

DEP CONTRACT No. DC664
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AMENDMENT No. 02

THIS AGREEMENT was entered into on the 27th day of June 2006, and amended on the 30th day of August 2006, by and between the Department of Environmental Protection with headquarters at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, a state agency ("Department"), the Nassau County Board of County Commissioners as the governing body of the South Amelia Island Shore Stabilization Municipal Service Benefit Unit, a political subdivision of the State of Florida, whose address is Post Office Box 1010, Fernandina Beach, Florida 32035 ("County"), and Olsen Associates, Inc., with headquarters at 4438 Herschel St., Jacksonville, Florida 32210 ("Consultant").

WHEREAS THE Department, County and Consultant have entered into this Agreement designated Contract DC664 (formerly DC661), for the purpose of providing coastal engineering services (professional services) for the post construction monitoring, mitigation and maintenance of the South Amelia Island Shoreline Stabilization Project; and

WHEREAS THE original Agreement was intended to be periodically amended to that end.

NOW, THEREFORE, in consideration of the mutual covenants herein contained. The Department, County, and Consultant agree as follows:

1. The Consultant will continue post construction physical monitoring as required by the provisions of DEP Joint Coastal Permit No. 0187721-JC, and all its modifications (mods). As a prerequisite to conducting any future project mitigation, or maintenance tasks involving sand placement, the Consultant shall locate and identify a suitable off-shore sand source, and obtain all the required State and Federal permits necessary for its use.
2. Attachment B is revised to include the Consultant's Cost Schedule for the completion of the annual physical monitoring for the '2006-2007' monitoring year, and the Scope of Work for the South Amelia Island Shore Stabilization Project Sand Search, attached hereto as Attachment B and incorporated herein by reference.
3. The parties agree to increase the total contract amount by \$459,330.00 from \$133,530.00 to \$592,860.00, to compensate the Consultant for the services described herein. The Department agrees to pay 32.2% of the new total, or \$147,997.00, and the County agrees to pay 67.8%, or \$311,333.00, the remainder of the sum.
4. The Consultant shall complete the annual monitoring task, and shall make all relevant submittals. All reports shall be filed no later than December 31, 2007. The sand source permit application shall be completed and submitted by no later than December 31, 2008.
5. The County will maintain the public beach access sites and public parking spaces, as identified in the Funding Eligibility statement for beach use throughout the life of the

Project. If at any time the County fails to maintain the subject beach access sites and public parking for use by the general public on an equal basis, the County agrees to reimburse the Department all funds provided by the Department associated with any beach access site, or associated public parking space for which maintenance is discontinued. Additionally, the Department and County agree to maintain public beach access signs that are clearly visible from the highway for the life of the Project. The Department will be responsible for maintaining access, parking and signs at State owned access points. And the County will maintain access, parking and signs for the Amelia Island Shoreline Association access points.

6. Attachments.

Attachment B included as part of this Amendment.

Page 1:	Monitoring Cost Sheet '06-07'	1 page
Page 2 – 17:	Sand Source - Scope of Services	16 pages

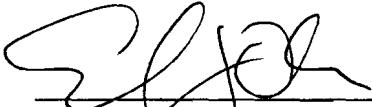
IN ALL OTHER RESPECTS, the Agreement of which this is an Amendment, and attachments relative thereto, shall remain in full force and effect.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the parties hereto have duly executed this 13th day of

August, 2007.

FOR THE CONSULTANT



Authorized Person

Erik S. Olsen

Print Name

Pres. - Olsen Assoc. Inc.

Title

25 July 07

Date

59-2223174

FEID Number

FOR THE DEPARTMENT



For the Secretary

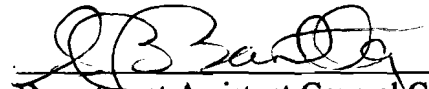
Assistant Director

Title

8-22-07

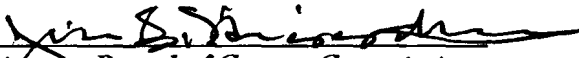
Date

APPROVED AS TO FORM



Department Assistant General Counsel

FOR NASSAU COUNTY FLORIDA
as governing body of the South Amelia Island
Shore Stabilization Municipal Service Benefit Unit


Chairman, Board of County Commissioners,
As Chairman of the South Amelia Island Shore
Stabilization Municipal Service Benefit Unit

Jim B. Higginbotham

Chairman

Title

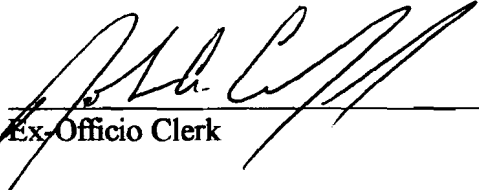
8-13-07

Date

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FEID Number

ATTEST:

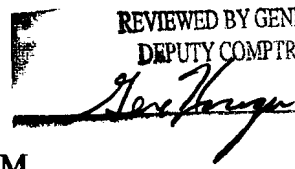


Ex-Officio Clerk

John A. Crawford

Print Name

REVIEWED BY GENE KNAGA
DEPUTY COMPTROLLER

 8/23/07
DATE

APPROVED AS TO FORM



Nassau County Attorney

David A. Hallman

Print Name

**SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
PHASES I & II
MONITORING PROGRAM – 06/07**

COST SHEET

Period – 06/07

▪ Annual Monitoring Program (June 07)	
▪ Rectified Digital Color Photography	\$9,180
▪ Oblique Photography	\$5,250
▪ Survey	
Borrow Site	
Structures	
MHWL and +8 ft. contour (Strux field only)	
Amelia Island Shoreline (R and half mons.)	\$30,500
▪ Subcontractor Management	\$5,250
▪ Data Management	\$7,875
▪ Analyses	\$18,375
▪ Reproduction	\$2,100
▪ Report Preparation	\$37,800
	<hr/>
Task Total	\$116,330.00

NOT ADDRESSED – Remediation surveys or analyses, if determined to be required by Permit Conditions; Permittees; or BB&CS. Such work will be authorized by FDEP or SAISSA, Inc

olsen associates, inc.
DC664
July 2007

**S. Amelia Island
Shore Stabilization Project
Sand Search**

PURPOSE

Two largescale beach restoration projects have been constructed along the southernmost end of Amelia Island, Florida – *i.e.* in 1994 and 2002. The latter renourishment project included the S. Amelia Island State Park, as will all future fill maintenance projects. Two different borrow sites were utilized for the projects each with varying sediment characteristics. Neither borrow site (as permitted) was excavated in its entirety.

This study will seek to re-examine existing sand resources and develop fringe areas of prior borrow sites. A newly developed sand source is required for:

- The next scheduled maintenance of the overall project (assumed to be 2009), and/or.
- An emergency fill project to be constructed following impact by a major storm event.

The latter reconstruction scenario is eligible for Category 'G' Post Disaster Funding by FEMA. Hence, both a sand source and permit(s) are required in order to reconstruct the beach fill in a timely fashion and to take advantage of a Category 'G' designation.

EXISTING DATA

As a result of prior projects constructed at this location, existing Sand Search Investigations, Culture Resource Investigations (for borrow areas) and post-construction

ATTACHMENT B

SCOPE-OF-SERVICES

sediment analysis are available. Similarly, over 14 years of beach monitoring of project fills have been performed along the subject shoreline.

Other available reconnaissance level offshore geotechnical data has been acquired by the USACOE for the Nassau County Shore Protection Project (pending) and a Section 933 study for Nassau Sound.

Note – the work to be performed under the proposed scope-of-work will seek to fully develop a new project borrow area suitable for permitting. A seismic study (CHIRP) was performed for a 3 mi x 7 mi area in 1993 for most of the offshore area in reasonable proximity to the project site (Olsen Associates, Inc. 1993). That study detailed the spatial limits of potentially available near field sand resources which were subsequently utilized by the 1994 and 2002 projects. The Seismic Study was calibrated by a number of VIBRACORES. It is presently felt that sufficient sand resources lie within the above study area sufficient to accomplish the next renourishment. Hence, additional Seismic Survey is not proposed at this time.

OFFICE STUDY

The first phase of work will be a reassembly and reexamination of all available data derived from the previous two beach fill projects, including recent monitoring data for prior borrow sites. As noted above, this database is relatively extensive and includes multiple characterizations of the native beach.

An initial Coring Plan will be formulated based upon the development of sediments associated with unused portions of prior borrow areas and fringe areas (unpermitted) in proximity to these sites. Additional work is intended to extend the geotechnical body of knowledge farther into the ebb tidal platform of Nassau Sound.

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SCOPE-OF-SERVICES

FIELD DATA COLLECTION

All coring will utilize the AOSS vessel the *Alpine Twin*. The coring plan will highlight areas of high probability sediments but will be "dynamic" in that it will be subject to change as cores are acquired and analyzed visually throughout (via a clear tube) and textually at 5 ft intervals as coring tubes are cut, wrapped and stored. Hence, each core will be immediately qualitatively assessed (and rough logged) for depth of apparent high quality sediment, type of sediment (shell, sand, silt, etc.) and apparent elevation of the bottom of core and horizon of desirable sediment. That data will affect the decision to acquire the next pre-planned core or to modify the location of the pending core so as to extend the knowledge of any apparent sediment deposition of potential borrow value.

Each new core location is graphically mapped aboard as work progresses so as to be able to evaluate new data, existing data and the propriety of only subsequent pre-plotted core. All surveying of core locations is by a Hy-Pack system integral to the vessel.

