

DEP CONTRACT DC664
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AMENDMENT 8

THIS AGREEMENT was entered into on the 27th day of June 2006, and amended on the 30th day of August 2006 (Amendment 1), the 22nd day of August 2007 (Amendment 2), the 30th day of June 2008 (Amendment 3), the 26th day of January 2009 (Amendment 4), the 1st day of June 2009 (Amendment 5), the 28th day of October 2009 (Amendment 6) and the 11th day of May 2010 (Amendment 7), by and between the Department of Environmental Protection with headquarters at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, a state agency (hereinafter referred to as the "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 96135 Nassau Place Suite 2, Yulee, Florida 32097 (hereinafter referred to as the "County"), and Olsen Associates, Inc., 2618 Herschel Street, Jacksonville, FL 32204 (hereinafter referred to as the "Consultant").

The Department and County selected the Consultant to provide professional engineering services for the post construction monitoring, mitigation and maintenance of the South Amelia Island Shoreline Stabilization Project, according to the Consultants Competitive Negotiations Act, Chapter 287.055 Florida Statutes. The Request for Statement of Qualifications No. RFSOQBDC 07 05/06 and the Consultant's response are included herein by reference.

The Agreement is hereby amended as follows:

1. The Consultant's headquarters address shall be changed from: Olsen Associates, Inc., 4438 Herschel Street, Jacksonville, Florida 32210, to: Olsen Associates, Inc., 2618 Herschel Street, Jacksonville, Florida 32204.
2. The Consultant shall provide the necessary Professional Engineering Services to accomplish the routine placement of suitable beach quality sand, approximately between R-59.5 and R-77, on the south end of Amelia Island, Nassau County, Florida, for a planned periodic maintenance renourishment of the existing beach restoration project. This work shall be conducted in accordance with the Consultant's Statement of Work, attached hereto as Attachment A 8.
3. The total contract amount shall be increased by \$470,882.00 from \$1,402,840.00 \$1,873,722.00 to compensate the Consultant for the services described in Attachment A. The County agrees to pay the additional \$470,882.00. Of the total contract amount the Department has expended \$393,716.00 and the County has expended \$1,480,006.00.
4. The County shall 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.

5. Attachments.

Attachment A 8 is hereby included as part of this Amendment.

Statement of Work: 14 pages

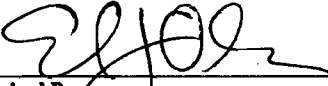
IN ALL OTHER RESPECTS, the Agreement of which this is an Amendment, and attachments relative thereto, shall remain in full force and effect.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

IN WITNESS WHEREOF, the parties hereto have duly executed this 20th day of April, 2011.

FOR THE CONSULTANT

FOR THE DEPARTMENT



Authorized Person



Scott Robinson, Assistant Director DRP

Erik J. Olsen

Print Name

01-28-11

Date

Doc

Title


11 April 2011

Date

Approved As To Form

59-2223174

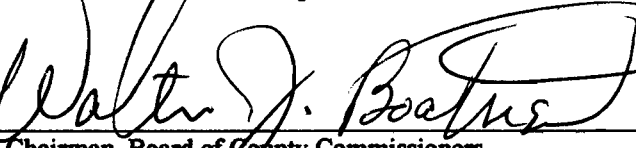
FEID Number



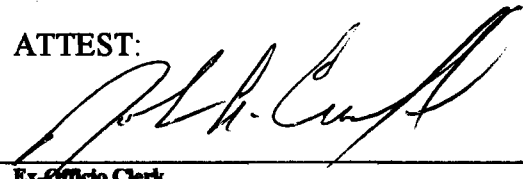
Department Assistant General Counsel

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

ATTEST:



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



Ex-Officio Clerk

Walter J. Boatright

Print Name

John A. Crawford

Print Name

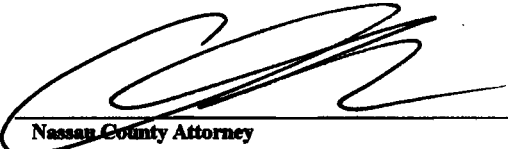
April 20, 2011

Date

Approved As To Form

59-186-3042

FEID Number



Nassau County Attorney

David A. Hallman

Print Name

Attachment A 8
SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
RENOURISHMENT (2011)

