

EXECUTIVE SUMMARY

Recommendation to recommend approval of award of Contract 11-5772 for Collier County 2013-14 Beach Renourishment Project Design Engineering and Permitting Services for Renourishment of Barefoot, Vanderbilt, Clam Pass, Park Shore and Naples to Coastal Planning and Engineering in the amount of \$848,554.

OBJECTIVE: To recommend award of Contract 11-5772 to Coastal Planning and Engineering in the amount of \$848,554 to move forward with the Collier County 2013-14 Beach Renourishment Project.

CONSIDERATIONS: At the BCC April 10, 2012 meeting the shortlist of firms for contract negotiations for RFP No. 11-5227 “Beach Renourishment Engineering Services” was recommended for approval. Coastal Planning and Engineering was ranked number 1 for the Beach Renourishment for Barefoot, Vanderbilt, Clam Pass, park Shore and Naples Beach.

The scope of work detail the tasks required to bring the 2013-14 project to construction. The tasks include coastal engineering, design, bathymetric and land surveys, marine geology, biology and modeling. The principal products will be modeling results, plans and specifications of the selected alternative, a comprehensive permit modification, various environmental documents and monitoring plans.

ADVISORY COMMITTEE RECOMMENDATIONS: At the May 11, 2012 CAC this item was unanimously recommended for approval by a 6 to 0 vote.

FISCAL IMPACT: Funding for this project will be from Tourist Development Tax, Fund 195.

It is estimated that the design and pre-construction activities (coastal engineering, design, bathymetric and land surveys, marine geology, biology and modeling) for this project to be \$1,098,000. The current contract price with contingency tasks identified, priced and included in the total is \$848,554. A preliminary/partial funding request of \$600,000 was approved in Fiscal Year 11/12. An additional funding request of \$490,000 will be processed in FY 12/13 to complete is activity.

It is estimated that the construction costs for Barefoot, Vanderbilt, Clam Pass, Park Shore and Naples Beaches will be between \$20,000,000 - \$30,000,000 depending on the project approach, scope and funds available.

Using today’s dollars, the total cost to replace the asset is \$20,000,000 to \$30,000,000. The project has an expected life expectancy of 10 years generating a hypothetical annual depreciation cost of \$2 to \$3 million.

GROWTH MANAGEMENT IMPACT: There is no impact to the Growth Management Plan related to this action.

ADVISORY COMMITTEE RECOMMENDATIONS: Staff recommends approval of this item.

LEGAL CONSIDERATIONS: This item has been reviewed by the County Attorney's Office, requires majority vote, and is legally sufficient for Board action. – CMG

RECOMMENDATION: To recommend approval of award of Contract 11-5772 for Collier County 2013-14 Beach Renourishment Project Design Engineering and Permitting Services for Renourishment of Barefoot, Vanderbilt, Clam Pass, Park Shore and Naples to Coastal Planning and Engineering in the amount of \$848,554.

PREPARED BY: J. Gary McAlpin, P.E., Director, Coastal Zone Management Department

Contract #11-5772
**Design, Engineering and Permitting Services for Re-nourishment of the Barefoot,
Vanderbilt, Clam Pass, Park Shore, and Naples Beaches**

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into this ____ day of _____, 2012 by and between the Board of County Commissioners for Collier County, Florida, a political subdivision of the State of Florida (hereinafter referred to as the "COUNTY" or "OWNER") and **Coastal Planning and Engineering, Inc.** authorized to do business in the State of Florida, whose business address is 2481 NW Boca Raton Blvd., Boca Raton, Florida 33431 (hereinafter referred to as the "CONSULTANT").

WITNESSETH:

WHEREAS, the OWNER desires to obtain the professional Design, Engineering and Permitting Services of the CONSULTANT concerning Re-nourishment of the Barefoot, Vanderbilt, Clam Pass, Park Shore, and Naples Beaches (hereinafter referred to as the "Project"), said services being more fully described in Schedule A "Scope of Services", which is attached hereto and incorporated herein;

WHEREAS, the CONSULTANT has submitted a proposal for provision of those services;
and

WHEREAS, the CONSULTANT represents that it has expertise in the type of professional services that will be required for the Project.

NOW, THEREFORE, in consideration of the mutual covenants and provisions contained herein, the parties hereto agree as follows:

ARTICLE ONE
CONSULTANT'S RESPONSIBILITY

1.1. CONSULTANT shall provide to OWNER professional Design, Engineering and Permitting Services in all phases of the Project to which this Agreement applies.

1.2. The Basic Services to be performed by CONSULTANT hereunder are set forth in the Scope of Services described in detail in Schedule A. The total compensation to be paid CONSULTANT by the OWNER for all Basic Services is set forth in Article Five and Schedule B, "Basis of Compensation", which is attached hereto and incorporated herein.