Note – preparation of a plot of tentative core locations at this time is beyond the scope of an (unfunded) Proposal. Graphics of prior borrow areas and associated cores are attached however, for review and consideration.

CORE ANALYSIS

As previously noted, a brief investigation of each core is immediately made during its recovery and processing. Physical samples are evaluated at 5-ft intervals and roughly classified on SP, SM, etc. Based upon this data, a relatively confident evaluation as to quantity and quality of available sand is made during the onboard core acquisition process. A *minimum* of 50 cores will be acquired. At that time, it will be clear as to whether or not a borrow site has been "developed" irrespective of subject detailed Lab results.

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SCOPE-OF-SERVICES

Subsequent to vessel demobilization, the numbered cores are sent to the geotechnical laboratory of SEA, Inc., in Melbourne, Florida. As noted above, seismic data for the area exists. No additional seismic data is proposed under this contract.

Each core will be reassembled and logged and photographed by a professional geologist. Subsequently a *minimum* of 4 samples will be analyzed from the strata of apparent borrow quality sand. Three samples are grabs (at strategic locations) the fourth is a composite of the stratum of apparent high quality sediment available for borrowing. In most instances project design by OAI is based upon the *composite* sample. A project specific core sampling protocol is established between SEA and OAI depending on the nature of the sediments involved for each project. Note – prior to SEA performing each detailed log, an onboard log and penetrometer record is prepared by an AOSS geologist or geophysicist is forwarded to them. Hence, rough core logs are available to all parties prior to formal logging by the lab.

All samples taken from a core are analyzed for % shell, % fines, color, and GSD. The FDEP required protocol for methodologies used will be followed. Both OAI and SEA are knowledgeable of the standards, data formatting preferred, and graphical presentations typically desired by the BB&CS.

NATIVE BEACH CHARACTERIZATION

“Native” beach conditions (prior to and post-fill construction) are available as part of previously referenced studies or investigations. Moreover, a specific analysis of sediments was performed during the initial monitoring of the 2002 renourishment project. A discussion of sediment types (past and future) will be included for purposes of permitting the next renourishment project.

As a part of the Sand Search proposed herein, OAI will re-evaluate insitu existing beach sediment types. Cross shore sampling protocols from prior investigations will be

ATTACHMENT B

SCOPE-OF-SERVICES

utilized. Reference to post-construction beach conditions (beach, texture, etc.) will be made for purposes of supporting design recommendations.

An inter comparison of results (current and historical) will be made as part of the final report. Subsequently, a recommendation as to preferred sediment characteristics will be made for purposes of project design.

WORK BY OTHERS

A Marine Cultural Resources Investigation will be performed for the candidate borrow area by Atlantic Tidewater, Inc. That firm will seek a Permit from the State Historic Preservation Officer (SHPO) to perform the work and will initiate same subsequent to receiving a NTP from OAI. A separate report will be issued in accordance with State standards.

A detailed survey of the defined borrow area will be performed by the hydrographic survey firm of HIS, Inc. A legal description will likewise be prepared upon a NTP by OAI.

DELIVERABLES

Contract deliverables will include:

- Progress Reports at the completion of each major phase of activity.
- A final geotechnical report including all of the findings of the Sand Search and the laboratory analyses. In addition a survey and a Cultural Resource Investigation report will be submitted as separate items. Recommendation regarding future modeling or other Permit related Tasks will be discussed.

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SCOPE-OF-SERVICES

- All geotechnical information in an electronic file suitable for input to the Department's Reconnaissance Offshore Sand Search (ROSS) database.

- A Power Point presentation will be prepared for purposes of agency discussion or posting on the FPS website.

ATTACHMENT B

SCOPE-OF-SERVICES

REFERENCES

Olsen Associates, Inc. (1993). "Amelia Island Sand Transfer/Sand Search Study."

Project submitted to Nassau County Soil and Water Conservation District (1993).

Olsen Associates, Inc. (2000). "South Amelia Island Shoreline Stabilization Study."

Report submitted to Nassau County, FL Board of County Commissioners

(December 2000).

USACE (1991). "Nassau Sound, Section 933 Study, Geotechnical Report". US Army

Corps of Engineers, Jacksonville District, Jacksonville, FL (December 1991).

Olsen Associates, Inc. (2001). "South Amelia Island Shore Stabilization Project – Phase

I Sand Source Investigation." Report submitted to FDEP – FPS and SAISSA

(August, 2001).