Statement Of Work
Task 3.0 Construction

OVERVIEW:

The subject work provides for the renourishment of an existing beach restoration project nominally located between R-59.5 and R-77 on the south end of Amelia Island, Nassau County, Florida. The project includes the north end Amelia Island State Park. The anticipated construction window is the fair weather months of May – Sept, 2011, mol. The project borrow site is located on the ebb tidal platform of Nassau Sound. An ocean certified dredge will be required to perform the 2 M cy fill placement. The permittees (OWNERS) for the proposed work are the Division of Recreation and Parks (DRP), the Nassau County – B.O.C.C., and the South Amelia Island Shore Stabilization Association (SAISSA).

TASK 3.2 BEACH FILL CONSTRUCTION (2011)

Task 3.2(a) Bidding/Negotiation:

The CONSULTANT shall assist Nassau County in advertising the project nationally as well as directly solicit major dredging firms with suitable equipment to construct the proposed work. In that regard, every effort will be made to develop interest in the project and a competitive bidding atmosphere. This will include sending informal project notices in advance of formal bid solicitation/advertisement.

A pre-bid meeting will be held approximately 15-days before the end of the 45-day bid period to address questions from the industry, provide clarifications or intent and address other matters of relevance to the bidding process including Permit status, content, etc. The CONSULTANT will issue, as required, all formal Addendums to the bid documents.

The CONSULTANT shall assist the project sponsors in receiving, opening and evaluating bids for the proposed work. The CONSULTANT shall likewise assist the OWNERS in any level of negotiation, as well as all contractual compliance associated with Insurance and Bond submittals by the apparent low bidder.

CONSULTANT shall be available to appear before the Nassau County Commission and the SAISSA Board in order to answer questions regarding the capabilities and

qualifications of the project bidders, the bid costs, potential negotiations with the apparent low bidder, relevancy to the M.S.B.U., or Bond/Financing requirements, etc.

3.2(a) Deliverable: Bid Advertisement; Addenda; Bid Tabulation; Bid Recommendation; Executed Contracts. Meeting notes, conference hand-outs, etc.

3.2(a) Performance Criteria: Recipient of a bid within budget by a qualified contractor. Negotiations of a contract for the work. Recipient of Bonds and Insurance Certifications.

3.2(a) Schedule: Completion of the work by April 30, 2012.

3.2(a) Fee: \$37,206. L.S.

Task 3.2(b) Construction Observation:

General. The CONSULTANT shall provide engineers and engineering technicians that are trained in methods of the marine construction proposed under this contract. The Principle Engineer shall provide project management oversight. The CONSULTANT's Project Engineer or Project Manager shall provide coordination and liaison and quality assurance review. The CONSULTANT's Site Representative shall provide daily on-site observation and reporting of construction activities and permit compliance.

Pre-Construction Conference and Re-Design. The CONSULTANT along with project representatives shall review the Permits with the CONTRACTOR prior to commencement of the activity authorized by the Permits. More specifically, the CONSULTANT shall coordinate, prepare for and attend a pre-construction conference to review construction methodology, and the specific conditions and monitoring requirements of the Permits with the CONTRACTOR, CONTRACTOR's associated SUB-CONTRACTORS, the Department (DEP), the Division of Recreation and Parks (DRP), and the Florida Fish and Wildlife Conservation Commission (FFWCC) staff, the marine turtle permit holder and other involved parties. The CONSULTANT shall conduct a brief overview of the project and shall reiterate communications and reporting protocols for the duration of CONTRACTOR mobilization, construction, and demobilization activities. The conference shall be held at least 14 days prior to the commencement date of construction. A minimum 7 days advance written notification to the parties advising of the date, time, and location of the pre-construction conference shall be provided. Approximately 14-days prior to the initiation of construction, the CONSULTANT shall "initially rebalance" (*i.e.*, recompute) the project fill to best reflect beach conditions at that point in time.

Site Representation During Construction. The CONSULTANT shall designate Site Representatives to be present at the beach fill construction site, access corridors or staging areas ten (10) hours per day for the duration of construction activities. The Project Engineer or Site Representative(s) will be on call throughout the period of construction.

Observations will be conducted to ensure that construction is in compliance with the construction plans, contract documents, and authorizations granted for the work.

