends along the southern region of St. Lucie County's Atlantic coastline, from FDEP survey range monuments[1] R-77 through R-115, southward to the St. Lucie County/Martin County line. (**Figure E-2 – Study Area**)

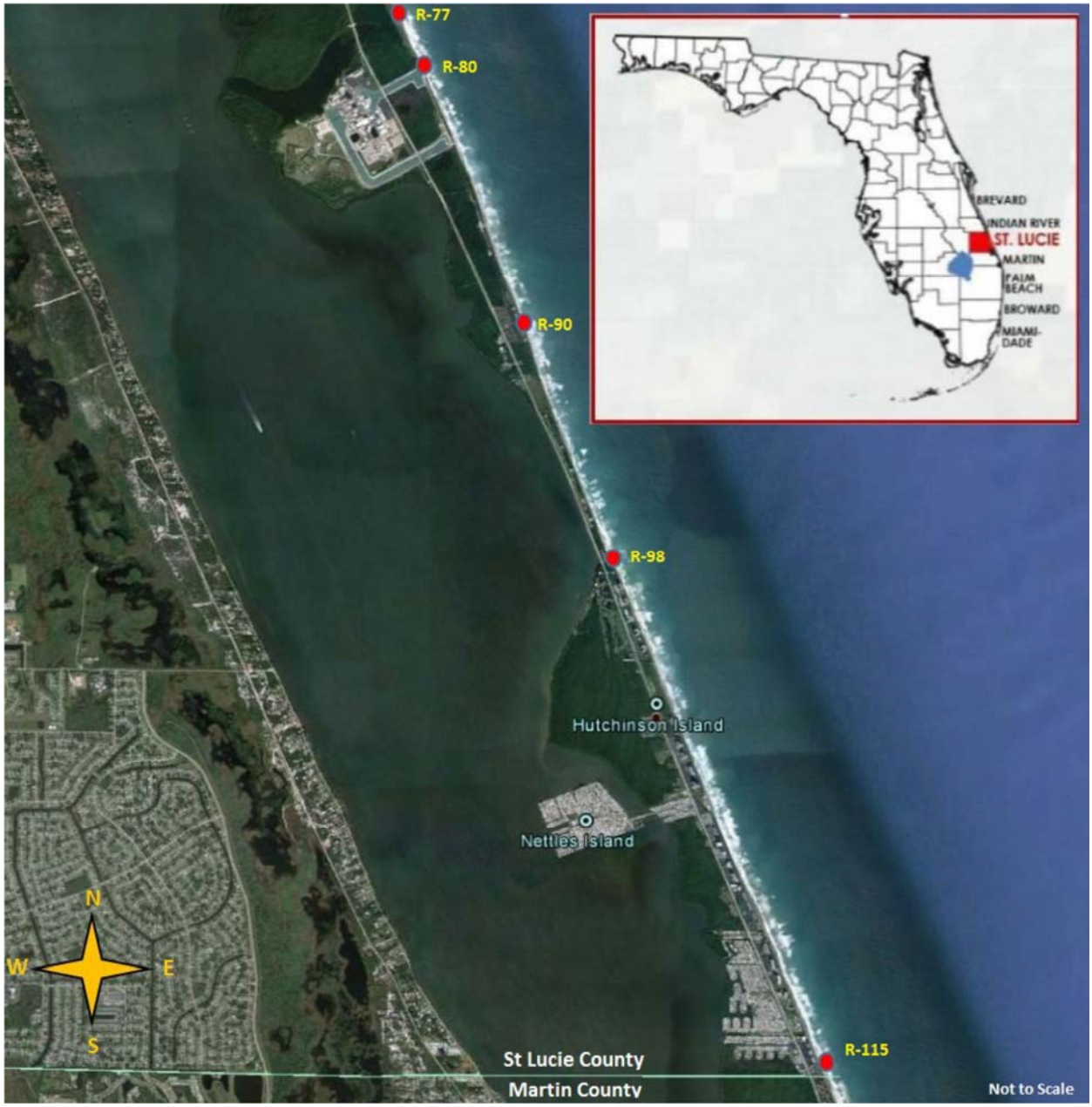


Figure E-2 Study Area

[1] FDEP reference (R) monuments are located approximately every 1000 feet along the shoreline and serve as geographic reference points for historic and contemporary shoreline monitoring. They are used as reference points throughout this report.

b. The recommended plan covers 3.3 miles of the shoreline between FDEP monuments R-98.5 and the Martin County line with tapers extending to the north from R-98.5 to R-97.5 and to the south from R-1 to R-2. (**Figure E-3 – Project Maps**) This design plan provides for a 20 foot berm extension from the existing dune. The expected volume of beach-fill material for the initial construction of the design beach profile will require an average of 422,000 cubic yards of material.

The borrow areas are located in the Atlantic Ocean off the shores of the St. Lucie County. The north borrow area sand source is approximately 5 miles offshore at the northern end of the proposed placement area. The south borrow area sand source is approximately 4 miles offshore roughly in the middle of the proposed placement area. (**Figure E-4 – Borrow Area Map)**

Figure E-3 - Project Map (Map 1 of 4)

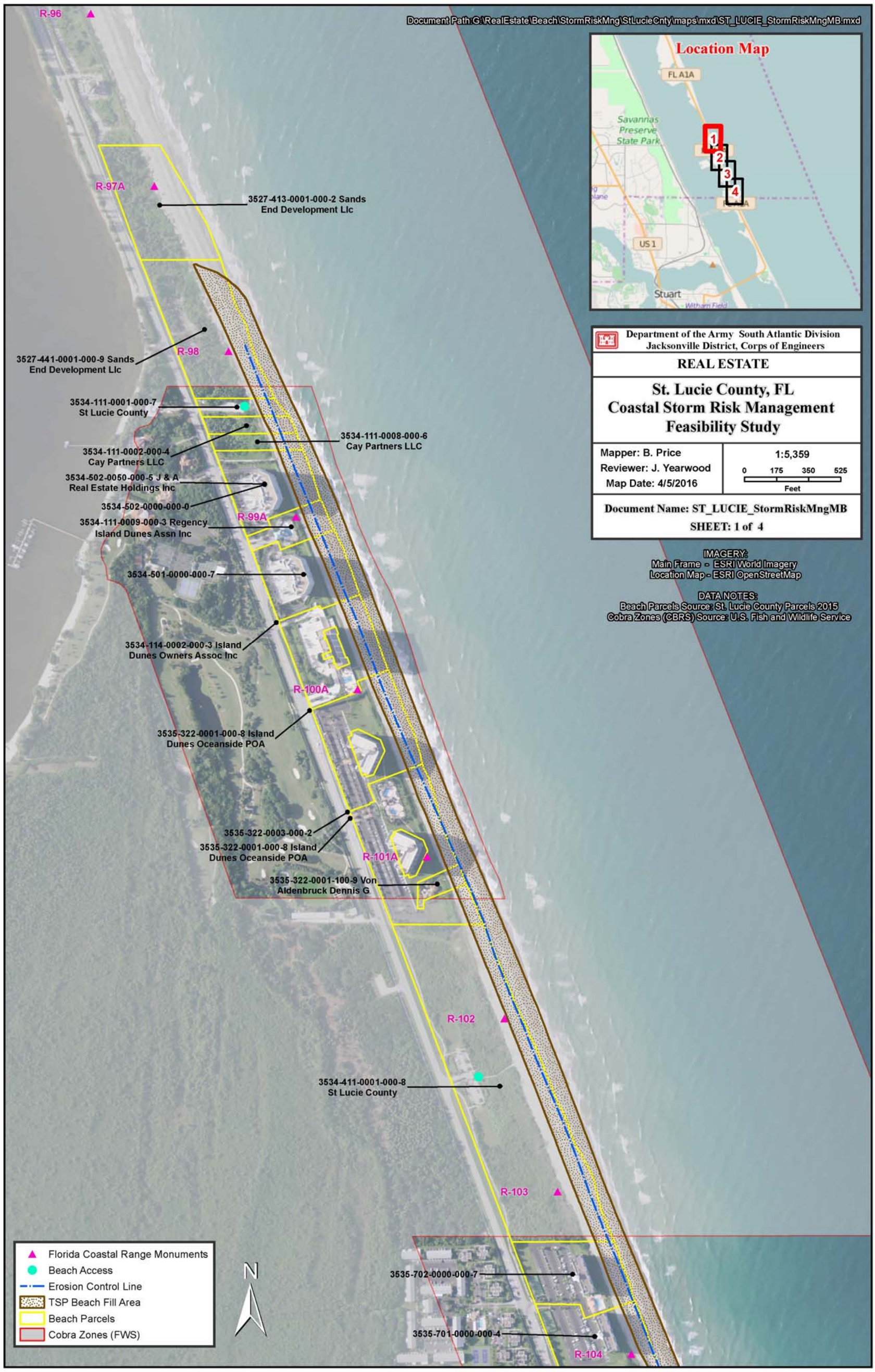


Figure E-3 - Project Map (Map 2 of 4)

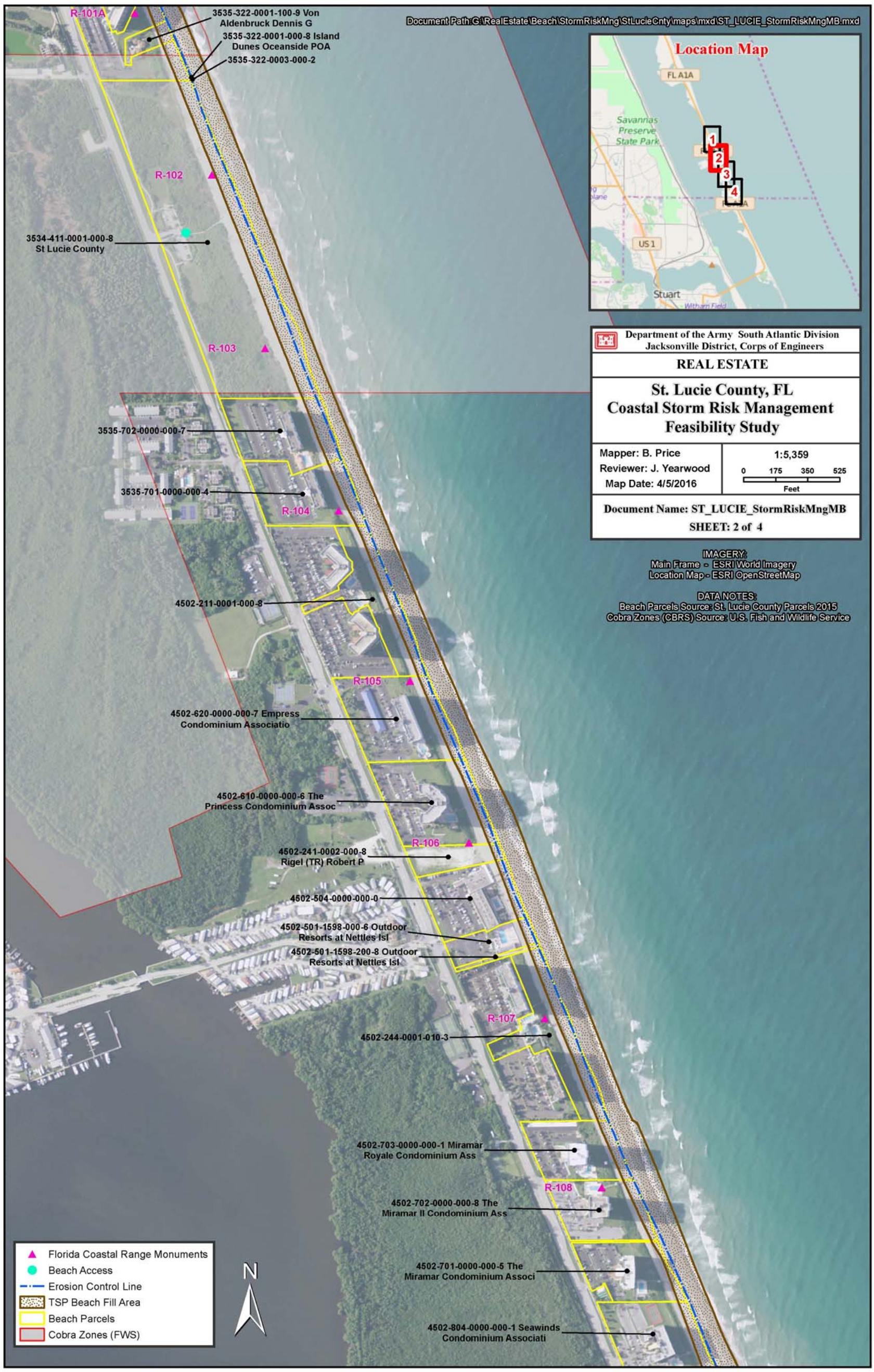


Figure E-3 - Project Map (Map 3 of 4)