1.3. The CONSULTANT agrees to obtain and maintain throughout the period of this Agreement all such licenses as are required to do business in the State of Florida and in Collier County, Florida, including, but not limited to, all licenses required by the respective state boards and other governmental agencies responsible for regulating and licensing the professional services to be provided and performed by the CONSULTANT pursuant to this Agreement.

1.4. The CONSULTANT agrees that, when the services to be provided hereunder relate to a professional service which, under Florida Statutes, requires a license, certificate of authorization or other form of legal entitlement to practice such services, it shall employ and/or retain only qualified personnel to provide such services to OWNER.

1.5. CONSULTANT designates Stephen Keehn, P.E. a qualified licensed professional to serve as the CONSULTANT'S project coordinator (hereinafter referred to as the "Project Coordinator"). The Project Coordinator is authorized and responsible to act on behalf of the CONSULTANT with respect to directing, coordinating and administering all aspects of the services to be provided and performed under this Agreement. Further, the Project Coordinator has full authority to bind and obligate the CONSULTANT on all matters arising out of or relating to this Agreement. The CONSULTANT agrees that the Project Coordinator shall devote

whatever time is required to satisfactorily manage the services to be provided and performed by the CONSULTANT hereunder. The Project Coordinator shall not be removed by CONSULTANT from the Project without OWNER'S prior written approval, and if so removed must be immediately replaced with a person acceptable to OWNER.

1.6. CONSULTANT agrees, within fourteen (14) calendar days of receipt of a written request from Owner to promptly remove and replace the Project Coordinator, or any other personnel employed or retained by the CONSULTANT, or any subconsultants or subcontractors or any personnel of any such subconsultants or subcontractors engaged by the CONSULTANT to provide and perform services or work pursuant to the requirements of this Agreement, said request may be made with or without cause. Any personnel so removed must be immediately replaced with a person acceptable to OWNER.

1.7. The CONSULTANT represents to the OWNER that it has expertise in the type of professional services that will be performed pursuant to this Agreement and has extensive experience with projects similar to the Project required hereunder. The CONSULTANT agrees that all services to be provided by CONSULTANT pursuant to this Agreement shall be subject to the OWNER'S review and approval and shall be in accordance with the generally accepted standards of professional practice in the State of Florida, as well as in accordance with all applicable laws, statutes, including the Local Government Prompt Payment Act (218.735 and 218.76 F.S.) as amended in the 2010 legislative session, ordinances, codes, rules, regulations and requirements of any governmental agencies, including the Florida Building Code where applicable, which regulate or have jurisdiction over the Project or the services to be provided and performed by CONSULTANT hereunder. In the event of any conflicts in these requirements, the CONSULTANT shall notify the OWNER of such conflict and utilize its best professional judgment to advise OWNER regarding resolution of each such conflict. OWNER'S approval of the design documents in no way relieves CONSULTANT of its obligation to deliver complete and accurate documents necessary for successful construction of the Project.

1.7.1 The County reserves the right to deduct portions of the (monthly) invoiced (task) amount for the following: Tasks not completed within the expressed time frame, including required deliverables, incomplete and/or deficient documents, failure to comply with local, state and/or federal requirements and/or codes and ordinances applicable to Consultant's performance of the work as related to the project. This list is not deemed to be all-inclusive, and the County reserves the right to make sole determination regarding deductions. After notification of deficiency, if the Consultant fails to correct the deficiency within the specified timeframe, these funds would be forfeited by the Consultant. The County may also deduct or charge the Consultant for services and/or items necessary to correct the deficiencies directly related to the Consultant's non-performance whether or not the County obtained substitute performance.

1.8. CONSULTANT agrees not to divulge, furnish or make available to any third person, firm or organization, without OWNER'S prior written consent, or unless incident to the proper performance of the CONSULTANT'S obligations hereunder, or in the course of judicial or legislative proceedings where such information has been properly subpoenaed, any non-public information concerning the services to be rendered by CONSULTANT hereunder, and CONSULTANT shall require all of its employees, agents, subconsultants and subcontractors to comply with the provisions of this paragraph. CONSULTANT shall provide OWNER prompt written notice of any such subpoenas.

1.9 As directed by OWNER, all plans and drawings referencing a specific geographic area must be submitted in an AutoCad Digital Exchange File (DXF) format on a CD or DVD, drawn in the Florida State Plane East (US Feet) Coordinate System (NAD 83/90). The drawings should either reference specific established Survey Monumentation, such as Certified Section Corners (Half or Quarter Sections are also acceptable), or when implemented, derived from the RTK(Real-Time Kinematic) GPS Network as provided by OWNER. Information layers shall have

common naming conventions (i.e. right-of-way - ROW, centerlines - CL, edge-of-pavement - EOP, etc), and adhere to industry standard CAD specifications.