Through his Site Representatives, the CONSULTANT will monitor daily progress of the work, track CONTRACTOR delays, and notify the OWNERS as appropriate.

The CONSULTANT shall obtain and review the CONTRACTOR's quality control reports (daily reports) through the duration of the project from mobilization through demobilization from the project site. The CONSULTANT shall obtain and review, on a daily basis, the water quality monitoring reports to be provided by the CONTRACTOR. The CONSULTANT or his representative shall also review, on a daily basis, the dredge position data to be provided by the CONTRACTOR. The horizontal and vertical positions data will be analyzed, plotted and compared to the permitted borrow area limits. Violations will be reported to the CONTRACTOR and OWNERS.

The CONSULTANT shall designate a Project Engineer, who will visit the site on a weekly basis. The Project Engineer will serve as liaison between the CONTRACTOR and the OWNERS during all phases of construction. The Project Engineer or Site Representative shall address questions concerning the plans and specifications and address other issues requiring coordination or liaison, at a minimum.

The Project Engineer or Site Representative shall attend periodic progress meetings with the CONTRACTOR and the CONTRACTOR's associated SUB-CONTRACTORS as appropriate during construction.

Sand samples of the project fill shall be taken in accordance with the project QA/QC Plan along the nourished beach at the time of construction. Sampling stations will be dictated by the Plan. Percentage fines and shell content will be estimated. Additional samples may be taken for future evaluation.

3.2(b) Deliverables: Pre-Construction survey data submittal; Rebalanced fill templates; Acceptance Section Fill Submittals; monthly status report; Fill adjustments made to maintain contract volume/budget throughout the period of construction; revised plan sheets (as required).

3.2(b) Performance Criteria: Visual and quantitative documentation of work performed by CONTRACTOR. Assurance of performance of certain activities necessitated by Permit (State and Federal). Modification of the project fill plan sufficient to address changes of conditions and the project budget. Assurance that CONTRACTOR complies with project technical specifications and design requirements.

3.2(b) Schedule: Completion of the work by April 30, 2012.

3.2(b) Fee: \$167,274. L.S.

Task 3.2(c) Contract Management

CONTRACTOR Plan or Submittal Review. The CONSULTANT shall review and comment on and coordinate the acceptance and distribution of the following typical Plans-of-Action or submittals required of the CONTRACTOR:

- a) Quality Control Plan (include QA/QC Plan compliance)
- b) Diving Plan
- c) Accident Prevention Plan
- d) Hurricane and Severe Storm Plan
- e) Grade Stake Recovery Plan
- f) Survey Plans and Baseline
- g) Dredge Plan (Borrow Site)
- h) Environmental Protection Plan/Turbidity Monitoring (included)

Additionally, the CONSULTANT shall review the results of any vibration monitoring (if applicable) performed by the CONTRACTOR throughout the duration of the work.

CONTRACTOR Requests for Payment. The CONSULTANT shall review the CONTRACTOR's progress and pay surveys, and pay requests for all related work elements. The CONSULTANT shall review for accuracy of computation and completeness, the CONTRACTOR's periodic payment invoices and will make recommendations to the County and or Department. The CONSULTANT shall make a volumetric comparison of the pre-construction survey and the CONTRACTOR's pay survey in order to verify the section was filled to specifications and assist the OWNERS in evaluating the periodic and final payments to the CONTRACTOR. The CONSULTANT shall assist the County and or Department in assembling the documentation needed for future State reimbursement or cost sharing.

Per the consent of the County and Department, the CONSULTANT shall revise the beach fill design sections as necessary *during the course of the work* in order to maintain the integrity of the project volume and contract cost. The CONSULTANT shall formulate multiple revisions to plan sheets and/or Change Orders, as-needed.

Records Management. The CONSULTANT shall ensure that a copy of the permit, complete with all conditions, attachments, modifications, and time extensions, and the approved plans and specifications shall be kept at the work site of the permitted activity.

The CONSULTANT shall maintain detailed field logbooks, photographs and construction files (notebooks and file folders with copies of all documentation). Upon completion of

construction activities, the CONSULTANT shall conduct final file management and transfer to the County and Department one copy of the files for archival of records.