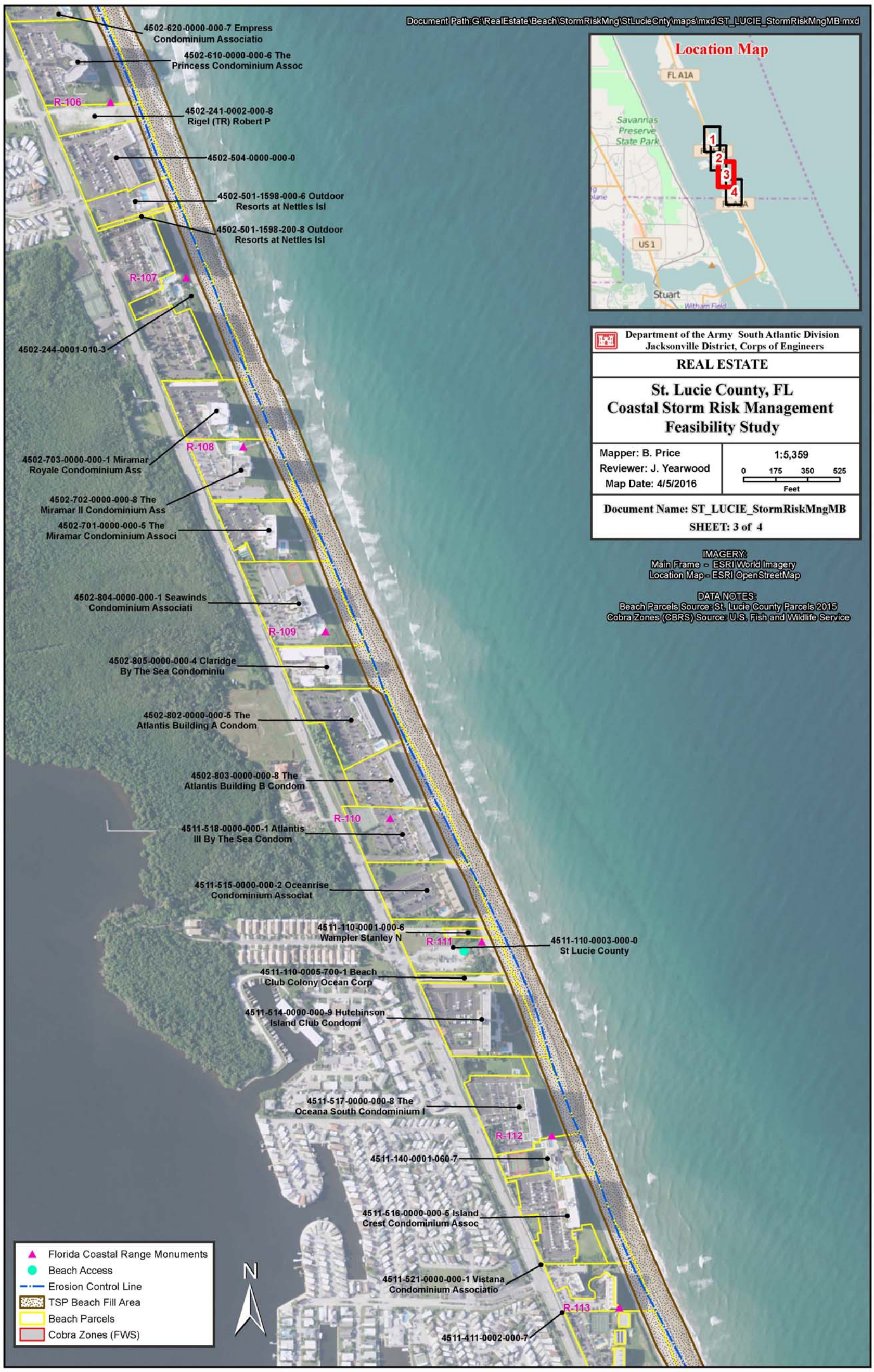


Figure E-3 - Project Map (Map 4 of 4)

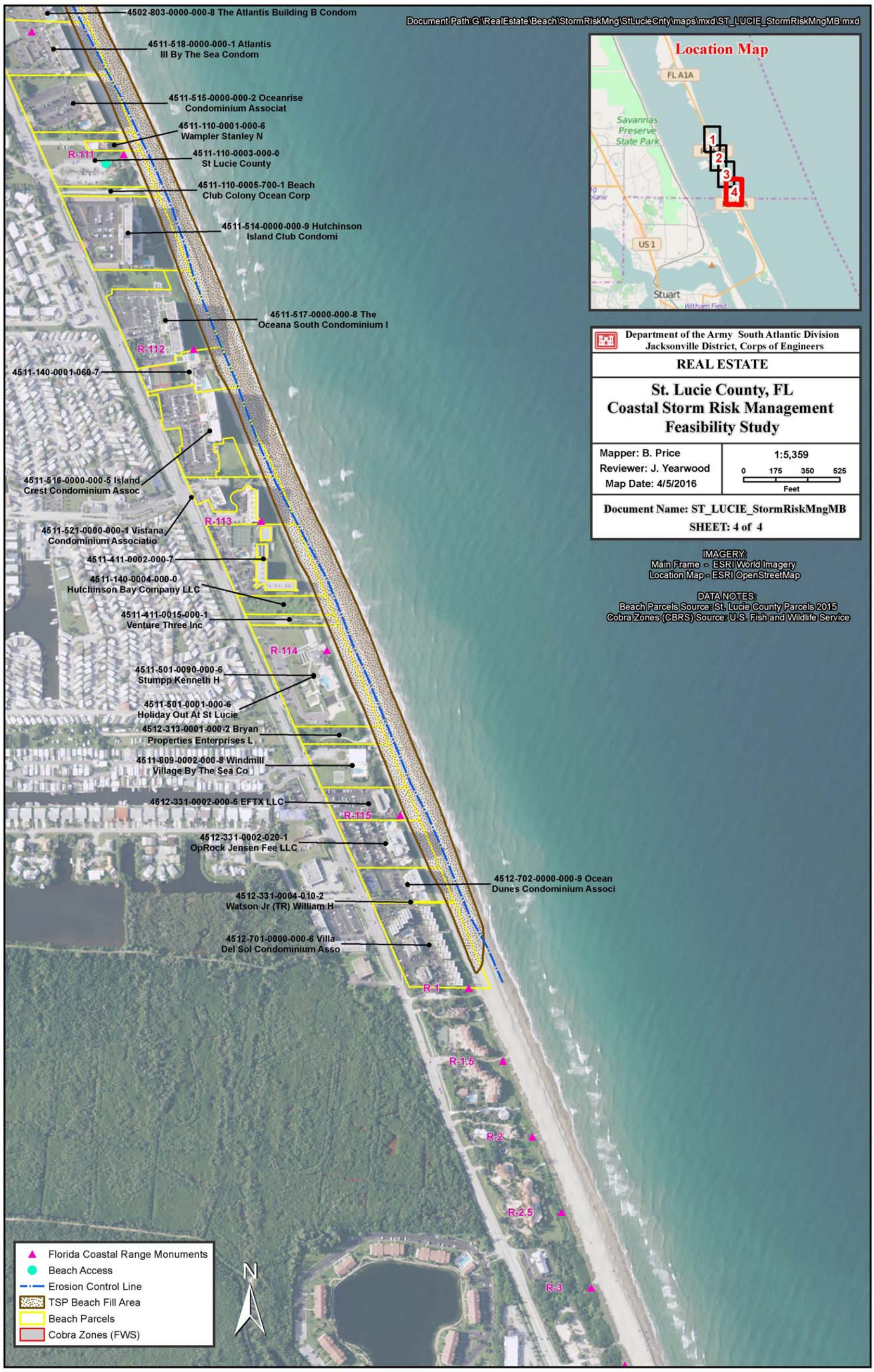
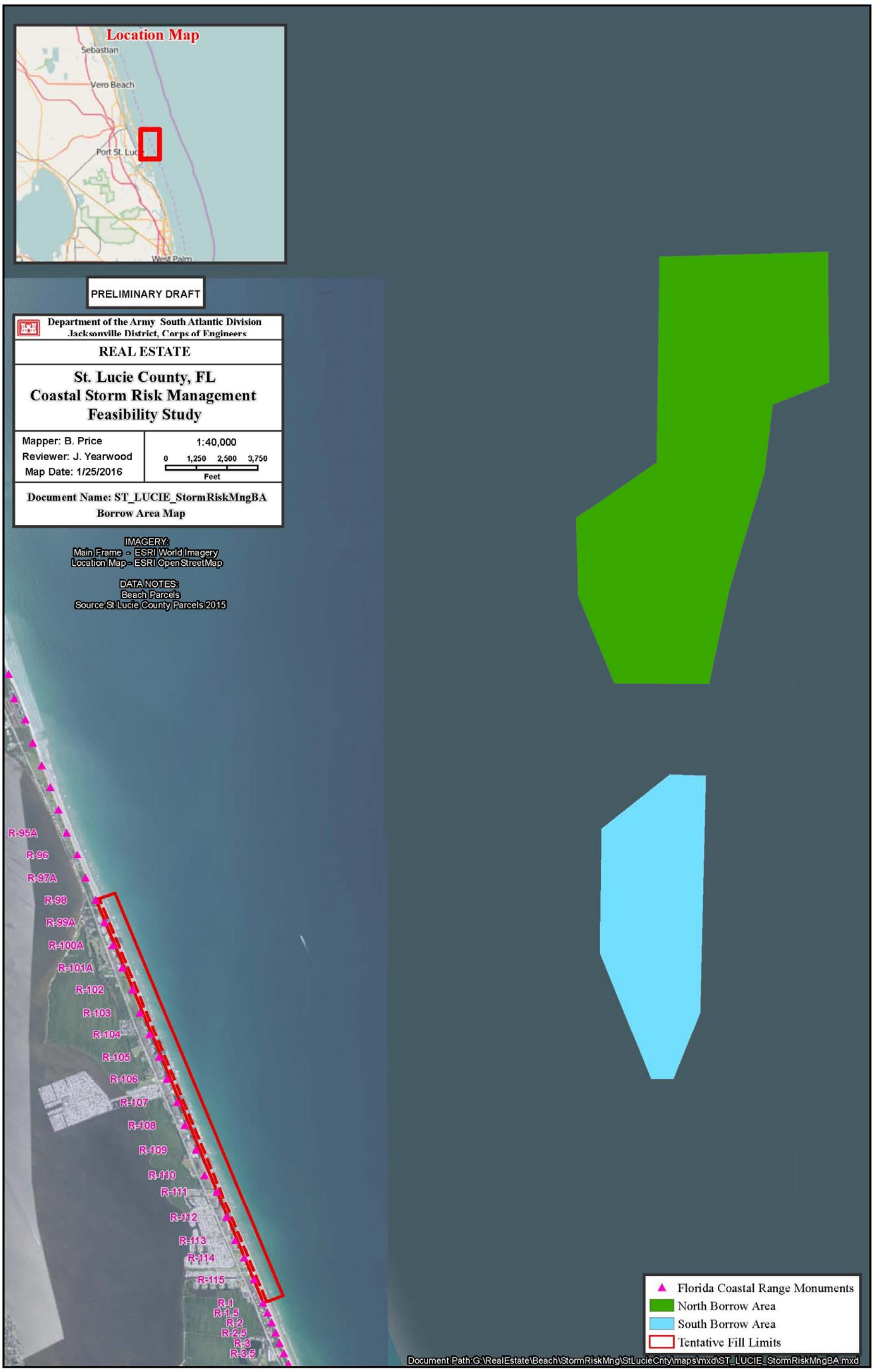


Figure E-4 – Borrow Area Map



5. REAL ESTATE REQUIREMENTS

The State of Florida beach nourishment, beach restoration, and erosion control projects are established pursuant to Florida Statute, Section 161.141, Property Rights of State and Private and Private Upland Owners in Beach Restoration Project Areas. The Statue requires a mean high water boundary line be determined between state sovereign lands and the adjacent upland property. The line is referred to as an erosion control line (ECL). Florida Statue, Section 161.191, Vesting of Title to Lands, states that titles to all lands seaward of the ECL shall be vested to the state by right of its sovereignty. The lands landward of the ECL remain vested to the upland owner.