ARTICLE TWO ADDITIONAL SERVICES OF CONSULTANT

If authorized in writing by OWNER through a Change Order to this Agreement, CONSULTANT shall furnish or obtain from others Additional Services of the types listed in Article Two herein. The agreed upon scope, compensation and schedule for Additional Services shall be set forth in the Amendment authorizing those Additional Services. With respect to the individuals with authority to authorize Additional Services under this Agreement, such authority will be as established in OWNER'S Purchasing Policy and Administrative Procedures in effect at the time such services are authorized. These services will be paid for by OWNER as indicated in Article Five and Schedule B. Except in an emergency endangering life or property, any Additional Services must be approved in writing via an Amendment to this Agreement prior to starting such services. OWNER will not be responsible for the costs of Additional Services commenced without such express prior written approval. Failure to obtain such prior written approval for Additional Services will be deemed: (i) a waiver of any claim by CONSULTANT for such Additional Services and (ii) an admission by CONSULTANT that such Work is not additional but rather a part of the Basic Services required of CONSULTANT hereunder. If OWNER determines that a change in the Agreement is required because of the action taken by CONSULTANT in response to an emergency, an Amendment shall be issued to document the consequences of the changes or variations, provided that CONSULTANT has delivered written notice to OWNER of the emergency within forty-eight (48) hours from when CONSULTANT knew or should have known of its occurrence. Failure to provide the forty-eight (48) hour written notice noted above, waives CONSULTANT'S right it otherwise may have had to seek an adjustment to its compensation or time of performance under this Agreement. The following services, if not otherwise specified in Schedule A as part of Basic Services, shall be Additional Services:

2.1. Preparation of applications and supporting documents (except those already to be furnished under this Agreement) for private or governmental grants, loans, bond issues or advances in connection with the Project.

2.2. Services resulting from significant changes in the general scope, extent or character of the Project or its design including, but not limited to, changes in size, complexity, OWNER'S schedule or character of construction; and revising studies, reports, design documents or Contract Documents previously accepted by OWNER when such revisions are required by changes in laws, rules, regulations, ordinances, codes or orders enacted subsequent to and not reasonably anticipated prior to the preparation of such studies, reports or documents, or are due to any other causes beyond CONSULTANT'S control and fault.

2.3 Providing renderings or models for OWNER'S use.

2.4 Investigations and studies involving detailed consideration of operations, maintenance and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; and evaluating processes available for licensing and assisting OWNER in obtaining such process licensing.

2.5. Furnishing services of independent professional associates and consultants for other than the Basic Services to be provided by CONSULTANT hereunder.

2.6. Services during travel outside of Collier and Lee Counties required of CONSULTANT and directed by OWNER, other than visits to the Project site or OWNER's office.

2.7 Preparation of operating, maintenance and staffing manuals, except as otherwise provided for herein.

2.8. Preparing to serve or serving as a CONSULTANT or witness for OWNER in any litigation, or other legal or administrative proceeding, involving the Project (except for assistance in consultations which are included as part of the Basic Services to be provided herein).

2.9 Additional services rendered by CONSULTANT in connection with the Project, not otherwise provided for in this Agreement or not customarily furnished in Collier County as part of the Basic Services in accordance with generally accepted professional practice.

ARTICLE THREE OWNER'S RESPONSIBILITIES

3.1. The OWNER shall designate in writing a project manager to act as OWNER'S representative with respect to the services to be rendered under this Agreement (hereinafter referred to as the "Project Manager"). The Project Manager shall have authority to transmit instructions, receive information, interpret and define OWNER'S policies and decisions with respect to CONSULTANT'S services for the Project. However, the Project Manager is not authorized to issue any verbal or written orders or instructions to the CONSULTANT that would have the effect, or be interpreted to have the effect, of modifying or changing in any way whatever:

- (a) The scope of services to be provided and performed by the CONSULTANT hereunder;
- (b) The time the CONSULTANT is obligated to commence and complete all such services; or
- (c) The amount of compensation the OWNER is obligated or committed to pay the CONSULTANT.

3.2. The Project Manager shall:

- (a) Review and make appropriate recommendations on all requests submitted by the CONSULTANT for payment for services and work provided and performed in accordance with this Agreement;

- (b) Provide all criteria and information requested by CONSULTANT as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations;
- (c) Upon request from CONSULTANT, assist CONSULTANT by placing at CONSULTANT'S disposal all available information in the OWNER'S possession pertinent to the Project, including existing drawings, specifications, shop drawings, product literature, previous reports and any other data relative to the Project;
- (d) Arrange for access to and make all provisions for CONSULTANT to enter the Project site to perform the services to be provided by CONSULTANT under this Agreement; and
- (e) Provide notice to CONSULTANT of any deficiencies or defects discovered by the OWNER with respect to the services to be rendered by CONSULTANT hereunder.