Project Closeout. Following notification by the CONTRACTOR that construction activities are complete and all payment sections have been approved and accepted by the OWNERS, the CONSULTANT shall conduct a final visual inspection of the beach and staging areas and prepare a punch list of remaining equipment and material to be removed from the project sites and the activities required for restoration of access and staging areas. This list shall be furnished to the local Park Representative, OWNERS and CONTRACTOR to ensure control of final clean-up, any repairs to Park infrastructure, etc.

The CONSULTANT shall conduct a final inspection of the beach and staging areas following notice from the CONTRACTOR that final clean-up has been completed. If the dredge plant and attendant vessels and all grade stakes, pipeline, pipeline supports, pontoons, earthmoving equipment, construction fencing, and CONTRACTOR supplies and debris are completely removed, and access and staging areas restored, then the CONSULTANT shall forward a recommendation to the OWNERS that final payment with release of retainage be made to the CONTRACTOR.

Notice of Commencement. At least forty-eight (48) hours prior to commencement of beach construction activity authorized by the State and Federal Permits, the CONSULTANT shall submit to the County, the Bureau of Beaches and Coastal Systems (BBCS), and the appropriate District Office of the DEP, a written notice (via fax or email) of commencement of construction indicating the actual start date and the expected completion date and an affirmative statement that the County and the CONTRACTOR, if one is to be used, have read the general and specific conditions of the permit and understand them.

Periodic Progress Reports. The CONSULTANT shall submit a weekly report (via fax or email) to the OWNERS and other designated parties, that summarizes the progress of construction and compliance with the Permits and Contract, including but not limited to manpower, amount of work performed and by whom, equipment, problems encountered, method to correct problems, errors, omissions, deviations from Contract Documents, and weather conditions.

Water Quality Reports. As addressed by Permit, the CONSULTANT shall submit summaries of all water quality monitoring data to the BBCS and the appropriate DEP District Office within one week of collection with supporting documents containing the following information: (1) permit number; (2) dates and times of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations; and (5) a statement by the

individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Notice of Anticipated Deviation. The CONSULTANT shall notify the OWNERS and the BBCS in writing (via fax or email) of any *anticipated* deviation from the DEP permit prior to implementation so that the DEP can determine whether a modification of the permit is required pursuant to Section 62B-49.008, Florida Administrative Code.

3.2(c) Deliverables: Written concurrence with pay requests. Modified plan sheets (as required). Change orders. Submission of data files. Submittal of a Final Punch List and recommendations for final payment. Formal determination of Substantial Completion and Final Completion of the work. Submission of a formal notice of commencement. Submittal of periodic progress and Water Quality reports. Copies of correspondence related to the work, deviations from the permit, etc.

3.2(c) Performance Criteria: Continuous assurance of compliance with all Plans-of-Action submitted by CONTRACTOR, compliance with the Contract plans and specifications, etc. Assurance of eligibility for progress and final payment – per the terms of the contract. Assurance of overall performance in the construction of the design works.

3.2(c) Schedule: Completion of the work by April 30, 2012.

3.2(c) Fee: \$85,640. L.S.

Task 3.2(d) Permit Compliance:

Notice of Non-Compliance. The CONSULTANT shall notify immediately (via fax or email) the OWNERS of any non-compliance with any condition or limitation specified in the permits. The written report shall contain a description of and cause of non-compliance; and the period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. All notices of non-compliance from CONSULTANT will likewise be submitted to the State and Federal agencies, as appropriate. This task likewise includes sediment QA/QC.

Certification of Completion. Within 30 days after completion of construction authorized by the permit, the CONSULTANT shall submit to the OWNER and the DEP BBCS a written statement of completion and certification by a registered professional engineer. This certification shall state that all locations and elevations specified by the permits have been verified; the activities authorized by the permits have been performed in compliance with the plans and specifications approved as a part of the permits, and all conditions of the permits; or shall describe any deviations from the plans and specifications, and all conditions of the permits. When the completed activity differs substantially from the

permitted plans, any substantial deviations shall be noted and explained on two copies of as-built drawings.

Environmental Monitoring. The CONSULTANT shall retain a qualified environmental subcontractor to perform benthic sampling and analyses of the beach and borrow site before the initiation of construction. This work will be a precursor to follow-up annual monitoring of the beach and borrow area required by federal permit.