ATTACHMENT B

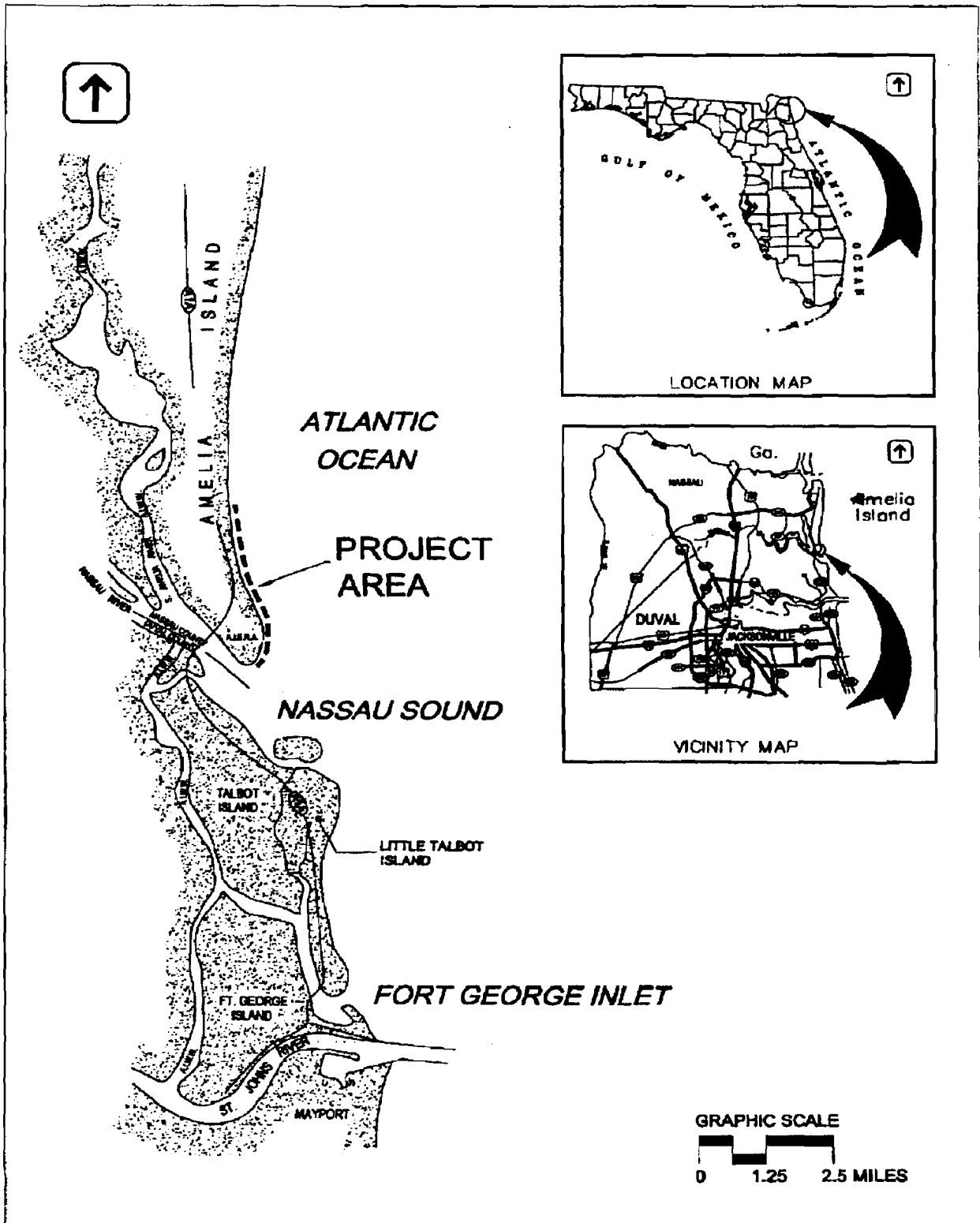


Figure 1: Location map of South Amelia Island in Nassau County, FL