The Erosion Control Line (ECL) has been established, and in accordance with the Interagency Coordination Agreement for Civil Works Projects, executed by the Florida Department of Environment Protection and the U.S. Army Corps of Engineers, Mobile and Jacksonville Districts, on February 28, 2006, the State of Florida issues a Sovereign Submerged Lands Authorization (SSLA) to the project sponsor. The SSLA is contained within the Consolidated Joint Coastal (CJC) Permit for placement areas located seaward of the ECL. The State of Florida issues the permit in ten year increments in connection with the use of these lands.

Perpetual beach storm damage reduction easements will be required over approximately 52 parcels. There are approximately 48 privately owned parcels and 4 public access/parking parcels owned in fee by the non-federal sponsor located within the current project footprint.

A noncompetitive negotiated agreement will be required from the Bureau of Ocean Energy Management (BOEM) in accordance with Outer Continental Shelf Lands Act for the mining of sand from the offshore borrow areas. A sample is located behind Exhibit E

Staging areas will require temporary work area easements, if not located within the perpetual storm damage reduction easement areas. Staging areas have not yet been identified. Access to the project and the staging areas will be by public roads and non-federal sponsor owned lands situated within the project area.

6. STANDARD ESTATES

<u>PERPETUAL BEACH STORM DAMAGE REDUCTION EASEMENT</u>

A perpetual and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tract No. __) for use by the (Project Sponsor), its representatives, agents, contractors, and assigns, to construct; preserve; patrol; operate; maintain; repair; rehabilitate; and replace; a public beach [a dune system] and other erosion control and storm damage reduction measures together with appurtenances thereto, including the right to deposit sand; to accomplish any alterations of contours on said land; to construct berms [and dunes]; to nourish and renourish periodically; to move, store and remove equipment and supplies; to erect and remove temporary structures; and to perform any other work necessary and incident to the construction, periodic renourishment and maintenance of the (Project Name), together with the right of public use and access; [to plant vegetation on said dunes and berms; to erect, maintain and

remove silt screens and sand fences; to facilitate preservation of dunes and vegetation through the limitation of access to dune areas;] to trim, cut, fell, and remove from said land all trees, underbrush, debris, obstructions, and any other vegetation, structures and obstacles within the limits of the easement (except_____); [reserving, however, to the grantor(s), (his) (her) (its) (their) (heirs), successors and assigns, the right to construct dune overwalk structures in accordance with any applicable Federal, State or local laws or regulations, provided that such structures shall not violate the integrity of the dune in shape, dimension or function, and that prior approval of the plans and specifications for such structures is obtained from the (designated representative of the Project Sponsor) and provided further that such structures are subordinate to the construction, operation, maintenance, repair, rehabilitation and replacement of the project; and further] reserving to the grantor(s), (his) (her) (its) (their) (heirs), successors and assigns all such rights and privileges as may be used and enjoyed without interfering with or abridging the rights and easements hereby acquired; subject however to existing easements for public roads and highways, public utilities, railroads and pipelines.

TEMPORARY WORK AREA EASEMENT

A temporary easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for a period not to exceed _____, beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as a (borrow area) (work area), including the right to (borrow and/or deposit fill, spoil and waste material thereon) (move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the _____ Project, together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

7. NON STANDARD ESTATES

As noted in Section 5, Real Estate Requirements; The State of Florida will issue a Consolidated Joint Coastal Permit and Sovereign Submerged Lands Authorization for use of lands seaward of the ECL. The Consolidated Joint Coastal Permit and Sovereign Submerged Lands Authorization are considered non-standard estate. A sample of the Consolidated Joint Coastal Permit is attached as Exhibit C and a sample of Sovereign Submerged Lands Authorization is attached as Exhibit D.

A Memorandum of Agreement between the Bureau of Ocean Energy Management, the U.S. Army Corps of Engineers, and the non-federal sponsor will be executed pursuant to 43 United States Code, Section 1337(k) (2) Agreements for Use of Resources for Shore Protection, Beach or Coastal Wetlands Restoration, or other Projects, “the Secretary may negotiate with any person an agreement for the use of the Outer Continental Shelf sand, gravel and shell resources for (1) for use in a program of, or project for, shore protection, beach restoration, or local government agency, or (2) for use in a construction project,

that is funded in whole or in part by or authorized by the Federal Government. A sample of the document is attached as Exhibit E.

8. FEDERALLY GOVERNMENT-OWNED LAND

There are no Federal Government known lands in the project area.

9. NON-FEDERALLY OWNED LAND

The non-Federal lands are owned by the non-federal sponsor, private landowners and commercial landowners.

10. NON-FEDERAL OPERATION AND MAINTAINANCE RESPONSIBILITIES

St. Lucie County is the Non-Federal Sponsor (NFS) for the project. The non-federal sponsor has the responsibility to acquire all real estate interests required for the Project. The non- federal sponsor will have operation and maintenance responsibility for the project once construction has been completed. Future periodic nourishments are considered construction and will be performed in accordance with the Project Partnership Agreement, when approved.

11. NON-FEDERAL SPONSOR'S AUTHORITY TO PARTICIPATE IN PROJECT

St. Lucie County, Florida is a political subdivision of the State of Florida as provided by Florida Statute Title XI, Chapter 161, Section 141, Beach and Shore Preservation to, "establish and administer programs of housing, slum clearance, community redevelopment, conservation, flood and beach erosion control, air pollution control, and navigation and drainage and cooperate with governmental agencies and private enterprises in the development and operation of such programs."

The non-federal sponsor has been an integral part of the Project Delivery Team (PDT) from the conception of the project. At each step of the process, the NFS has contributed to the available information and participated in the formulation of this study. The Assessment of the NFS Real Estate Acquisition Capability is attached as Exhibit A. The Risk Letter is attached as Exhibit B, and advises the non-federal sponsor that lands should not be acquired for the project prior to execution of the Project Partnership Agreement (PPA).

12. NAVIGATION SERVITUDE

In accordance with CECC-R Bulletin 14-05, Availability of the Navigation Servitude for Coastal Storm Damage Reduction Projects dated April 9, 2014, navigational servitude is not applicable to this project.

13. ATTITUDE OF THE LANDOWNERS

The St. Lucie County, private landowners, commercial landowners, and local communities fully support the project.

14. MINERALS

Preliminary assessment indicates no known present or anticipated mineral or sub-surface mineral extraction activities within the vicinity of the proposed area which may affect construction, operation, or maintenance of the project.

15. HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)

There are no known HTRW identified within the project area.

16. INDUCED FLOODING

There will be no induced flooding directly associated with this project.

17. ZONING ORDINANCES

Application or enactment of zoning ordinances will not be used in lieu of acquisition.

18. RELOCATIONS ASSISTANCE (PUBLIC LAW 91-646)

No persons, businesses or structures will be impacted by the project. There will be no relocations under PL 91-646 for this project.

19. RELOCATIONS, ALTERATIONS, VACATIONS, AND ABANDONMENTS (UTILITIES, STRUCTURES AND FACILITIES, CEMETERIES, AND TOWNS).

There are no structural facilities to be affected by the construction of the project.

20. STANDING TIMBER AND VEGETATIVE COVER

Existing dune vegetation will be impacted during construction. The Tentatively Selected Plan includes planting dune vegetation on newly constructed areas as well as re-vegetating areas disturbed during construction. It is assumed that dune planting will only be necessary for initial construction and that vegetation will spread naturally to any areas that are re-nourished in the future.

21. RECREATION RESOURCES

There are no separable recreational lands identified for this project.

22. CULTURAL RESOURCES

There are no known cultural resources identified as affected by the project.

23. OUTSTANDING RIGHTS

There are no known outstanding rights in the project area.

24. MITIGATION

There is no mitigation required.

25. ACQUISITION/ADMINISTRATIVE COSTS

Revision to Policy Guidance Letter No. 11, Credit for Lands, Easements, Right-of-Way (LERR) at Shore Protection Projects, dated 21 April 1989, and ER 405-1-12, Real Estate Handbook, directs lands subject to shore erosion required for project purposes be appraised considering special benefits. The intent is to preclude credit for lands needed for shore protection projects, when the increase in value of the remaining lands would offset compensation for the property as well as any severance damages. Erodible land protected by a Federal project is valued at zero as it will be enhanced post-project.

The estimate of the Federal real estate acquisition administrative cost including a contingency is $556,000.00. This cost includes project real estate planning, mapping, review, oversight, monitoring, crediting review costs of approximately 52 acquisitions, certification of lands required for project purposes, real estate analysis or other requirements that may be necessary during Planning, Engineering and Design (PED). The non-Federal sponsor will receive credit towards its share of real estate administrative project cost incurred for certification.

The estimate of the non-federal sponsor administrative costs associated with the acquisition including a contingency is $834,000.00. The non-Federal Sponsor has been provided with requirements regarding acquisition policies and procedures, including compliance with Public Law 91-646, as amended, Land, Easement, Right-of-Way, relocation and Disposal (LERRD) crediting procedures, and milestones for the land acquisition.

26. SUMMARY OF PROJECT REAL ESTATE COSTS

The following cost figures are subject to change prior to construction.

a. Lands and Damages		$0
b. Acquisition Administrative costs		$1,390,000
Federal*	$556,000	
Non-Federal	$834,000	
c. Total Estimated Real Estate Cost		$1,390,000
d. Contingency (28%)		$389,200
e. **Total Estimated Real Estate Cost with Contingency**		**$1,779,200**

* Includes Corps Real Estate planning, monitoring, oversight, and coordination with the SFWMD sponsor.

27. ACQUISITION SCHEDULE

The NFS is responsible for acquiring real estate interests required for the project. The Perpetual Storm Damage Reduction Easements, Consolidated Joint Coastal Permit, and the BOEM Agreement and Sovereign Submerged Lands Easement will take approximately 6 -18 months to acquire once final plans and specifications have been completed and the Project Partnership Agreement has been executed. The Project Sponsor, Project Manager and Real Estate Technical Lead will formulate the milestone schedule upon project approval to meet dates for advertisement and award of the construction contract.