3.2(d) Deliverables: Certifications by CONSULTANT. Mapping of resources identified and relocated. Copies of reporting required by permit. QA/QC sediment sampling results. Copies of data acquired by environmental subconsultant. Nest relocation.

3.2(d) Performance Criteria: Quality control for the duration of work with respect to Permit Compliance by both CONTRACTOR and CONSULTANT. Initiation of certain non-construction related biological monitoring required by subcontractors to CONSULTANT. With FPS staff, facilitation of tortoise nest relocation within and abutting the State Park.

3.2(d) Schedule: Completion of the work by April 30, 2012.

3.2(d) Fee: \$72,420. L.S.

Task 3.2(e) Post-Construction Reporting:

The CONSULTANT shall prepare a Post-Construction Engineering Report which addresses all aspects of the project, as constructed. The purpose of the report is to document relevant aspects of the work which will be beneficial in the design and planning of future renourishment efforts and which relate to project permits. The post-construction report will likewise provide a technical predicate to the first year of post-construction monitoring. That is to say, it provides the baseline condition for subsequent annual monitoring surveys/reporting required by Permit. It likewise will serve as a form of evidence to the DEP regarding eligibility for future cost sharing.

The report will discuss productivity, dredging techniques, weather conditions during the prosecution of the work, factors affecting the CONTRACTOR's productivity, borrow site usage, soil quality, etc. Additionally, the report will summarize the bid results, elements of the total cost to construct, permit, environmental (in general) and public interest issues occurring during the period of construction and other factors potentially affecting future projects. The CONSULTANT shall access, analyze, and summarize CONTRACTOR related data obtained from daily reports, project specific reporting submittals, internal reports, etc. Whenever possible such data bases will be formulated in a graphic format for visual interpretation by the layman. Documentation of spatial variations of fill placement and borrow site usage based upon both CONTRACTOR and CONSULTANT surveys

will be included. The CONSULTANT will commission post-construction controlled aerial photography as part of sub-task 4.5 (Monitoring 10/11). All survey documentation will be provided by the CONTRACTOR as part of the contract deliverables. The report will be suitable for submittal to the County Commission and review by the general public, if desired.

3.2(e) Deliverables: Post-Construction – as-built survey submittal; dredge production analyses; volume and shoreline change analyses; borrow site evaluation; sediment testing results; sea turtle report; shorebird report; documentation by way of a comprehensive report-of-findings.

3.2(e) Performance Criteria: Global assessment of description of all work related activities documented by a comprehensive report suitable for dissemination to the OWNERS, the BB&CS and the general public.

3.2(e) Schedule: Completion of the work by April 30, 2012.

3.2(e) Fee: \$42,072. L.S.

Task 3.2(f) FEMA Documentation – “Engineered Beach”

This special purpose report is intended to be submitted to the Federal Emergency Management Agency (FEMA) to document project compliance with appropriate standards (published and unpublished) of an “engineered beach”.

Moreover, it must likewise provide documentation and analyses of *prior* nourishment projects constructed in 1994 and 2002 in an effort to document cumulative engineered beach project performance to date and to substantiate pre-fill conditions in 1994 as the baseline for which all sediment losses (of fill material) should be measured in the future. That is to say, the “engineered” beach should be discussed and documented in accordance with fills of 1994, 2002 and 2011. To do otherwise could limit the amount of post-disaster compensation (based on fill volume lost) potentially received from FEMA after a future declared disaster for N.E. Florida. This will be a separate stand-alone report suitable for submittal to FEMA Region 4 and Nassau County. Appendices will include quantitative analyses of comparative survey profiles for the three (3) projects constructed over time, as well as qualitative aerial photography of the beach fills (post-construction) suitable for visualization of each improvement.

3.2(f) Deliverables: Report documenting construction of an “engineered beach” suitable for submittal to FEMA and Nassau County; all relevant surveys, aerials, etc.

3.2(f) Performance Criteria: Compliance with the directions, policies, tenets and standards associated with a manual entitled *Public Assistance Guide* (FEMA 322/June 2007). – more specifically Work Category ‘G’ – Parks, Recreational and Other.

3.2(f) Schedule: Completion of the work by April 30, 2012.

3.2(f) Fee: \$45,068. L.S.