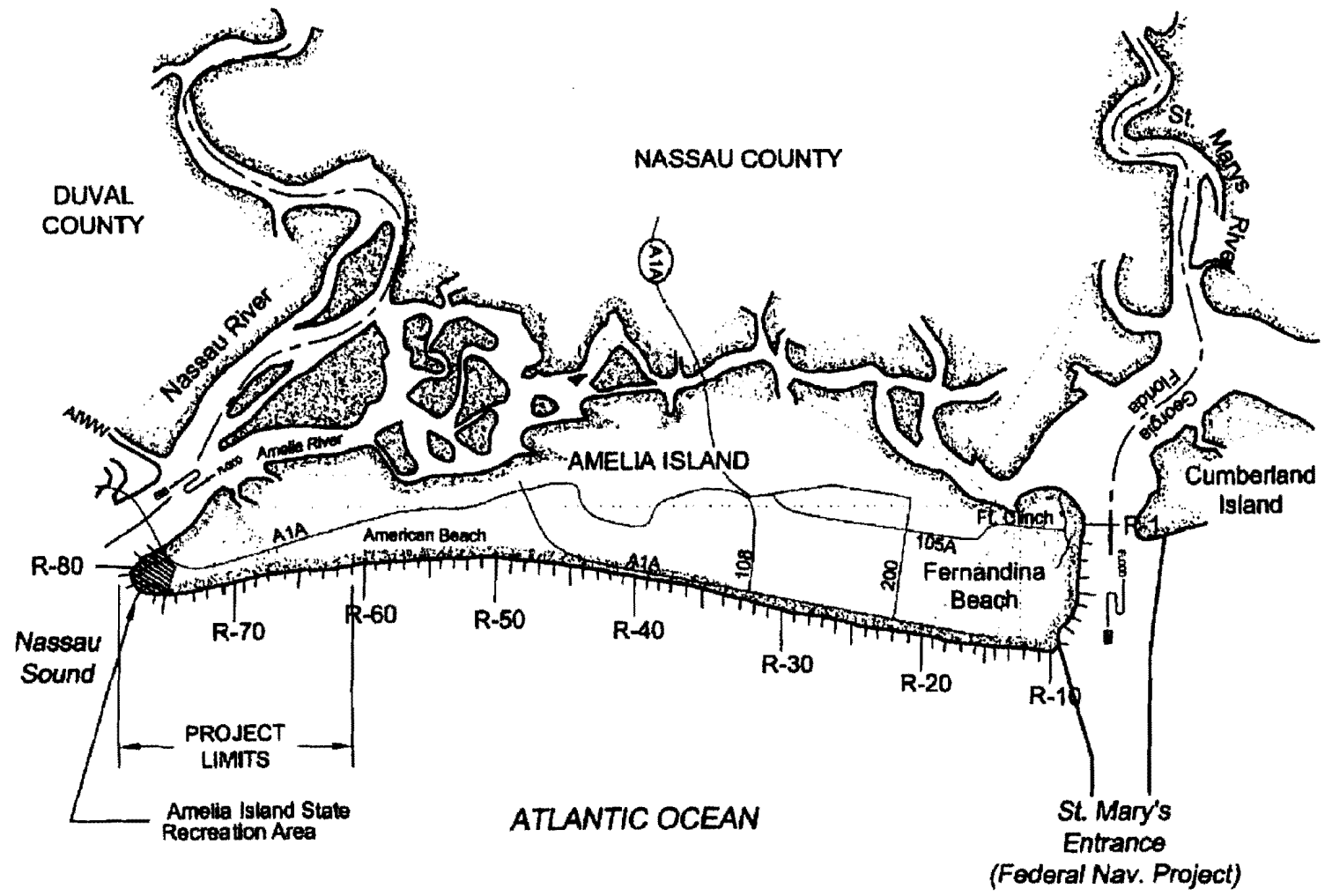


Figure 2: Project Location

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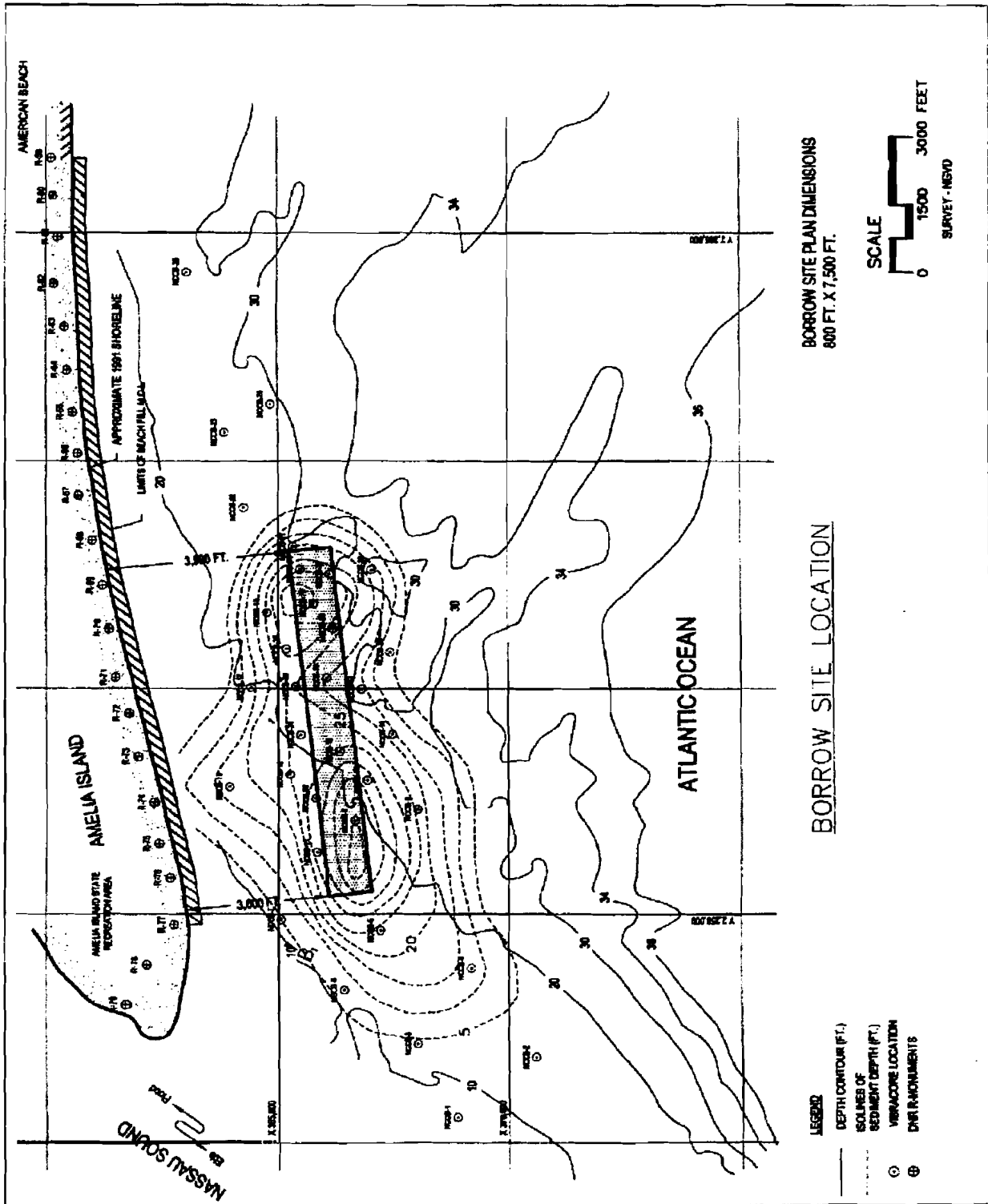