28. REAL ESTATE CHART OF ACCOUNTS

01	Lands & Damages	$ 0
01B--	Acquisition/Admin	
01B20	By Project sponsor (LS)	$834,000
01B40	Review of Project sponsor	$556,000
TOTAL REAL ESTATE COST EXCLUDING CONTINGENCY		**$1,390,000**
	CONTINGENCY (28%)	$389,200
TOTAL PROJECT REAL ESTATE COST		**$1,779,200**

ASSESSMENT OF NON-FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY FOR ST. LUCIE COUNTY COASTAL STORM RISK MANANGMENT PROJECT

I. Legal Authority:

a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? YES

b. Does the sponsor have the power of eminent domain for this project? YES

c. Does the sponsor have "quick-take" authority for this project? YES

d. Are any of the lands/interests in land required for the project located outside the sponsor's political boundary? NO

e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? NO

II. Human Resource Requirements:

a. Will the sponsor's in-house staff require technical training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? NO

b. If the answer to IIa. is "yes," has a reasonable plan been developed to provide such training? N/A

c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? YES

d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? YES

e. Can the sponsor obtain contractor support, if required in a timely fashion? YES

f. Will the sponsor likely request USACE assistance in acquiring real estate? NO

III. Other Project Variables:

a. Will the sponsor's staff be located within reasonable proximity to the project site? YES

b. Has the sponsor approved the project/real estate schedule/milestones? Project milestone will be developed during PED, will be joint effort between RE, PM and NFS

IV. Overall Assessment:

a. Has the sponsor performed satisfactorily on other USACE projects? YES

b. With regard to this project, the sponsor is anticipated to be: Highly Capable

V. Coordination:

a. Has this assessment been coordinated with the sponsor? YES

b. Does the sponsor concur with this assessment? YES

Date: 4/21/16

Prepared by:

Emmanuel J. Freeman
Realty Specialist
Real Estate Division
Jacksonville District

Reviewed by:

Hansler A. Bealyer
Chief, Acquisition Branch
Real Estate Division
Jacksonville District

Reviewed and approved by:

Audrey C. Ormerod
Chief, Real Estate Division
Real Estate Division
Jacksonville District

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 San Marco Boulevard
JACKSONVILLE, FLORIDA 32207-8175

APR 2 5 2016

REPLY TO
ATTENTION OF

Real Estate Division

Subject: St. Lucie County Coastal Storm Risk Management Project

Mr. Richard A. Bouchard, P.E.
St. Lucie County Engineering
2300 Virginia Avenue
2nd Floor Annex, Room 229
Ft. Pierce, FL 34982-5652

Dear Mr. Bouchard:

The intent of this letter is to formally advise the St. Lucie County sponsor for the project, of the risks associated with land acquisition prior to the execution of the Project Partnership Agreement (PPA) or prior to the Government's formal notice to proceed with acquisition. If a non-Federal sponsor deems it necessary to commence acquisition prior to an executed PPA for whatever reason, the non- Federal sponsor assumes full and sole responsibility for any and all costs, responsibility, or liability arising out of the acquisition effort.

Generally, these risks include, but may not be limited to, the following:

a. Congress may not appropriate funds to construct the proposed project;

b. The proposed project may otherwise not be funded or approved for construction;

c. A PPA mutually agreeable to the non-Federal sponsor and the Government may not be executed and implemented;

d. The non-Federal sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of CERCLA, as amended;

e. The non-Federal sponsor may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the project;

f. The non-Federal sponsor may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under P.L. 91-646 as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after PPA

execution and the Government's notice to commence acquisition and performance of LERRD; and

g. The non-Federal sponsor may incur costs or expenses in connection with its decision to acquire or perform LERRD in advance of the executed PPA and the Government's notice to proceed which may not be creditable under the provisions of Public Law 99-662 or the PPA.

We appreciate your participation in this project. Should you have questions or concerns pertaining to this letter please feel free to contact Emmanuel Freeman at (904) 232-1636.

Sincerely,

Audrey C. Ormerod

Audrey C. Ormerod
Chief, Real Estate Division

Exhibit C

((SAMPLE) Consolidated Joint Coastal Permit)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

CONSOLIDATED JOINT COASTAL PERMIT AND SOVEREIGN SUBMERGED LANDS AUTHORIZATION

PERMITTEE:
U.S. Army Corps of Engineers
Jacksonville District
Attn: Eric P. Summa, Chief
Environmental Branch
PO Box 4970
Jacksonville, FL 32232-0019

PERMIT INFORMATION:
Permit Number: 030774-002-JC

Project Name: Bal Harbor Nourishment

County: Miami-Dade

Issuance Date: July 11, 2013

Expiration Date: July 11, 2028

REGULATORY AUTHORIZATION:

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

PROJECT DESCRIPTION:

The project involves the periodic nourishment of 0.9 miles of eroding shoreline at Bal Harbor. Fill material for the project will be excavated from the Bakers Haulover Inlet ebb shoal.

PROJECT LOCATION:

The borrow area is located approximately 800 feet east of Bakers Haulover Inlet. The beach nourishment site is located south of Bakers Haulover Inlet, and extends from DEP Range monument R-27 to approximately 350 feet south of R-31, in Miami-Dade County, Sections 23, 26 and 35, Township 52 South, Range 42 East, Atlantic Ocean, Class III Waters.

PROPRIETARY AUTHORIZATION:

This activity also requires a proprietary authorization, as the activity is located on sovereign submerged lands held in trust by the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), pursuant to Article X, Section 11 of the Florida Constitution, and Sections 253.002 and 253.77, F.S. The activity is not exempt from the need to obtain a proprietary authorization. The Board of Trustees delegated, to the Department, the responsibility to review and take final action on this request for proprietary authorization in accordance with

Section 18-21.0051, F.A.C., and the Operating Agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C. This proprietary authorization has been reviewed in accordance with Chapter 253, F.S., Chapter 18-21, F.A.C., and the policies of the Board of Trustees.

As staff to the Board of Trustees, the Department has reviewed the project described above, and has determined that the beach nourishment activities qualify for a Letter of Consent to use sovereign, submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein. Pursuant to the Interagency Coordination Agreement (dated February 28, 2006), activities by the U.S. Army Corps of Engineers (Corps) on sovereign submerged lands that do not fall within one of the federal powers listed in the Sovereign Submerged Lands Act under 43 USC 1311 (d) or 43 USC 1314 will require proprietary authorization from the State, and "the parties agree that authorization to use sovereignty submerged lands may be issued to the project local sponsor." Therefore, consent is hereby granted to Miami-Dade County's Department of Regulatory and Economic Resources (RER), the project's local sponsor, pursuant to Chapter 253.77, F.S., to perform the activity on the specified sovereign submerged lands.

The Department has also determined that the use of the offshore borrow area for more than 5 years requires a public easement for the use of those lands, pursuant to Chapter 253.77, F.S. The Department intends to issue the public easement to RER, the project's local sponsor, subject to the conditions outlined in the previously issued *Consolidated Intent to Issue* and in the Recommended Proprietary Action (entitled *Delegation of Authority*).

The final documents required to execute the easement have been sent to the Division of State Lands. The Department intends to issue the easement upon satisfactory execution of those documents. **You may not begin construction of this activity on state-owned, sovereign submerged lands until the easement has been executed to the satisfaction of the Department.**

COASTAL ZONE MANAGEMENT:

This permit constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

WATER QUALITY CERTIFICATION:

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

LOCAL SPONSOR AGREEMENT:

The Department will enter into a contractual agreement with the local project sponsor, RER, under which RER will be responsible for conducting monitoring, for the protection of hardbottom, nesting marine turtles, their hatchlings and their habitat. The agreement is enforceable against RER and is independent of this permit. In the event that RER does not conduct all necessary marine turtle protection and monitoring requirements, the Permittee is still

responsible for those marine turtle protection measures specified by the applicable U.S. Fish & Wildlife Service Biological Opinion and the National Marine Fisheries Service Biological Opinion for this project.

AGENCY ACTION:

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

GENERAL CONDITIONS:

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

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

   a) operational plans;
   b) project dimensions, size or location;
   c) ability to adhere to permit conditions;
   d) project description included in the permit;
   e) monitoring plans.

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

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

   a) a description of and cause of noncompliance;
   b) the period of noncompliance, including dates and times;
   c) impacts resulting or likely to result from the non-compliance;
   d) steps being taken to correct the non-compliance; and
   e) the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

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

5. Nothing herein conveys to the Corps or creates in the Corps any property right, any interest in real property, any title to land or water, constitutes State recognition or acknowledgment of title, or constitutes authority for the use of Florida's sovereign submerged lands seaward of the mean high-water line or an established erosion control line, unless herein provided, and the necessary title, lease, easement, or other form of consent authorizing the proposed use has been obtained from the State.

6. Any delineation of the extent of a wetland or other surface water submitted as part of the application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this authorization or a formal determination under section 373.421(2), F.S., provides otherwise.

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

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

9. The Corps specifically agrees to allow Department personnel with proper identification, at reasonable times and in compliance with Corps specified safety standards access to the premises where the authorized activity is located or conducted for the purpose of

ascertaining compliance with the terms of this document and with the rules of the Department and to have access to and copy any records that must be kept; to inspect the facility, equipment, practices, or operations regulated or required; and to sample or monitor any substances or parameters at any location reasonably necessary to assure compliance. Reasonable time may depend on the nature of the concern being investigated.

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

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

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

SPECIFIC CONDITIONS:

1. All reports or notices relating to this permit shall be sent to the JCP Compliance Officer (E-mail: JCPCompliance@dep.state.fl.us), unless otherwise specified in the permit condition. **All submittals shall clearly indicate the project name (Bal Harbor Nourishment), permit number (0307741-002-JC) and relevant permit condition numbers**.

2. At least **28 days** prior to construction, and at least **14 days** prior to the pre-construction meeting (referenced above), the Permittee shall submit, for review by the Department, one (1) electronic copy of detailed **final construction plans** and one (1) electronic copy of the **final construction specifications** that are consistent with the Activity Description of this permit and the approved permit drawings. Any significant deviations from the permit or permit drawings, and any significant changes made during construction, as necessitated by field conditions, shall be addressed pursuant to General Condition #2. At a minimum, the final construction plans and specifications should include the following:

a. A written summary of the construction schedule, the specific type of dredge equipment and construction methods to be used and the (final) anticipated volume of material to be dredged from each borrow area;

b. A plan view of all staging and beach access areas, overlaid on a recent aerial photograph;

c. The names, credentials and contact information for the individuals who will conduct the turbidity monitoring and biological monitoring;

d. A copy of the Contractor's Environmental Protection Plan, or equivalent, that provides **project-specific** details of the Best Management Practices (BMPs) that will be implemented to prevent erosion, turbidity and the release of hazardous substances at the dredge, pump-out and pipeline locations and staging areas; and

e. A Grade Stake Recovery Plan (for beach areas).