Task 3.2(g) As-Built Verification:

The CONSULTANT shall acquire photographic documentation of the renourishment project during and immediately after completion of construction. Limited oblique aerial photography will be acquired during the period of construction for purposes of documenting progress. Post-construction digital, rectified photography (to DEP standards) will be acquired upon completion of the beach fill. All work products will serve to assist in the formulation of a post-construction report (Task 3.2e) as well as the FEMA documentation of an “engineered beach” (Task 3.2f).

3.2(g) Deliverable: Subsequent to a Q/C assessment by the CONSULTANT, copies of all work products shall be submitted to the OWNER group and the BB&CS.

3.2(g) Performance Criteria: Flight plans, survey plans and work products which meet FDEP standards.

3.2(g) Schedule: Completion of the work by April 30, 2012.

3.2(g) Fee: \$21,202. L.S.

**SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
RENOURISHMENT (2011)**

Hourly Cost Schedule by Task

3.2(a) Bidding/Contract Negotiation				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	76	206.00	\$ 15,656.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	72	155.00	\$ 11,160.00
Coastal Engineer I	Steve Howard P.E.	16	119.00	\$ 1,904.00
Coastal Engineer I	Bill Hobensack, P.E.	0	119.00	\$ -
Coastal Engineer II	Will Reilly, P.E.	0	98.00	\$ -
Draftsman	Mike Lawson	16	61.00	\$ 976.00
Admin. Assistant	Heather Kalka	64	65.00	\$ 4,160.00
				\$ -
ODC's				\$ 3,350.00
Total				\$ 37,206.00
3.2 (b) Construction Observation				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	67	206.00	\$ 13,802.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	48	155.00	\$ 7,440.00
Coastal Engineer I	Steve Howard P.E.	40	119.00	\$ 4,760.00
Coastal Engineer I	Bill Hobensack, P.E.	40	119.00	\$ 4,760.00
Coastal Engineer II	Will Reilly, P.E.	24	98.00	\$ 2,352.00
Draftsman	Mike Lawson	0	61.00	\$ -
Admin. Assistant	Heather Kalka	24	65.00	\$ 1,560.00
Field Inspector	Rick Kelly	1250	85.00	\$106,250.00
				\$ -
Geotech Services	Mactec			\$ 1,500.00
ODC's				\$ 24,850.00
Total				\$167,274.00

3.2(c) Contract Management				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	192	206.00	\$ 39,552.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	8	183.00	\$ 1,464.00
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	144	155.00	\$ 22,320.00
Coastal Engineer I	Steve Howard P.E.	0	119.00	\$ -
Coastal Engineer I	Bill Hobensack, P.E.	88	119.00	\$ 10,472.00
Coastal Engineer II	Will Reilly, P.E.	8	98.00	\$ 784.00
Draftsman	Mike Lawson	48	61.00	\$ 2,928.00
Admin. Assistant	Heather Kalka	48	65.00	\$ 3,120.00
				\$ -
				\$ -
				\$ -
ODC's				\$ 5,000.00
Total				\$ 85,640.00
3.2 (d) Contract Compliance				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	44	206.00	\$ 9,064.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	56	155.00	\$ 8,680.00
Coastal Engineer I	Steve Howard P.E.	0	119.00	\$ -
Coastal Engineer I	Bill Hobensack, P.E.	64	119.00	\$ 7,616.00
Coastal Engineer II	Will Reilly, P.E.	0	98.00	\$ -
Draftsman	Mike Lawson	24	61.00	\$ 1,464.00
Admin. Assistant	Heather Kalka	64	65.00	\$ 4,160.00
Field Inspector	Rick Kelly	40	85.00	\$ 3,400.00
				\$ -
Geotech Services	Mactec			\$ 2,500.00
Environmental Monitoring	Coastal Eco-Group			\$ 34,136.00
ODC's				\$ 1,400.00
Total				\$ 72,420.00

3.2(e) Post-Construction Reporting				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	48	206.00	\$ 9,888.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	112	155.00	\$ 17,360.00
Coastal Engineer I	Steve Howard P.E.	48	119.00	\$ 5,712.00
Coastal Engineer I	Bill Hobensack, P.E.	0	119.00	\$ -
Coastal Engineer II	Will Reilly, P.E.	0	98.00	\$ -
Draftsman	Mike Lawson	48	61.00	\$ 2,928.00
Admin. Assistant	Heather Kalka	80	65.00	\$ 5,200.00
				\$ -
				\$ -
				\$ -
ODC's				\$ 984.00
Total				\$ 42,072.00