Figure 3: SAISSA Beach Restoration Project Borrow Site (1994)

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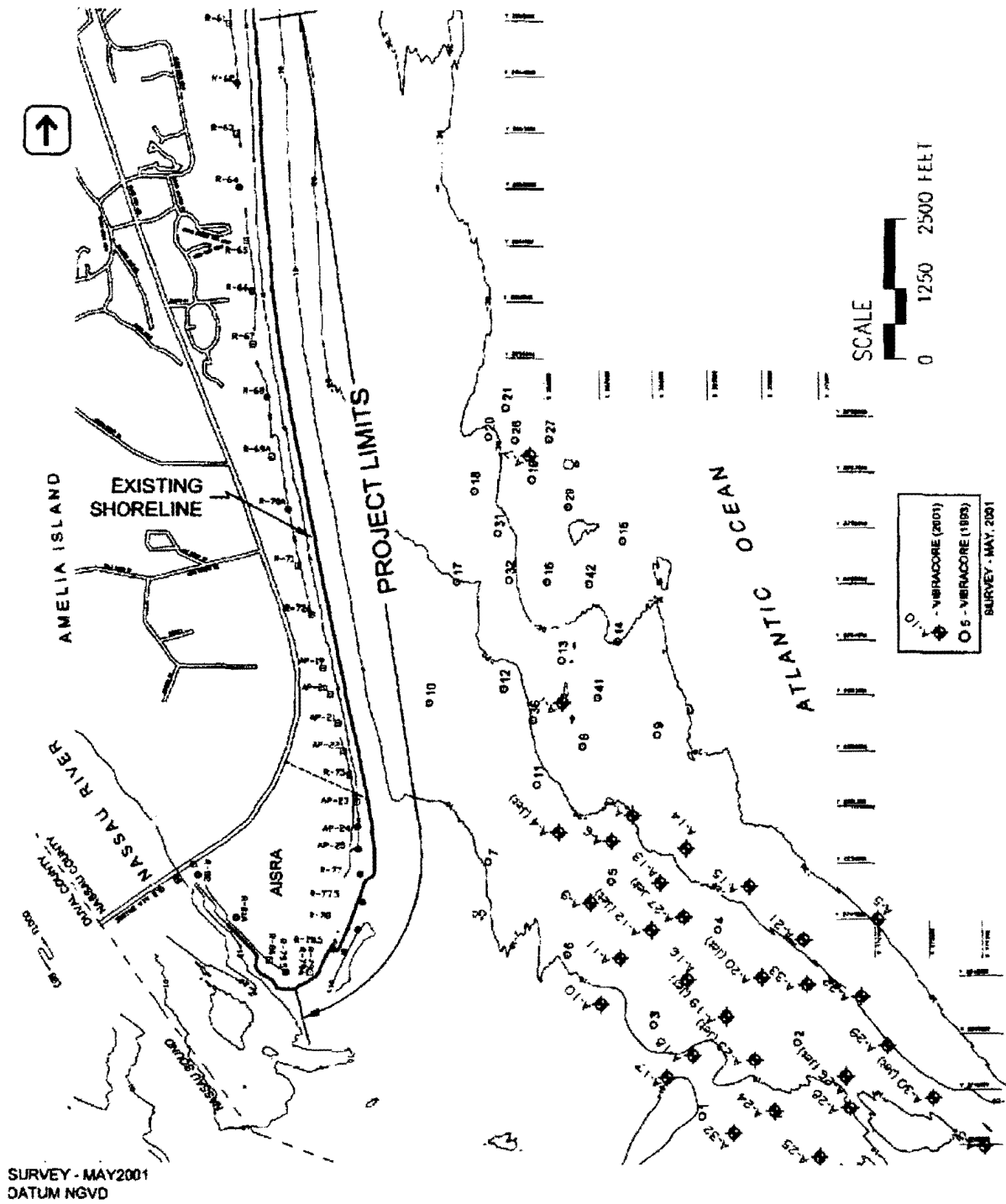
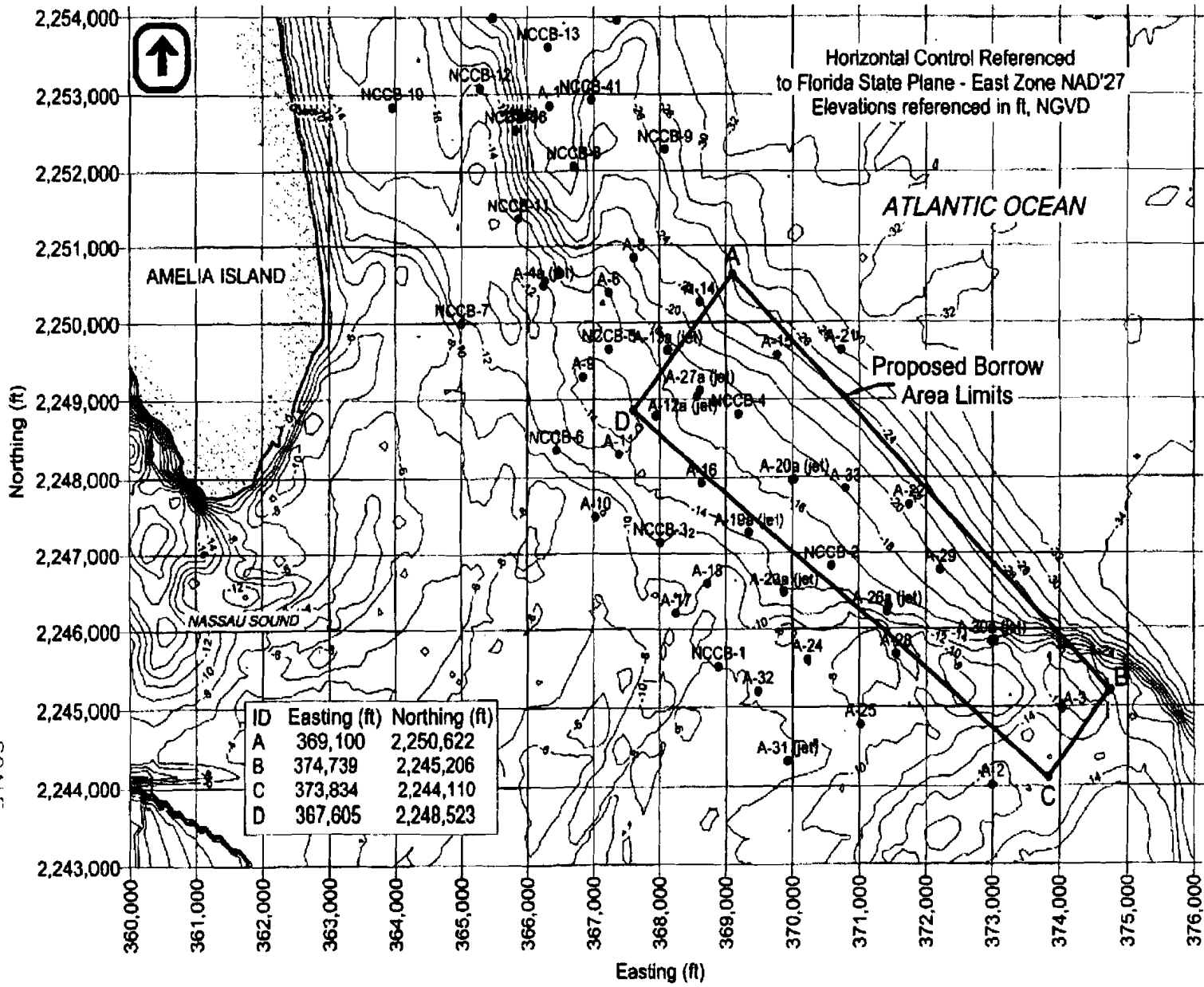


Figure 4: South Amelia Island VIBRACORE Locations (2001 & 1993)



ID	Easting (ft)	Northing (ft)
A	369,100	2,250,622
B	374,739	2,245,206
C	373,834	2,244,110
D	367,605	2,248,523