ARTICLE FOUR TIME

4.1. Services to be rendered by CONSULTANT shall be commenced subsequent to the execution of this Agreement upon written Notice to Proceed from OWNER for all or any designated portion of the Project and shall be performed and completed in accordance with the Project Milestone Schedule attached hereto and made a part hereof as Schedule C. Time is of the essence with respect to the performance of this Agreement.

4.2. Should CONSULTANT be obstructed or delayed in the prosecution or completion of its services as a result of unforeseeable causes beyond the control of CONSULTANT, and not due to its own fault or neglect, including but not restricted to acts of nature or of public enemy, acts of government or of the OWNER, fires, floods, epidemics, quarantine regulations, strikes or lock-outs, then CONSULTANT shall notify OWNER in writing within five (5) working days after

commencement of such delay, stating the specific cause or causes thereof, or be deemed to have waived any right which CONSULTANT may have had to request a time extension for that specific delay.

4.3. No interruption, interference, inefficiency, suspension or delay in the commencement or progress of CONSULTANT'S services from any cause whatsoever, including those for which OWNER may be responsible in whole or in part, shall relieve CONSULTANT of its duty to perform or give rise to any right to damages or additional compensation from OWNER. CONSULTANT'S sole remedy against OWNER will be the right to seek an extension of time to its schedule provided, however, the granting of any such time extension shall not be a condition precedent to the aforementioned "No Damage for Delay" provision. This paragraph shall expressly apply to claims for early completion, as well as claims based on late completion. Provided, however, if through no fault or neglect of CONSULTANT, the services to be provided hereunder have been delayed for a total of 180 calendar days, CONSULTANT'S compensation shall be equitably adjusted, with respect to those services that have not yet been performed, to reflect the incremental increase in costs experienced by CONSULTANT, if any, as a result of such delays.

4.4 Should the CONSULTANT fail to commence, provide, perform or complete any of the services to be provided hereunder in a timely manner, in addition to any other rights or remedies available to the OWNER hereunder, the OWNER at its sole discretion and option may withhold any and all payments due and owing to the CONSULTANT until such time as the CONSULTANT resumes performance of its obligations hereunder in such a manner so as to reasonably establish to the OWNER's satisfaction that the CONSULTANT'S performance is or will shortly be back on schedule.

4.5 In no event shall any approval by OWNER authorizing CONSULTANT to continue performing Work under this Agreement or any payment issued by OWNER to CONSULTANT be

deemed a waiver of any right or claim OWNER may have against CONSULTANT for delay or any other damages hereunder.

ARTICLE FIVE COMPENSATION

5.1. Compensation and the manner of payment of such compensation by the OWNER for services rendered hereunder by CONSULTANT shall be as prescribed in Schedule B, entitled "Basis of Compensation", which is attached hereto and made a part hereof.

ARTICLE SIX OWNERSHIP OF DOCUMENTS

6.1. Upon the completion or termination of this Agreement, as directed by OWNER, CONSULTANT shall deliver to OWNER copies or originals of all records, documents, drawings, notes, tracings, plans, Auto CADD files, specifications, maps, evaluations, reports and other technical data, other than working papers, prepared or developed by or for CONSULTANT under this Agreement ("Project Documents"). OWNER shall specify whether the originals or copies of such Project Documents are to be delivered by CONSULTANT. CONSULTANT shall be solely responsible for all costs associated with delivering to OWNER the Project Documents. CONSULTANT, at its own expense, may retain copies of the Project Documents for its files and internal use.

6.2. Notwithstanding anything in this Agreement to the contrary and without requiring OWNER to pay any additional compensation, CONSULTANT hereby grants to OWNER a nonexclusive, irrevocable license in all of the Project Documents for OWNER'S use on this Project. CONSULTANT warrants to OWNER that it has full right and authority to grant this license to OWNER. Further, CONSULTANT consents to OWNER'S use of the Project Documents to complete the Project following CONSULTANT'S termination for any reason or to perform additions to or remodeling, replacement or renovations of the Project. CONSULTANT also acknowledges OWNER may be making Project Documents available for review and information to various third parties and hereby consents to such use by OWNER.

ARTICLE SEVEN MAINTENANCE OF RECORDS

7.1. CONSULTANT will keep adequate records and supporting documentation which concern or reflect its services hereunder. The records and documentation will be retained by CONSULTANT for a minimum of five (5) years from (a) the date of termination of this Agreement or (b) the date the Project is completed, whichever is later, or such later date as may be required by law. OWNER, or any duly authorized agents or representatives of OWNER, shall, free of charge, have the right to audit, inspect and copy all such records and documentation as often as they deem necessary during the period of this Agreement and during the five (5) year period noted above, or such later date as may be required by law; provided, however, such activity shall be conducted only during normal business hours.