3. At least **14 days** prior to the commencement of project construction, the Permittee shall conduct a conference to review the specific conditions and monitoring requirements of this permit and the Local Sponsor Agreement with the Permittee's contractors (including the authorized marine turtle handler), a Local Sponsor (RER) representative, the area or district engineer of record, the Florida Fish and Wildlife Conservation Commission (FWC) and the Department's JCP Compliance Office (or their designee). This condition can be best met at the pre-construction conference arranged by the Permittee. In order to ensure that appropriate representatives are available, the Permittee is advised to contact the Department and other agency representatives at least 14 days prior to the intended meeting date. Once the required participants have confirmed their availability, the Permittee shall provide written notification, at least **seven (7) days** in advance of the meeting, to the following offices advising of the agreed-upon date, time, location and teleconference information for the pre-construction meeting:

JCP Compliance Officer
Email: JCPCompliance@dep.state.fl.us

FWC Imperiled Species Management Section
620 South Meridian Street
Tallahassee, Florida 32399-1600
Phone: (850) 922-4330
Fax: (850) 921-4369

DEP Southeast District Office
Submerged Lands & Environmental Resources Program
400 N. Congress Avenue, Suite 200
West Palm Beach, FL 33401

Phone: (561) 681-6600
Fax: (561) 681-6755

4. Construction shall not commence until the public easement for the borrow area has been executed to the satisfaction of the Department and a Local Sponsor Agreement between the Department and RER (DRAFT attached) that adopts a final, Department-approved Physical and Biological Monitoring Plan for this project has also been executed. Additionally, **construction shall not commence** until the local sponsor has completed all pre-construction requirements of the approved Monitoring Plan. The plans include provisions for turtle and shorebird nest monitoring, scarp monitoring and leveling, sand compaction monitoring and tilling, reef/hardbottom impact assessment and coral relocation, and topographic/bathymetric monitoring of the beach placement and excavation areas. Such activities will take place before, during and after construction, as outlined in the plans.

5. In the event RER does not conduct all necessary monitoring requirements under the Local Sponsor Agreement, the Corps will abide by the terms and conditions specified by the applicable Biological Opinions issued by the U. S. Fish and Wildlife Service and NOAA National Marine Fisheries Service.

6. Best management practices (BMPs) shall be utilized where appropriate and maintained at all times during project construction to minimize turbidity generation, and to prevent the spillage of hazardous substances into waters of the state from the dredge and scows. When discharging slurried sand onto the beach from a pipeline, the Permittee shall use shore-parallel sand dikes on the beach berm, seaward of the pipeline discharge point, to maximize settlement of suspended sediment on the beach before return water from the dredged discharge reenters the Atlantic Ocean.

7. The Permittee shall not store or stockpile project-related tools, equipment, materials, etc., within littoral zones or elsewhere within surface waters of the state, unless it is done within work area specifically approved by the Department under this permit or within established anchorage areas or port/marina facilities.

8. Storage, stockpiling or access of equipment on, in, over or through seagrass (or other aquatic vegetation) beds or wetlands is prohibited. Anchoring or spudding of vessels and barges within beds of aquatic vegetation or over hardbottom areas is also prohibited.

9. In accordance with Rule 62B-41.008(1)(k)4, F.A.C., a sediment quality control/quality assurance plan for this project was submitted and has been approved. The plan will ensure that the sediment from the borrow area will meet the standards in Rule 62B-41.007(2)(j), F.A.C. The Department requires compliance with the approved plan. Any occurrences of unacceptable material shall be handled according to the protocols set forth in the Sediment QA/QC plan. The sediment testing result shall be submitted to the Department within 90 days following the completion of beach construction.

The Sediment QC/QA plan includes the following:

a. If during construction, the Permittee or Engineer determines that the beach fill material does not comply with the sediment compliance specifications, measures shall be taken to avoid further placement of noncompliant fill, and the sediment inspection results shall be reported to the Department.

b. The Permittee shall submit post-construction sediment testing results and an analysis report as outlined in the Sediment QC/QA plan to the Department within 90 days following beach construction. The sediment testing results shall be certified by a P.E. or P.G. from the testing laboratory. A summary table of the sediment samples and test results for the sediment compliance parameters as outlined in Table 1 of the Sediment QC/QA plan shall accompany the complete set of laboratory testing results. A statement of how the placed fill material compares to the sediment analysis and volume calculations from the geotechnical investigation shall be included in the sediment testing results report.

c. A post-remediation report containing the site map, sediment analysis, and volume of noncompliant fill material removed and replaced shall be submitted to the Department within 7 days following completion of remediation activities.

THREATENED AND ENDANGERED SPECIES

10. The following measures shall be taken to protect marine turtles from impacts if construction occurs during the marine turtle nesting season (March 1 to November 30). Certain turtle-related tasks, such as nest monitoring, will be performed by RER under the Local Sponsor Agreement, and conditions are outlined in that document (attached).

a. Beach nourishment may proceed during the sea turtle nesting season, provided early morning surveys for sea turtle nests are conducted daily by RER from March 1 through September 15 or until two weeks after the last documented crawl. A series of stakes and highly visible survey ribbon or string will be installed to establish a 10-foot radius around the nest. No project activity shall occur within this area that could result in impacts to the nest.

b. Construction activity shall not commence until completion of the marine turtle survey each day.

c. During marine turtle nesting season, staging areas for construction equipment shall be located off the beach to the maximum extent possible. Nighttime storage of construction equipment not in use shall be off the beach to minimize disturbance to sea turtle nesting and hatching activities. All construction pipes that are placed on the beach shall be located as far landward as possible without

compromising the integrity of the existing or reconstructed dune system or interfering with shorebird nesting.

d. The Permittee shall arrange a meeting between representatives of the contractor, the Department, the FWC, and the permitted person responsible for marine turtle nest monitoring at least 30 days prior to the commencement of work on this project. At least 15 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures.

e. In the event a sea turtle nest is excavated during construction activities, all work shall cease in that area immediately and the permitted person responsible for egg relocation for the project shall be notified so the eggs can be moved to a suitable relocation site.

f. For construction during marine turtle nesting season, all project lighting shall be limited to the immediate area of active construction only and shall be the minimal lighting necessary to comply with U.S. Coast Guard and/or OSHA requirements. Stationary lighting on the beach and all lighting on the dredge shall be minimized through reduction, shielding, lowering, and appropriate placement of lights to minimize illumination of the nesting beach and water (Figure 1).

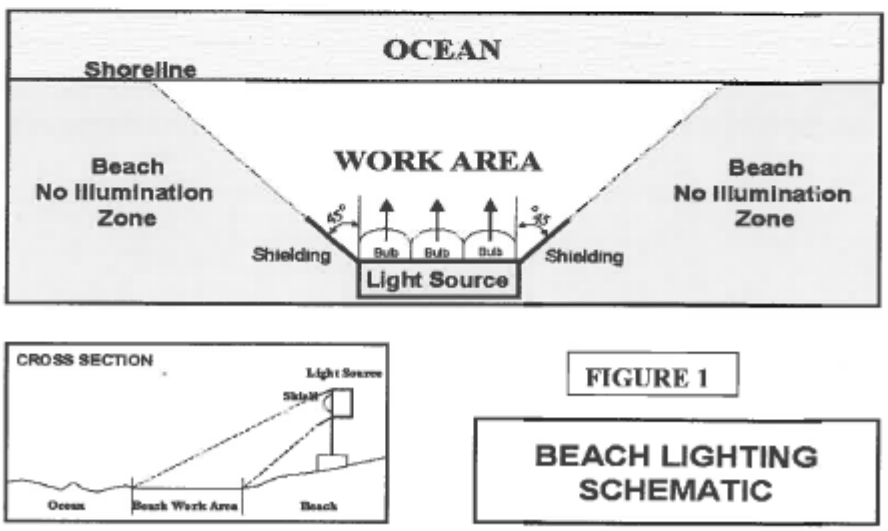


Figure 1.

g. Upon locating a dead, injured, or sick endangered or threatened sea turtle specimen by project personnel, initial notification must be made to the FWC at 1-888-404-FWCC. Care should be taken in handling sick or injured specimens to ensure effective treatment and care and in handling dead specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.

h. In the event a hopper dredge is utilized, the following requirements shall be met in addition to the Terms and Conditions of the appropriate NMFS Biological Opinion:

i. Handling of sea turtles captured during hopper dredging projects shall be conducted only by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by the FWC, pursuant to Florida Administrative Code 68E-1.

ii. *Dredging Pumps*: To prevent impingement of sea turtles within the water column, every effort should be made to keep the dredge pumps disengaged when the dragheads are not firmly on the bottom.

iii. *Sea Turtle Deflecting Draghead:* A sea turtle deflecting draghead is required for all hopper dredging during the months that turtles may be present, unless a waiver is granted by the Corps (South Atlantic District) in consultation with NMFS.

iv. The Sea Turtle Stranding and Salvage Network (STSSN) Coordinator, Dr. Allen Foley, shall be notified at (904) 573-3930 of the start-up and completion of hopper dredging operations.

v. If required, non-capture trawling, as authorized by NMFS, shall be undertaken at all projects where **any** of the following conditions are met; however, other ongoing projects not meeting these conditions are not required to conduct relocation trawling:

- Two or more turtles are taken in a 24-hour period in the project.
- Four or more turtles are taken in the project.

If applicable, the Permittee shall fax (850-921-6988) or e-mail (Meghan.Conti@MyFWC.com) weekly reports to the Imperiled Species Management

section on Friday each week that relocation trawling is conducted in Florida water. These faxes shall include: the species and number of turtles captured in Florida waters, general health, and release information. A summary of all turtles captured in Florida waters, including all measurements, the latitude and longitude (in decimal degrees) of captures and tow start-stop points, and times for the start-stop points of the tows, including those tows on which no turtles are captured shall be submitted to the ISM by January 15 of the following year.

11. The following measures shall be taken to protect migratory shorebirds from impacts if construction occurs during the shorebird nesting season (generally April 1 to September 1). Certain shorebird-related tasks, such as nest monitoring, will be performed by RER under the Local Sponsor Agreement, and conditions are outlined in that document.

    a. *Buffer Zones*. Within the project area, RER will establish a buffer zone around any location where shorebirds have been engaged in nesting behavior, including territory defense. Designated buffer zones will be posted with clearly marked signs around the perimeter. Any and all construction activities, including movement of vehicles, shall be prohibited in the buffer zone. No construction activities, movement of vehicles, or stockpiling of equipment shall be allowed within the buffer area.

    b. *Travel Corridors.* Travel corridors, approved in consultation with FWC, shall be designated and marked by RER outside the buffer areas. Heavy equipment, other vehicles, or pedestrians may transit past nesting areas in these corridors. However, other activities such as stopping or turning shall be prohibited within the designated travel corridors adjacent to the nesting site. To the degree possible, the Permittee should maintain some activity within these corridors on a daily basis, without directly disturbing any shorebirds documented on site or interfering with sea turtle nesting, especially when those corridors are established prior to commencement of construction. Passive methods to modify nesting site suitability must be approved by FWC Regional Biologist for that region.

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

    d. *Placement of Equipment and Sand*. If it will be necessary to extend construction pipes past a known shorebird nesting site, then whenever possible those pipes should be placed landward of the site before birds are active in that area. No pipe

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

12. 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 shall 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, shall be shutdown if a manatee(s) comes within 50 feet of the operation. Activities shall 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 shall not be herded away or harassed into leaving.

    e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922. Collision and/or injury shall 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 - Watch for Manatees* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all

personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

g. After sunset, movement of any vessel associated with work authorized by this permit within the Biscayne Bay Aquatic Preserve should be minimized to the greatest extent possible under normal operating procedures, as the likelihood of spotting submerged animals is limited.

MONITORING REQUIRED:

13. Water Quality - Turbidity shall be monitored as follows:

Units: Nephelometric Turbidity Units (NTUs).

Frequency: Sampling shall occur three times per day, at least 2 hours apart, during the periods of peak project related turbidity generation, which may be related to pumping rates. Sampling shall be conducted while the highest project-related turbidity levels are crossing the edge of the mixing zone. The compliance samples and the corresponding background samples shall be collected at approximately the same time, i.e., one shall immediately follow the other.

Location: Background: At surface and mid-depth, clearly outside the influence of any artificially generated turbidity plume.

Nourishment Site: approximately 500 meters upcurrent from any portion of the beach that has been, or is being, filled during the current construction event, at the same distance offshore as the associated compliance sample.