3.2 (f) FEMA Documentation - "Engineered Beach"				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	28	206.00	\$ 5,768.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	76	155.00	\$ 11,780.00
Coastal Engineer I	Steve Howard P.E.	0	119.00	\$ -
Coastal Engineer I	Bill Hobensack, P.E.	104	119.00	\$ 12,376.00
Coastal Engineer II	Will Reilly, P.E.	48	98.00	\$ 4,704.00
Draftsman	Mike Lawson	80	61.00	\$ 4,880.00
Admin. Assistant	Heather Kalka	64	65.00	\$ 4,160.00
				\$ -
				\$ -
ODC's				\$ 1,400.00
Total				\$ 45,068.00

3.2 (g) As-Built Verification				
	Personnel/Sub-Consultant Firm	Anticipated Effort (hrs)	Rate	Extended
Principal Engineer I	Erik Olsen, P.E.	8	206.00	\$ 1,648.00
Principal Engineer II	Kevin Bodge, Ph.D., P.E.	0	183.00	\$ -
Senior Engineer	Chris Creed, P.E.	0	155.00	\$ -
Senior Engineer	Al Browder, Ph.D., P.E.	8	155.00	\$ 1,240.00
Coastal Engineer I	Steve Howard P.E.	0	119.00	\$ -
Coastal Engineer I	Bill Hobensack, P.E.	0	119.00	\$ -
Coastal Engineer II	Will Reilly, P.E.	0	98.00	\$ -
Draftsman	Mike Lawson	4	61.00	\$ 244.00
Admin. Assistant	Heather Kalka	8	65.00	\$ 520.00
				\$ -
Aerials	Kucera International			\$ 11,400.00
Oblique Photography	APICS			\$ 5,800.00
ODC's				\$ 350.00
Total				\$ 21,202.00

Summary	
Sub-Task	Amount
3.2 a	\$37,206.00
3.2 b	\$167,274.00
3.2 c	\$85,640.00
3.2 d	\$72,420.00
3.2 e	\$42,072.00
3.2 f	\$45,068.00
3.2 g	\$21,202.00
Total	\$470,882.00

**SOUTH AMELIA ISLAND
SHORE STABILIZATION PROJECT
RENOURISHMENT (2011)**

Schedule of Deliverables

I. Task 3.2 Beach Fill Construction (2011)		
Sub-Task		Deliverables
3.2a	Bidding/Negotiation	Bid Advertisement; Addenda; Bid Tabulation; Bid Recommendation; Executed Contracts. Meeting notes, conference hand-outs, etc.
3.2b	Construction Observation	Pre-Construction survey data submittal; Rebalanced fill templates; Acceptance Section Fill Submittals; monthly status report; Fill adjustments made to maintain contract volume/budget throughout the period of construction; revised plan sheets (as required).
3.2c	Contract Management	Written concurrence with pay requests. Modified plan sheets (as required). Change orders. Submission of data files. Submittal of a Final Punch List and recommendations for final payment. Formal determination of Substantial Completion and Final Completion of the work. Submission of a formal notice of commencement. Submittal of periodic progress and Water Quality reports. Copies of correspondence related to the work, deviations from the permit, etc.
3.2d	Permit Compliance	Certifications by CONSULTANT. Mapping of resources identified and relocated. Copies of reporting required by permit. QA/QC sediment sampling results. Copies of data acquired by environmental subconsultant.
3.2e	Post-Construction Reporting	Post-Construction – as-built survey submittal; dredge production analyses; volume and shoreline change analyses; borrow site evaluation; sediment testing results; sea turtle report; shorebird report; documentation by way of a comprehensive report-of-findings.
3.2f	FEMA – Documentation	Report documenting construction of an “engineered beach” suitable for submittal to FEMA and Nassau County; all relevant surveys, aerials, etc.
3.2g	As-Built Verification	Data acquisition (principally aerial photography) required by 3.2.e and 3.2.f. This is data not provided through dredge contractor contract.