ARTICLE EIGHT INDEMNIFICATION

8.1. To the maximum extent permitted by Florida law, CONSULTANT shall indemnify and hold harmless OWNER, its officers and employees from any and all liabilities, damages, losses and costs, including, but not limited to, reasonable attorneys' fees and paralegals' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of CONSULTANT or anyone employed or utilized by the CONSULTANT in the performance of this Agreement. This indemnification obligation shall not be construed to negate, abridge or reduce any other rights or remedies which otherwise may be available to an indemnified party or person described in this paragraph 8.1.

ARTICLE NINE INSURANCE

9.1. CONSULTANT shall obtain and carry, at all times during its performance under the Contract Documents, insurance of the types and in the amounts set forth in SCHEDULE D to this Agreement.

9.2 All insurance shall be from responsible companies duly authorized to do business in the State of Florida.

- 9.3 All insurance policies required by this Agreement shall include the following provisions and conditions by endorsement to the policies:
- 9.3.1. All insurance policies, other than the Business Automobile policy, Professional Liability policy, and the Workers Compensation policy, provided by CONSULTANT to meet the requirements of this Agreement shall name Collier County Government, Collier County, Florida, as an additional insured as to the operations of CONSULTANT under this Agreement and shall contain a severability of interests provisions.
 - 9.3.2. Companies issuing the insurance policy or policies shall have no recourse against OWNER for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of CONSULTANT.
 - 9.3.3. All insurance coverages of CONSULTANT shall be primary to any insurance or self-insurance program carried by OWNER applicable to this Project, and the "Other Insurance" provisions of any policies obtained by CONSULTANT shall not apply to any insurance or self-insurance program carried by OWNER applicable to this Project.
 - 9.3.4. The Certificates of Insurance must read: **For any and all work performed on behalf of Collier County.**
 - 9.3.5. All insurance policies shall be fully performable in Collier County, Florida, and shall be construed in accordance with the laws of the State of Florida.
- 9.4. CONSULTANT, its subconsultants and OWNER shall waive all rights against each other for damages covered by insurance to the extent insurance proceeds are paid and received by OWNER, except such rights as they may have to the proceeds of such insurance held by any of them.
- 9.5 All insurance companies from whom CONSULTANT obtains the insurance policies required hereunder must meet the following minimum requirements:
- 9.5.1. The insurance company must be duly licensed and authorized by the Department of Insurance of the State of Florida to transact the appropriate insurance business in the State of Florida.
 - 9.5.2. The insurance company must have a current A. M. Best financial rating of "Class VI" or higher.

ARTICLE TEN SERVICES BY CONSULTANT'S OWN STAFF

- 10.1. The services to be performed hereunder shall be performed by CONSULTANT'S own staff, unless otherwise authorized in writing by the OWNER. The employment of, contract with,

or use of the services of any other person or firm by CONSULTANT, as independent consultant or otherwise, shall be subject to the prior written approval of the OWNER. No provision of this Agreement shall, however, be construed as constituting an agreement between the OWNER and any such other person or firm. Nor shall anything in this Agreement be deemed to give any such party or any third party any claim or right of action against the OWNER beyond such as may then otherwise exist without regard to this Agreement.

10.2 Attached as Schedule F is a listing of all key personnel CONSULTANT intends to assign to the Project to perform the Services required hereunder. Such personnel shall be committed to this Project in accordance with the percentages noted in Schedule F. CONSULTANT also has identified each subconsultant and subcontractor it intends to utilize on the Project in Schedule F. All personnel, subconsultants and subcontractors identified in Schedule F shall not be removed or replaced without OWNER'S prior written consent.

10.3 CONSULTANT is liable for all the acts or omissions of its subconsultants or subcontractors. By appropriate written agreement, the CONSULTANT shall require each subconsultant or subcontractor, to the extent of the Services to be performed by the subconsultant or subcontractor, to be bound to the CONSULTANT by the terms of this Agreement, and to assume toward the CONSULTANT all the obligations and responsibilities which the CONSULTANT, by this Agreement, assumes toward the OWNER. Each subconsultant or subcontract agreement shall preserve and protect the rights of the OWNER under this Agreement with respect to the Services to be performed by the subconsultant or subcontractor so that the subconsulting or subcontracting thereof will not prejudice such rights. Where appropriate, the CONSULTANT shall require each subconsultant or subcontractor to enter into similar agreements with its sub-subconsultants or sub-subcontractors.

10.4 CONSULTANT acknowledges and agrees that OWNER is a third party beneficiary of each contract entered into between CONSULTANT and each subconsultant or subcontractor, however nothing in this Agreement shall be construed to create any contractual relationship between OWNER and any subconsultant or subcontractor. Further, all such contracts shall provide that, at Owner's discretion, they are assignable to OWNER upon any termination of this Agreement.