Borrow Site: At least 500 meters upcurrent from the source of turbidity at the dredge site.

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

Nourishment Site: Samples shall be collected in the densest portion of the turbidity plume, at a distance of 150 meters downcurrent from the point where the return water from the dredged discharge reenters the Atlantic Ocean. For each sampling event, compliance samples shall be collected within the area of highest turbidity. *Note: If the plume flows parallel to the shoreline, the densest portion of the plume may be too*

close to shore to access by boat. In that case, it may be necessary to access the sampling location from the shore.

Borrow Site: Samples shall be collected 150 meters downcurrent from the dredge head, **and** from any other source of turbidity generated by the dredge, in the densest portion of any visible turbidity plume. If no plume is visible, follow the likely direction of flow.

Analysis of turbidity samples shall be performed in compliance with DEP-SOP-001/01 FT 1600 Field Measurement of Turbidity:

http://publicfiles.dep.state.fl.us/dear/sas/sopdoc/2008sops/ft1600.pdf

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

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

15. The compliance locations given above shall be considered the limits of the turbidity mixing zone allowed during construction. If monitoring reveals compliance turbidity levels greater than 29 NTUs above the associated background at the dredge site or beach placement site, construction activities shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence shall also be immediately reported to the Department via email at JCP Compliance@dep.state.fl.us. The subject line of the email shall state "TURBIDITY EXCEEDANCE".

Any project-associated discharge other than dredging or fill placement (e.g., scow or pipeline leakage) shall be monitored as close to the source as possible. If the turbidity level exceeds 29 NTUs above background, the construction activities related to the exceedance shall **cease immediately** and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. This turbidity monitoring shall continue every hour until background turbidity levels are achieved or until otherwise

directed by the Department. The Permittee shall notify the Department, by separate email to the JCP Compliance Officer, of such an event within 24 hours of the time the Permittee first becomes aware of the discharge. The subject line of the email shall state "PROJECT-ASSOCIATED DISCHARGE-OTHER".

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

a. the Project Name;

b. the Permit Number;

c. location and level (NTUs above background) of the turbidity exceedance;

d. the time and date that the exceedance occurred; and

e. the time and date that construction ceased.

Prior to re-commencing the construction, a report shall be emailed to the Department with the same information that was included in the "Exceedance Report", plus the following information:

a. turbidity monitoring data collected during the shutdown documenting the decline in turbidity levels and achievement of acceptable levels;

b. corrective measures that were taken; and

c. cause of the exceedance.

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

a. time of day samples were taken;

b. dates of sampling and analysis;

c. GPS location of sample

d. depth of water body;

e. depth of each sample;

f. antecedent weather conditions, including wind direction and velocity;

g. tidal stage and direction of flow;

h. water temperature;

i. a digitized map, outlining key project features (preferably overlaid on an aerial photograph) indicating the sampling locations, dredging and discharge locations, and direction of flow;

j. a statement describing the methods used in collection, handling, storage and analysis of the samples;

k. a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, calibration of the meter and accuracy of the turbidity and GPS data;

l. Monitoring will occur provided sea, wind, visibility, traffic and other conditions allow for the safe performance of the activity. Permittee or contracted designee agrees to document all instances where turbidity monitoring within the bounds of the above parameters could not be performed. When samples cannot be collected, include an explanation in the report. If unable to collect samples due to severe weather conditions, include a copy of a current report from a reliable, independent source, such as an online weather service.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT .
OF ENVIRONMENTAL PROTECTION

Marty K. Seeling, Administrator
Beaches, Inlets, and Ports Program

FILING AND ACKNOWLEDGMENT

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

Deputy Clerk July 11, 2013
Date

Attachments: Permit Drawings (12 pages)
Biological Monitoring Plan (dated July 2013)
Local Sponsor Agreement (dated July 10, 2013)
Sediment QA/QC plan (dated May 2012)

Exhibit D

(SAMPLE) Sovereign Submerged Lands Easement
(State of Florida Borrow Areas)

This Instrument Prepared By:
James Wright
Recurring Revenue Section
Bureau of Public Land Administration
3900 Commonwealth Boulevard
Mail Station No. 125
Tallahassee, Florida 32399

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND
OF THE STATE OF FLORIDA

SOVEREIGNTY SUBMERGED LANDS EASEMENT

NO. 41341
BOT FILE NO. 130235776
PA NO. 02955427-001-JC

THIS EASEMENT is hereby granted by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, hereinafter referred to as the Grantor.

WITNESSETH: That for the faithful and timely performance of and compliance with the terms and conditions stated herein, the Grantor does hereby grant to Miami-Dade County, Florida, hereinafter referred to as the Grantee, a nonexclusive easement on, under and across the sovereignty lands, if any, contained in the following legal description:

> A parcel of sovereignty submerged land 2.5 miles offshore,
> East of Section 14, Township 53 South, Range 42 East,
> in the Atlantic Ocean, Miami-Dade County, as is more particularly
> described and shown on Attachment A, dated April 13, 2011.

TO HAVE THE USE OF the hereinabove described premises for a period of 10 years from March 25, 2011, the effective date of this easement. The terms and conditions on and for which this easement is granted are as follows:

1. USE OF PROPERTY: The above described parcel of land shall be used solely for a subaqueous rock (spoil) disposal area and Grantee shall not engage in any activity except as described in the State of Florida Department of Environmental Protection Consolidated Joint Coastal Permit No. 0295427-001-JC, dated March 25, 2011, incorporated herein and made a part of this easement by reference. All of the foregoing subject to the remaining conditions of this easement.

2. EASEMENT CONSIDERATION: In the event the Grantor amends its rules related to fees and the amended rules provide the Grantee will be charged a fee or an increased fee for this activity, the Grantee agrees to pay all charges required by such amended rules within 90 days of the date the amended rules become effective or by a date provided by an invoice from the Department, whichever is later. All fees charged under this provision shall be prospective in nature; i.e. they shall begin to accrue on the date that the amended rules become effective.

3. WARRANTY OF TITLE/GUARANTEE OF SUITABILITY OF USE OF LAND: Grantor neither warrants title to the lands described herein nor guarantees the suitability of any of the lands for any particular use.

4. RIGHTS GRANTED: The rights hereby granted shall be subject to any and all prior rights of the United States and any and all prior grants by the Grantor in and to the submerged lands situated within the limits of this easement.

5. DAMAGE TO EASEMENT PROPERTY AND INTERFERENCE WITH PUBLIC AND PRIVATE RIGHTS: Grantee shall not damage the easement lands or unduly interfere with public or private rights therein.

6. GRANTOR'S RIGHT TO GRANT COMPATIBLE USES OF THE EASEMENT PROPERTY: This easement is nonexclusive, and the Grantor, or its duly authorized agent, shall retain the right to enter the property or to engage in management activities not inconsistent with the use herein provided for and shall retain the right to grant compatible uses of the property to third parties during the term of this easement.

7. RIGHT TO INSPECT: Grantor, or its duly authorized agent, shall have the right at any time to inspect the works and operations of the Grantee in any matter pertaining to this easement.

8. INDEMNIFICATION/INVESTIGATION OF ALL CLAIMS: The Grantee shall investigate all claims of every nature at its expense. Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees and agents thereof. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 768.28, Florida Statutes, as amended from time to time, or any other law providing limitations on claims.

[47]

9. ASSIGNMENT OF EASEMENT: This easement shall not be assigned or otherwise transferred without prior written consent of the Grantor or its duly authorized agent and which consent shall not be unreasonably withheld. Any assignment or other transfer without prior written consent of the Grantor shall be null and void and without legal effect.

10. TERMINATION: The Grantee, by acceptance of this easement, binds itself, its successors and assigns, to abide by the provisions and conditions herein set forth, and said provisions and conditions shall be deemed covenants of the Grantee, its successors and assigns. In the event the Grantee fails or refuses to comply with the provisions and conditions herein set forth or in the event the Grantee violates any of the provisions and conditions herein, this easement may be terminated by the Grantor upon 30 days written notice to Grantee. If terminated, all of the above-described parcel of land shall revert to the Grantor. All notices required to be given to Grantee by this easement or applicable law or administrative rules shall be sufficient if sent by U.S. Mail to the following address:

Miami-Dade County, Florida
Dept. of Environmental Resource Management
701 NW 1st Court, 5th Floor
Miami, Florida 33136

The Grantee agrees to notify the Grantor by certified mail of any changes to this address at least ten (10) days before the change is effective.

11. TAXES AND ASSESSMENTS: The Grantee shall assume all responsibility for liabilities that accrue to the subject property or to the improvements thereon, including any and all drainage or special assessments or taxes of every kind and description which are now or may be hereafter lawfully assessed and levied against the subject property during the effective period of this easement which result from the grant of this easement or the activities of Grantee hereunder.

12. REMOVAL OF STRUCTURES/ADMINISTRATIVE FINES: If the Grantee does not remove said structures and equipment occupying and erected upon the premises after expiration or cancellation of this easement, such structures and equipment will be deemed forfeited to the Grantor, and the Grantor may authorize removal and may sell such forfeited structures and equipment after ten (10) days written notice by certified mail addressed to the Grantee at the address specified in Item 10 or at such address on record as provided to the Grantor by the Grantee. However, such remedy shall be in addition to all other remedies available to Grantor under applicable laws, rules and regulations including the right to compel removal of all structures and the right to impose administrative fines.

13. ENFORCEMENT OF PROVISIONS: No failure, or successive failures, on the part of the Grantor to enforce any provision, nor any waiver or successive waivers on its part of any provision herein, shall operate as a discharge thereof or render the same inoperative or impair the right of the Grantor to enforce the same upon any renewal thereof or in the event of subsequent breach or breaches.

14. RECORDATION OF EASEMENT: The Grantee, at its own expense, shall record this fully executed easement in its entirety in the public records of the county within which the easement site is located within fourteen (14) days after receipt, and shall provide to the Grantor within ten (10) days following the recordation a copy of the recorded easement in its entirety which contains the O.R. Book and pages at which the easement is recorded.

15. AMENDMENT/MODIFICATIONS: This easement is the entire and only agreement between the parties. Its provisions are not severable. Any amendment or modification to this easement must be in writing and must be accepted, acknowledged and executed by the Grantee and Grantor.

16. ACOE AUTHORIZATION: Prior to commencement of construction and/or activities authorized herein, the Grantee shall obtain the U.S. Army Corps of Engineers (COE) permit if it is required by the COE. Any modifications to the construction and/or activities authorized herein that may be required by the COE shall require consideration by and the prior written approval of the Grantor prior to the commencement of construction and/or any activities on sovereign, submerged lands.

17. ADDITIONAL STRUCTURES OR ACTIVITIES/EMERGENCY STRUCTURAL REPAIRS: No additional structures shall be erected and/or activities undertaken, including but not limited to, dredging, relocation/realignment or major repairs or renovations made to authorized structures, on, in or over sovereignty, submerged lands without the prior written consent from the Grantor, with the exception of emergency repairs. Unless specifically authorized in writing by the Grantor, such activities or structures shall be considered unauthorized and a violation of Chapter 253, Florida Statutes, and shall subject the Grantee to administrative fines under Chapter 18-14, Florida Administrative Code. If emergency repairs are required to be undertaken in the interests of public health, safety or welfare, the Grantee shall notify the Grantor of such repairs as quickly as is practicable; provided, however, that such emergency activities shall not exceed the activities authorized by this easement.

18. UPLAND RIPARIAN PROPERTY INTEREST: During the term of this easement, Grantee must have satisfactory evidence of sufficient upland interest as defined in subsection 18-21.003(60), Florida Administrative Code, to the extent required by paragraph 18-21.004(3)(b), Florida Administrative Code, in order to conduct the activity described in this easement. If at any time during the term of this easement, Grantee fails to comply with this requirement, use of sovereignty, submerged lands described in this easement shall immediately cease and this easement shall terminate and title to this easement shall revert to and vest in the Grantor immediately and automatically.