ATTACHMENT B

**PROPOSAL SUMMARY
S. AMELIA ISLAND
SHORE STABILIZATION PROJECT
SAND SEARCH**

From: Olsen Associates, Inc.
4438 Herschel St.
Jacksonville, FL 32210

Date:
Contract:
Request Made By:

8 August 2006
Coastal Engineering
SAISSA/FPS

Task Order Description: S. Amelia Island Shore Stabilization Project
Sand Search – Borrow Site Redevelopment

SCOPE-OF-WORK

In order to perform a Sand Search necessary to proceed with borrow site redevelopment seaward of S. Amelia Island, OA proposes to provide the following scope-of-services:

- Mob/Demob of Alpine Ocean Seismic Survey (AOSS) Vessel and Crew to Amelia Island, Florida. Vessel would be stationed at Mayport or Fernandina Beach.
- On board management would be provided by Olsen Associates, Inc. personnel during all field activities.
- Visual analysis of coring data "on the fly" would allow for a dynamic Coring Plan.
- A minimum of 50 Vibracores would be acquired up to 20 feet in length. Jet probing or recoring will be specified for core recovery less than 10 ft in length.
- A Vibracore/Penetrometer data report would be required from AOSS.
- Core logging, sampling and photo documentation of each split core would be performed by a certified geologist (SEA, Inc.)
- Laboratory analysis (grain size distributions) will be performed for discrete core samples (up to 3 per core) and 1 composite sample per core. Analyses will likewise include %shell, %fines and rating of color.
- Core Archive boxing (cardboard) of each core for future reference. Transfer to Florida Geological Survey (if requested) for permanent archiving.
- Review and incorporation of prior geotechnical testing seaward of Amelia Island, Florida.

ATTACHMENT B

- Native Beach sampling will be performed and samples analyzed.
- Hydrographic Survey of borrow area and legal description.
- Marine Cultural Resources Investigation of borrow areas (per State of Florida Standards)
- Overall Final Report-of-Findings for the Sand Search and laboratory analyses will be prepared by Olsen Associates, Inc. (10 copies).
- Electronic copy of all maps and report data will be provided to the FDEP as required.
- A Power Point presentation shall be formulated by OA regarding the project findings.
- All necessary subconsultant management and quality control.
- Liaison by Olsen Associates, with FDEP and SAISSA.
- Based upon findings, additional investigation may be warranted.

The Total Fee for the work shall be \$343,000 L.S.

The estimated time to complete the work will be 180 days from NTP. (Assumes availability of vessel and timing of year for NTP). Project field work is highly weather dependent.

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**SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
SAND SEARCH – 06/07**

A. SUBCONSULTANTS

Subconsultant - AOSS

▪ Mob of vessel to site.	
▪ 50 cores/consumables.	
▪ Weather contingency	\$132.825
Commercial transport of cores to lab (Melbourne. FL)	\$5.000

Subconsultant – SEA, Inc. (Soils Laboratory)

▪ 50 x 4 x \$250	\$50.000
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Subconsultant – HIS, Inc. (Hydrographic Survey) \$5.500

Subconsultant – Tidewater Atlantic Research, Inc. \$32.175

Subtotal \$225.500

B. CONSULTANT

▪ Subconsultant management	\$17.500
▪ Review of historical data base	\$12.000
▪ Preparation for field work	\$14.000
▪ Fieldwork/Onsite management/beach sampling	\$18.000
▪ Analyses/Report	\$42.000
▪ Report	\$4.500
▪ Power Point Presentation	\$2.000
▪ Liaison/Client	\$7.500

Subtotal \$117.500

TASK TOTAL \$343.000

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S. Amelia Island
Shore Stabilization Project
Sand Search

**TENTATIVE
SCHEDULE OF EVENTS**

(From NTP)

TASK

Assemblage of Data	0 – 60 Days
Office Study	60 – 90 Days
Native Beach Characterization	60 – 120 Days
Field Data Collection*	90 – 120 Days
Lab Analyses	120 – 180 Days
Report Preparation/Submittal	150 – 210 Days (Review by FDEP)
Survey/Cultural Resources Investigation	240 – 300 Days

*Critical Path determined by availability of coring vessel

SAISSA

South Amelia Island Shore Stabilization Association, Inc.
P.O. Box 3000, Amelia Island, Florida 32035-3000
904.277.5185 Fax: 904.277.5921

October 3, 2007

Joyce Bradley
Nassau County Attorney's Office
96135 Nassau Place
Suite 6
Yulee, Fl 32097

Subject: DEP Contract No. DC 664

Dear Joyce,

Enclosed is the original Amendment No. 2 signed by all parties for the County official record file.

Sincerely,



William R. Moore AICP
SAISSA Coordinator

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COUNTY ATTORNEY