ARTICLE ELEVEN WAIVER OF CLAIMS

11.1. CONSULTANT'S acceptance of final payment shall constitute a full waiver of any and all claims, except for insurance company subrogation claims, by it against OWNER arising out of this Agreement or otherwise related to the Project, and except those previously made in writing in accordance with the terms of this Agreement and identified by CONSULTANT as unsettled at the time of the final payment. Neither the acceptance of CONSULTANT'S services nor payment by OWNER shall be deemed to be a waiver of any of OWNER'S rights against CONSULTANT.

ARTICLE TWELVE TERMINATION OR SUSPENSION

12.1. CONSULTANT shall be considered in material default of this Agreement and such default will be considered cause for OWNER to terminate this Agreement, in whole or in part, as further set forth in this section, for any of the following reasons: (a) CONSULTANT'S failure to begin services under the Agreement within the times specified under the Notice(s) to Proceed, or (b) CONSULTANT'S failure to properly and timely perform the services to be provided hereunder or as directed by OWNER, or (c) the bankruptcy or insolvency or a general assignment for the benefit of creditors by CONSULTANT or by any of CONSULTANT'S principals, officers or directors, or (d) CONSULTANT'S failure to obey any laws, ordinances, regulations or other codes of conduct, or (e) CONSULTANT'S failure to perform or abide by the terms and conditions of this Agreement, or (f) for any other just cause. The OWNER may so terminate this

Agreement, in whole or in part, by giving the CONSULTANT seven (7) calendar days written notice of the material default.

12.2. If, after notice of termination of this Agreement as provided for in paragraph 12.1 above, it is determined for any reason that CONSULTANT was not in default, or that its default was excusable, or that OWNER otherwise was not entitled to the remedy against CONSULTANT provided for in paragraph 12.1, then the notice of termination given pursuant to paragraph 12.1 shall be deemed to be the notice of termination provided for in paragraph 12.3, below, and CONSULTANT's remedies against OWNER shall be the same as and be limited to those afforded CONSULTANT under paragraph 12.3, below.

12.3. OWNER shall have the right to terminate this Agreement, in whole or in part, without cause upon seven (7) calendar days written notice to CONSULTANT. In the event of such termination for convenience, CONSULTANT'S recovery against OWNER shall be limited to that portion of the fee earned through the date of termination, together with any retainage withheld and any costs reasonably incurred by CONSULTANT that are directly attributable to the termination, but CONSULTANT shall not be entitled to any other or further recovery against OWNER, including, but not limited to, anticipated fees or profits on work not required to be performed. CONSULTANT must mitigate all such costs to the greatest extent reasonably possible.

12.4. Upon termination and as directed by Owner, the CONSULTANT shall deliver to the OWNER all original papers, records, documents, drawings, models, and other material set forth and described in this Agreement, including those described in Section 6, that are in CONSULTANT'S possession or under its control.

12.5. The OWNER shall have the power to suspend all or any portions of the services to be provided by CONSULTANT hereunder upon giving CONSULTANT two (2) calendar days prior written notice of such suspension. If all or any portion of the services to be rendered hereunder

are so suspended, the CONSULTANT'S sole and exclusive remedy shall be to seek an extension of time to its schedule in accordance with the procedures set forth in Article Four herein.

12.6 In the event (i) OWNER fails to make any undisputed payment to CONSULTANT within forty-five (45) days after such payment is due or such other time as required by Florida's Prompt Payment Act or (ii) OWNER otherwise persistently fails to fulfill some material obligation owed by OWNER to CONSULTANT under this Agreement, and (ii) OWNER has failed to cure such default within fourteen (14) days of receiving written notice of same from CONSULTANT, then CONSULTANT may stop its performance under this Agreement until such default is cured, after giving OWNER a second fourteen (14) days written notice of CONSULTANT'S intention to stop performance under the Agreement. If the Services are so stopped for a period of one hundred and twenty (120) consecutive days through no act or fault of the CONSULTANT or its subconsultant or subcontractor or their agents or employees or any other persons performing portions of the Services under contract with the CONSULTANT, the CONSULTANT may terminate this Agreement by giving written notice to OWNER of CONSULTANT'S intent to terminate this Agreement. If OWNER does not cure its default within fourteen (14) days after receipt of CONSULTANT'S written notice, CONSULTANT may, upon fourteen (14) additional days' written notice to the OWNER, terminate the Agreement and recover from the Owner payment for Services performed through the termination date, but in no event shall CONSULTANT be entitled to payment for Services not performed or any other damages from Owner.

ARTICLE THIRTEEN TRUTH IN NEGOTIATION REPRESENTATIONS

13.1. CONSULTANT warrants that CONSULTANT has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that CONSULTANT has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for

CONSULTANT, any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement.