WITNESSES:

Original Signature

Print/Type Name of Witness

Original Signature

James E Wright

Print/Type Name of Witness

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

BY: _____ (SEAL)

Jeffery M. Gentry, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida

"GRANTOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 11TH day of August, 2011, by Jeffery M. Gentry, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. He is personally known to me.

APPROVED AS TO FORM AND LEGALITY:

DEP Attorney

Notary Public, State of Florida

Printed, Typed or Stamped Name

Notary Public State of Florida
Kathy C Griffin
My Commission DD727692
Expires 10/30/2011

My Commission Expires:

Commission/Serial No.

WITNESSES:

Original Signature

Ana Bustamante

Typed/Printed Name of Witness

Original Signature

Elizabeth Adorno

Typed/Printed Name of Witness

Miami-Dade County, Florida (SEAL)

BY: _____

Original Signature of Executing Authority

Jack Osterholt

Typed/Printed Name of Executing Authority

Deputy Mayor

Title of Executing Authority

"GRANTEE"

STATE OF Florida

COUNTY OF Miami-Dade

The foregoing instrument was acknowledged before me this 10TH day of August, 2011, by Jack Osterholt as Deputy Mayor, for and on behalf of Miami-Dade County, Florida. He is personally known to me or who has produced _____, as identification.

My Commission Expires:

Commission/Serial No.

Jacqueline Anghel-Novick.

Notary Public, State of

Printed, Typed or Stamped Name

JACQUELINE ANGHEL-NOVICK
Notary Public - State of Florida
My Comm. Expires Mar 23, 2013
Commission # DD 873507

Page 3 of 7 Pages
Easement No. 41341

Exhibit E

SAMPLE Memorandum of Agreement (Federal Borrow Areas)

MEMORANDUM OF AGREEMENT
AMONG
THE BUREAU OF OCEAN ENERGY MANAGEMENT
OF THE DEPARTMENT OF THE INTERIOR
AND THE
CORPS OF ENGINEERS
OF THE DEPARTMENT OF THE ARMY
AND
MIAMI-DADE COUNTY
BOARD OF COUNTY COMMISSIONERS, FLORIDA

REGARDING THE USE OF OUTER CONTINENTAL SHELF SAND RESOURCES FOR BEACH EROSION CONTROL AND HURRICANE PROTECTION IN MIAMI-DADE COUNTY, FLORIDA

BOEMRE Negotiated Agreement No. OCS - AXXXX

Title I. Explanatory Recitals

A. Pursuant to the authority and in accordance with the requirements of Flood Control Act of 1968 (H.D. No. 335/90/2), Water Resources Development Act (WRDA) of 1974 (Public Law 93-251, Section 69)and the WRDA of 1986 (Public Law 99-662), the Department of the Army, acting through the United States Army Corps of Engineers (USACE), with the cooperation of Miami-Dade County Board of County Commissioners (hereinafter referred as the County), are endeavoring to conduct a nourishment of beach along the Miami-Dade County, Florida shoreline.

B. USACE and the County have undertaken a project in furtherance of the abovementioned goals to renourish the shoreline along Miami-Dade County, Florida, (herein referred to as the "Project").

C. In accordance with the requirements of the Flood Control Act of 1968 (H.D. No. 335/90/2), Water Resources Development Act of 1974 (PL 93-251, Section 69)and the WRDA of 1986 (PL 99-662), the County has procured lands, easements, and rights-of-way (collectively, "Land Rights") as necessary from upland landowners, other property right holders, public entities, and other persons and entities as appropriate scope and duration for facilitate the Project.

D. USACE, which is acting as the project manager for the Project, now seeks to obtain sand in a manner that minimizes costs and leverages Federal resources.

Title II. <u>Purpose and Authority</u>

A. The Department of the Interior (DOI), acting through the Bureau of Ocean Energy Management, Regulation and Enforcement (Bureau) or any iteration of it's designation, enters into this Memorandum of Agreement (MOA) with the County and the USACE providing for the use of up to 500,000 cubic yards of Outer Continental Shelf sand resources ("OCS sand resources") for the Project under the authority of Section 8(k)(2) of the Outer Continental Shelf Lands Act (OCSLA) (43 U.S.C. § 1337(k)(2)). The term "OCS sand resources" means the sediment deposits found on or below the surface of

the seabed on the Outer Continental Shelf (OCS), as defined in Section 2(a) of the OSCLA (43 U.S.C. § 1331(a)). This MOA authorizes the County or the USACE, as appropriate, to use OCS sand from the _____, as designated and delineated in Table 1 and on the attached map (Attachment 1), in accordance with the terms of this MOA. After removal of the sand from the OCS and placement of those resources as specified in this MOA, the Bureau has no jurisdiction over those sand resources unless they return to the OCS.

Table 1: _____ Borrow Area Coordinates. Longitude and Latitude in Geographic Coordinate System NAD 1983. Easting and Northing in Florida State Plane Coordinate System (ft) NAD 1983.

	Lat.	Long.	X (NAD83 FLE)	Y (NAD83 FLE)
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				
K				
L				
M				

B. The Bureau, under the authority delegated by the Secretary of the Interior, is authorized, pursuant to Section 8(k)(2) of the OCSLA (43 U.S.C. § 1337 (k)(2)) to enter into this MOA concerning the potential use of OCS sand resources.

The Bureau has determined that the Project meets the requirements of Section 8(k)(2)(A)(i) of the OCSLA. Therefore, in accordance with Section 8(k)(2), and subject to the terms and conditions as contained herein, the Bureau hereby authorizes the use of OCS sand resources from the _____ identified in Table 1 for the construction of the Project. The parties acknowledge that under the terms of Section 8(k)(2)(B), the Bureau will not assess any fee against the County or the USACE for the use of the OCS sand resources described herein.

Nothing in this MOA is intended to abrogate or diminish the Secretary of the Interior's authority under the OCSLA to oversee and regulate the removal of OCS sand.

C. USACE, which is undertaking this project pursuant to authority granted to it in accordance with Flood Control Act of 1968 (H.D. No. 335/90/2), Water Resources Development Act of 1974 (P.L. 93-251, Section 69)and the WRDA of 1986 (P.L. 99-662), enters into this MOA in compliance with requirements of section 8(k)(2)(D) of the OCSLA. The County, who has procured and assigned Land Rights of appropriate scope and duration to facilitate the Project, enters into this MOA in compliance with requirements of section 8(k)(2)(A)(i) of the OCSLA.

Nothing in this MOA is intended to impede or hinder the County's or the USACE's ability to complete the Project or abrogate or diminish either's authority or responsibilities under

applicable law, including but not limited to Section 101(b)(7) of the Water Resources Development Act of 1996, Public Law 104-303, National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), Marine Mammal Protection Act (MMPA), National Historic Preservation Act (NHPA), or the Coastal Zone Management Act (CZMA).

Title III. Project Description

Designated, under Flood Control Act of 1968 (H.D. No. 335/90/2), Water Resources Development Act of 1974 (P.L. 93-251, Section 69)and the WRDA of 1986 (P.L. 99-662), as the Miami-Dade County Beach Erosion Control and Hurricane Protection Project, the Project is intended to restore the proper ecological function of a beach and facilitate beach stabilization. USACE anticipates extracting _____ cubic yards of sand resources to stabilize the shoreline and reconstruct the beach. The OCS sand resources will be extracted from the _____ Borrow Area, as designated and delineated on the attached map (Attachment 1).

Title IV. Provisions

A. The Bureau authorizes the use of OCS sand from the _____ Borrow Area. The USACE or its contractor(s) shall extract, transport, and place such OCS sand resources from the borrow area in accordance with the terms and conditions set forth below and in accordance with the Department of Environmental Protection - Consolidated Joint Coastal Permit and Sovereign Submerged Lands Authorization Permit No. _____. Except as provided above, the parties agree that all other aspects of the Project's execution and completion remain as described in the Local Cooperation Agreement between the Department of the Army and Miami-Dade County, FL for Construction of the Miami-Dade County Beach Erosion Control and Hurricane Protection Project entered into agreement on _____.

B. This MOA applies only to the extraction, transportation, and placement described above. The MOA shall terminate or expire upon (1) the USACE sending written notice to Chief, Bureau of Ocean Energy Management, Regulation and Enforcement, Leasing Division, 381 Elden Street, MS 4010, Herndon, Virginia 20170, that USACE has received sufficient sand to complete the Project, two years from the date of execution of this MOA, whichever occurs first. Upon request by USACE, the parties may agree to extend the terms of the MOA as necessary to provide USACE and its contractor(s) with additional time to complete the Project. The parties acknowledge that there may be a potential need for future OCS sand resources for periodic maintenance, augmentation or construction purposes. The Bureau, the USACE, and the County may enter into subsequent agreements, as may be required in the future, consistent with each party's respective responsibilities under applicable law.

C. The Bureau, the USACE, and the County recognize that planning and coordination among the three parties will ensure that responsibilities under the OCSLA, other applicable Federal laws, and this Congressionally-authorized Project are carried out and accommodated in an efficient and timely manner so that the project schedule will not be unnecessarily delayed or compromised. All parties recognize that the Bureau, as a bureau in the DOI, has certain responsibilities for the orderly, timely, and efficient recovery of OCS minerals using the best available technology while ensuring environmental stewardship and compliance. Moreover, the parties further recognize that USACE has certain stewardship and environmental compliance responsibilities that are separate and distinct from the responsibilities of the Bureau. To these ends, and with respect to the Project, the Bureau, USACE, and the County agree to the following terms:

1. Notification of Activity in or near the Borrow Areas

USACE will notify the Bureau at dredgeinfo@boemre.gov of the commencement and termination of the construction operations at _____ borrow area within 24 hours after USACE receives such notification from its contractor(s) for the Project. The Bureau will notify USACE in a timely manner of any OCS activity within the jurisdiction of the DOI that may adversely affect USACE's ability to use OCS sand for the Project.

2. Environmental Responsibilities and Environmental Compliance

USACE is the lead agency on behalf of the Federal government to ensure the Project complies with applicable environmental laws, including but not limited to the Endangered Species Act, Magnuson-Stevens Fishery Management and Conservation Act, Migratory Bird Treaty Act, National Historic Preservation Act, and Coastal Zone Management Act.

USACE will serve as the lead Federal agency for Endangered Species Act (ESA) Section 7 consultation concerning protected species under the purview of U.S. Fish and Wildlife Service (U.S. FWS) and National Marine Fisheries Service (NMFS). USACE will instruct its contractor(s) to implement the mitigation and monitoring terms, conditions, and measures required by the U.S. FWS, NMFS, Florida Department of Environmental Protection (FDEP), and the Bureau pursuant to applicable Federal and State laws and regulations. The required mitigation terms, conditions, and measures are reflected in the attached Biological Opinions, Conservation Recommendations (and related correspondence), and Joint Coastal Permit Final Order No._____.

USACE is responsible for compliance with the Specific Conditions of the Joint Coastal Permit, including implementation of turbidity monitoring and the Sediment Quality Control/Quality Assurance Plan. Miami-Dade Department of Environmental Resources Management (DERM) is responsible for compliance with certain monitoring and contingency mitigation requirements for the Project, including implementation of the requirements of the Final Physical and Biological Monitoring Plan and Contingency Mitigation Plan. Prior to the commencement of the Project, USACE and DERM will invite the Bureau to participate in any conference with FDEP to review specific conditions and monitoring requirements. Construction shall not commence until the pre-construction requirements of the Final Physical and Biological Monitoring Plan have been completed.

Copies of all relevant correspondence, monitoring reports, and other technical reports shall be provided to the Bureau at dredgeinfo@boemre.gov within 30 days of its completion. If physical and/or biological monitoring confirms that unexpected adverse impacts are occurring in the vicinity of _____ borrow area, USACE and DERM will invite the Bureau to participate in any effort to further study the impacts and/or undertake corrective, remedial, and/or compensatory action.

3. Dredge Positioning

During all phases of the Project, USACE will ensure that the dredge and any bottom disturbing equipment is outfitted with an onboard global positioning system (GPS) capable of maintaining and recording location within an accuracy range of no more than plus or minus 3 meters. The GPS must be installed as close to the cutterhead or draghead as practicable. An exclusionary

buffer of _____ ft has been established around documented hardbottom and reef features adjacent to the proposed borrow area. The borrow area design reflects the required buffer. During dredging operations, USACE will immediately notify the Bureau at dredgeinfo@boemre.gov if dredging occurs outside of the approved borrow area. Anchoring, spudding, or other bottom disturbing activity is to be avoided outside the authorized borrow area on the OCS.

USACE will provide the Bureau all Dredging Quality Management (DQM) data acquired during the project using procedures jointly developed by the USACE's National Dredging Quality Management Data Program Support Center and the Bureau. USACE will submit the DQM data, including draghead status and depth, to dredgeinfo@boemre.gov biweekly. A complete DQM dataset will be submitted within 45 days of completion of the Project.

4. Local Notice to Mariners

USACE shall require its contractor(s) for the Project to place a notice in the U.S. Coast Guard Local Notice to Mariners regarding the timeframe and location of dredging and construction operations in advance of commencement of dredging.

5. Marine Pollution Control and Contingency Plan

USACE will require its contractor(s) and subcontractor(s) to prepare for and take all necessary precautions to prevent discharges of oil and releases of waste and hazardous materials that may impair water quality. In the event of an occurrence, notification and response will be in accordance with applicable requirements of 40 C.F.R. 300. All dredging and support operations shall be compliant with U.S. Coast Guard regulations and the Environmental Protection Agency's Vessel General Permit, as applicable. USACE will notify the Bureau of any occurrences and remedial actions and provide copies of reports of the incident and resultant actions at dredgeinfo@boemre.gov.

6. Encounter of Ordinance

If any ordinance is encountered while conducting dredging activities at _____ borrow area, USACE will report the discovery within 24 hours to Chief, BOEMRE Leasing Division, at (703) 787-1215 and dredgeinfo@boemre.gov.

7. Archeological Resources

Onshore Prehistoric or Historic Resources
If USACE discovers any previously unknown historic or archeological remains while accomplishing activity on Miami-Dade Beaches, USACE will notify the Bureau of any finding. USACE will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

Offshore Prehistoric or Historic Resources
In the event that the dredge operators discover any archaeological resource while conducting dredging operations in _____ borrow area, USACE shall require that dredge and/or pump-out operations be halted immediately within _____ of the area of discovery. USACE shall then immediately report the discovery to Chief, BOEMRE Leasing Division, at (703) 787-1215. If investigations determine that the resource is significant, the parties shall together determine how best to protect it.

8. Bathymetric Surveys

USACE will provide the Bureau with pre- and post-dredging bathymetric surveys of _____ borrow area. The pre-dredging survey will be conducted within 30 days prior to dredging. The post-dredging survey will be conducted within 30 days after the completion of dredging. USACE will also provide the Bureau a bathymetric survey performed between 1 year and 3 years following the completion of dredging. Hydrographic surveys will be performed in accordance with the USACE Hydrographic Surveying Manual EM 1110-2-1003 unless specified otherwise. One hundred percent coverage using interferometric swath or multibeam bathymetry data is preferred over single-beam data. All bathymetric data shall be roll, pitch, heave, and tide corrected. Survey lines of the specific dredge area, within Unnamed Shoal A, will be established at no greater than 50 m intervals perpendicular to a baseline. Three equidistant cross-tie lines will be established parallel to the same baseline. Survey lines will extend at least 50 m beyond the edge of the dredge areas. All data shall be collected in such a manner that post-dredging bathymetry surveys are compatible with the pre-dredging bathymetric survey data to enable the latter to be subtracted from the former to calculate the volume of sand removed, the shape of the excavation, and nature of post-dredging bathymetric change.

Copies of pre-dredging and post-dredging hydrographic data will be submitted to the Bureau via dredgeinfo@boemre.gov within thirty (30) days after each survey is completed. The delivery format for data submission is an ASCII file containing x,y,z data. The horizontal data will be provided in the North American Datum of 1983 (NAD ’83) Florida State Plane, U.S. survey feet. Vertical data will be provided in the North American Vertical Datum of 1988 (NAVD ’88), U.S. survey feet. An 8.5x11” plan view plot of the pre- and post-construction data will be provided showing the individual survey points, as well as contour lines at appropriate elevation intervals. These plots will be provided in PDF format.

9. Submittal of Production and Volume Information

USACE, in cooperation with the dredge operator, shall submit to the Bureau on a biweekly basis a summary of the dredge track lines, outlining any deviations from the original Plan. A color-coded plot of the cutterhead or drag arms will be submitted, showing any horizontal or vertical dredge violations. The dredge track lines shall show dredge status: hotelling, dredging, transiting, or unloading. This map will be provided in PDF format.

USACE will provide at least a biweekly update of the construction progress including estimated volumetric production rates to the Bureau. The biweekly deliverables will be provided electronically to dredgeinfo@boemre.gov. The project completion report, as described below, will also include production and volume information, including Daily Operational Reports.

10. Plans and Performance Requirements

USACE will provide the Bureau with a copy of the Project’s “Construction Solicitation and Specifications Plan,” including final project drawings, prior to construction (herein referred to as the “Plan”). No activity or operation authorized by the negotiated agreement (herein referred to as the Memorandum of Agreement or MOA) at _____ borrow area shall be carried out until the Bureau has had an opportunity to review the Plan, thus ensuring that each activity or operation is conducted in a manner that is in compliance with the provisions and requirements of the MOA. USACE will ensure that all operations at _____ borrow area are conducted in accordance with the final approved Plan and all terms and conditions in this MOA, as well as all applicable regulations, orders, guidelines, and directives specified or referenced herein.

The preferred method of obtaining and conveying sediment from _____ borrow area involves the use of a hopper dredge. The MOA does not implicitly authorize use of a cutterhead dredge. USACE will allow the Bureau to review and comment on modifications to the Plan, including the use of a cutterhead dredge and/or submerged or floated pipelines to convey sediment that may affect the project area. Said comments shall be delivered in a timely fashion in order to not delay the USACE's construction contract or schedule.

Prior to the commencement of construction, USCAE shall provide a summary of the construction schedule. USACE, at the reasonable request of the Bureau, shall allow access, at the site of any operation subject to safety regulations, to any authorized Federal inspector and shall provide the Bureau any documents and records that are pertinent to occupational or public health, safety, or environmental protection as may be requested.

11. Responsibility for Damages

The Bureau does not warrant that the OCS sand resources used in this project are suitable for the purpose for which they are intended.

12. Project Completion Report

A project completion report will be submitted by USACE to the Bureau within 120 days following completion of the activities authorized under this MOA. This report and supporting materials should be sent to Chief, BOEMRE Leasing Division, 381 Elden Street, MS 4010, Herndon, Virginia 20170 and dredgeinfo@boemre.gov. The report shall contain, at a minimum, the following information:

- the names and titles of the project managers overseeing the effort (for USACE, the engineering firm (if applicable), and the contractor), including contact information (phone numbers, mailing addresses, and email addresses);
- the location and description of the project, including the final total volume of material extracted from the borrow area and the volume of material actually placed on the beach or shoreline (including a description of the volume calculation method used to determine these volumes);
- ASCII files containing the x,y,z and time stamp of the cutterhead or drag arm locations;
- a narrative describing the final, as-built features, boundaries, and acreage, including the restored beach width and length;
- a table, an example of which is illustrated below, showing the various key project cost elements;

	Project Cost Estimate ($)	Cost Incurred as of Construction Completion ($)
Construction		
Engineering and Design		
Inspections/Contract Administration		
Total		

- a table, an example of which is illustrated below, showing the various items of work construction, final quantities, and monetary amounts;

Item No.	Item	Estimated Quantity	Unit	Unit Price	Estimated Amount	Final Quantity	Bid Unit	Final Amount	% Over/

							Price		Under
1	Mobilization and Demobilization								
2	Beach Fill								
3	Any beach or offshore hard structure placed or removed								

- a listing of construction and construction oversight information, including the prime and subcontractor(s), contract costs, etc.;
- a list of all major equipment used to construct the project;
- a narrative discussing the construction sequences and activities, and, if applicable, any problems encountered and solutions;
- a list and description of any construction change orders issued, if applicable;
- a list and description of any safety-related issues or accidents reported during the life of the project;
- a narrative and any appropriate tables describing any environmental surveys or efforts associated with the project and costs associated with these surveys or efforts;
- a table listing significant construction dates beginning with bid opening and ending with final acceptance of the project by USACE;
- digital appendices containing the as-built drawings, beach-fill cross-sections, and survey data; and any additional pertinent comments.

13. Sharing of Information

Consistent with the purpose stipulated by the parties in Title II, the USACE, the County, and Bureau agree to: (1) share all information needed for or generated from the Project, including the sharing of implementation and other applicable schedules; (2) provide such information to the requesting agency as expeditiously as possible; and (3) work to ensure that all required completion report information is received.

14. Resolution of Disputes

The parties agree to make every attempt to settle any disputes regarding this MOA at the lowest operational level. In the case of a (1) substantial disagreement between Bureau and the USACE or between Bureau and the County with respect to any aspect of the Bureau's authorization of the use of OCS sand resources in accordance with the terms and conditions as specified or (2) any alleged breach by a party of the terms and conditions as specified herein, the undersigned will designate a senior management official in their respective agencies to state the area(s) of disagreement or alleged breach in writing and present such statement to the other party for consideration. If resolution is not reached within 60 days, the undersigned shall request the active participation of the District Commander, Jacksonville District of the U.S. Army Corps of Engineers, the Associate Director, Offshore Energy and Minerals Management, Bureau, and the County Mayor.

15. Miscellaneous

This MOA shall not affect any pre-existing or independent relationships or obligations among the Departments of Interior, the USACE, and the County, including any other relationships or

obligations between Bureau and the USACE, or any other units of such Departments.

All rights in the _____ Borrow Area not expressly granted to the USACE and County by the OCSLA or this MOA are hereby reserved to the Bureau. The Bureau reserves the right to authorize other uses in the _____ Borrow Area that will not unreasonably interfere with activities authorized under this MOA. The Bureau will allow USACE and the County to review and comment on any proposed authorizations for the use of sand in the _____ Borrow Area while this MOA is in effect.

Nothing herein is intended to conflict with current USACE, County, or Bureau directives. If the terms of this MOA are inconsistent with existing directives of any of the parties entering into this MOA, then those portions of this agreement which are determined to be inconsistent shall be invalid, but the remaining terms and conditions not affected by the inconsistency shall remain in full force and effect. At the first opportunity for review of the MOA, all necessary changes will be accomplished either by an amendment to this MOA or by entering into a new MOA, whichever is deemed expedient to the interest of the parties.

_____
_____
_____ for
Offshore Energy and Minerals Management
Bureau of Ocean Energy Management,
Regulation and Enforcement
Department of the Interior
Date: _____

_____
_____
Colonel, U.S. Army
District Commander
Jacksonville District
U.S. Corps of Engineers
Date: _____

_____
Mayor, Miami-Dade County
Date: _____

This page intentionally left blank