13.2. In accordance with provisions of Section 287.055, (5)(a), Florida Statutes, the CONSULTANT agrees to execute the required Truth-In-Negotiation Certificate, attached hereto and incorporated herein as Schedule E, certifying that wage rates and other factual unit costs supporting the compensation for CONSULTANT'S services to be provided under this Agreement are accurate, complete and current at the time of the Agreement. The CONSULTANT agrees that the original Agreement price and any additions thereto shall be adjusted to exclude any significant sums by which the OWNER determines the Agreement price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such adjustments shall be made within one (1) year following the end of this Agreement.

ARTICLE FOURTEEN CONFLICT OF INTEREST

14.1. CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder. CONSULTANT further represents that no persons having any such interest shall be employed to perform those services.

ARTICLE FIFTEEN MODIFICATION

15.1. No modification or change in this Agreement shall be valid or binding upon either party unless in writing and executed by the party or parties intended to be bound by it.

ARTICLE SIXTEEN NOTICES AND ADDRESS OF RECORD

16.1. All notices required or made pursuant to this Agreement to be given by the CONSULTANT to the OWNER shall be in writing and shall be delivered by hand, by fax, or by United States Postal Service Department, first class mail service, postage prepaid, addressed to the following OWNER'S address of record:

Board of County Commissioners,
Collier County Florida
Purchasing Department
3327 Tamiami Trail East
Naples, FL. 34112
Attention: Joanne Markiewicz, Interim Purchasing/General Services Director
Fax: 239-732-0844

16.2. All notices required or made pursuant to this Agreement to be given by the OWNER to the CONSULTANT shall be made in writing and shall be delivered by hand, by fax or by the United States Postal Service Department, first class mail service, postage prepaid, addressed to the following CONSULTANT'S address of record:

Coastal Planning and Engineering, Inc.
2481 NW Boca Raton Blvd.
Boca Raton, FL 33431
Telephone: 561-391-8102
Fax: 561-391-9116
Attn: Stephen Keehn, P.E.

16.3. Either party may change its address of record by written notice to the other party given in accordance with requirements of this Article.

ARTICLE SEVENTEEN MISCELLANEOUS

17.1. CONSULTANT, in representing OWNER, shall promote the best interests of OWNER and assume towards OWNER a duty of the highest trust, confidence, and fair dealing.

17.2. No modification, waiver, suspension or termination of the Agreement or of any terms thereof shall impair the rights or liabilities of either party.

17.3. This Agreement is not assignable, or otherwise transferable in whole or in part, by CONSULTANT without the prior written consent of OWNER.

17.4. Waivers by either party of a breach of any provision of this Agreement shall not be deemed to be a waiver of any other breach and shall not be construed to be a modification of the terms of this Agreement.

17.5. The headings of the Articles, Schedules, Parts and Attachments as contained in this Agreement are for the purpose of convenience only and shall not be deemed to expand, limit or change the provisions in such Articles, Schedules, Parts and Attachments.

17.6. This Agreement, including the referenced Schedules and Attachments hereto, constitutes the entire agreement between the parties hereto and shall supersede, replace and nullify any and all prior agreements or understandings, written or oral, relating to the matter set forth herein, and any such prior agreements or understanding shall have no force or effect whatever on this Agreement.

17.7 Unless otherwise expressly noted herein, all representations and covenants of the parties shall survive the expiration or termination of this Agreement.

17.8 This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

17.9 The terms and conditions of the following Schedules are by this reference incorporated herein:

- Schedule A SCOPE OF SERVICES
- Schedule B BASIS OF COMPENSATION
- Schedule C PROJECT MILESTONE SCHEDULE
- Schedule D INSURANCE COVERAGE

Schedule E TRUTH IN NEGOTIATION CERTIFICATE

Schedule F KEY PERSONNEL, SUBCONSULTANTS AND
SUBCONTRACTORS

RFP # 11-5772 Terms and conditions

ARTICLE EIGHTEEN
APPLICABLE LAW

18.1. This Agreement shall be governed by the laws, rules, and regulations of the State of Florida, and by such laws, rules and regulations of the United States as made applicable to services funded by the United States government. Any suit or action brought by either party to this Agreement against the other party relating to or arising out of this Agreement must be brought in the appropriate federal or state courts in Collier County, Florida, which courts have sole and exclusive jurisdiction on all such matters.

ARTICLE NINETEEN
SECURING AGREEMENT/PUBLIC ENTITY CRIMES

19.1 CONSULTANT warrants that CONSULTANT has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that CONSULTANT has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for CONSULTANT, any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement. At the time this Agreement is executed, CONSULTANT shall sign and deliver to OWNER the Truth-In-Negotiation Certificate identified in Article 13 and attached hereto and made a part hereof as Schedule E. CONSULTANT'S compensation shall be adjusted to exclude any sums by which OWNER determines the compensation was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs.

19.2 By its execution of this Agreement, CONSULTANT acknowledges that it has been informed by OWNER of and is in compliance with the terms of Section 287.133(2)(a) of the Florida Statutes which read as follows:

"A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months following the date of being placed on the convicted vendor list."

ARTICLE TWENTY DISPUTE RESOLUTION

20.1 Prior to the initiation of any action or proceeding permitted by this Agreement to resolve disputes between the parties, the parties shall make a good faith effort to resolve any such disputes by negotiation. The negotiation shall be attended by representatives of CONSULTANT with full decision-making authority and by OWNER'S staff person who would make the presentation of any settlement reached during negotiations to OWNER for approval. Failing resolution, and prior to the commencement of depositions in any litigation between the parties arising out of this Agreement, the parties shall attempt to resolve the dispute through Mediation before an agreed-upon Circuit Court Mediator certified by the State of Florida. The mediation shall be attended by representatives of CONSULTANT with full decision-making authority and by OWNER'S staff person who would make the presentation of any settlement reached at mediation to OWNER'S board for approval. Should either party fail to submit to mediation as required hereunder, the other party may obtain a court order requiring mediation under section 44.102, Fla. Stat.

20.2 Any suit or action brought by either party to this Agreement against the other party relating to or arising out of this Agreement must be brought in the appropriate federal or state courts in Collier County, Florida, which courts have sole and exclusive jurisdiction on all such matters.

ARTICLE 21

IMMIGRATION LAW COMPLIANCE

21.1 By executing and entering into this agreement, the CONSULTANT is formally acknowledging without exception or stipulation that it is fully responsible for complying with the provisions of the Immigration Reform and Control Act of 1986 as located at 8 U.S.C. 1324, et seq. and regulations relating thereto, as either may be amended. Failure by the CONSULTANT to comply with the laws referenced herein shall constitute a breach of this agreement and the County shall have the discretion to unilaterally terminate this agreement immediately.

IN WITNESS WHEREOF, the parties hereto have executed this Professional Services Agreement for the professional Design, Engineering and Permitting Services of the CONSULTANT concerning Re-nourishment of the Barefoot, Vanderbilt, Clam Pass, Park Shore, and Naples Beaches on the day and year first written above.

ATTEST:

BOARD OF COUNTY COMMISSIONERS FOR
COLLIER COUNTY, FLORIDA,

Dwight E. Brock, Clerk

By: _____

By: _____
Fred W. Coyle, Chairman

Date: _____

Approved as to form and
legal sufficiency:

Scott R. Teach
Deputy County Attorney

Coastal Planning and Engineering, Inc.,

Witness

By: _____

Typed Name

Typed Name and Title

Witness

Typed Name

Schedule A SCOPE OF SERVICES

This scope of work details the tasks required to bring the 2013-14 project to construction. The tasks include coastal engineering, design, bathymetric and land surveys, marine geology, biology and modeling. The principal products will be a design, modeling report, plans and specifications of the selected alternative, a comprehensive permit modification application, preparation of environmental documents and monitoring plans, and other technical products.

This scope of work divides the tasks into 2 phases: Phase I- Permitting and Design and Phase II- Pre-Construction and Contingent Tasks. Phase I tasks will begin immediately upon approval of the work by the County. Phase II tasks will start upon individual notice to proceed from the County. Contingent Tasks include those tasks that are not anticipated at this time, but may be required during the permit process. During-construction tasks are not included in the Scope of Work.

During initial implementation of this work, the top priority will be to prepare documents in support of the beach renourishment project minor permit modification request and documents needed to assist BOEM with coordination needed to obtain a lease for Borrow Area T1. An updated Hardbottom Biological Monitoring Plan, which will cover not only the beach project, but also Doctors Pass and Wiggins Pass, will be submitted with the beach renourishment project minor permit modification request. Submittal of the updated Plan will initiate coordination with FDEP to develop the final monitoring plan. This FDEP coordination may play a significant role in the final design of the beach project. The permit modification for the Collier County Beach Renourishment Project will request a second nourishment project to occur under the current active FDEP permit. The modification will also request the construction window be extended to September 15 – May 30, which will allow for flexibility during the construction and bidding phases. Obtaining these permit modifications would enable an early bidding period before the expiration of the existing permits. A Biological Assessment (BA) and supplemental Environmental Assessment (EA) will also be completed to support initiation of the BOEM lease process, per coordination in an April 24, 2012 telephone conference with BOEM. Preparation of these documents will support a pre-application meeting and coordination with the permit agencies. Based on this coordination, final design, modeling and permitting will move forward.

The enclosed scope of work details the development of the final engineering, design, preparation of environmental documents and permit modifications for the County's next major nourishment project.

PHASE I: PERMITTING AND DESIGN

1. ADMINISTRATION

The project manager will be responsible for general project administration with assistance from other staff as appropriate. Administration tasks included client coordination, progress and status updates, budget control, scheduling, planning, internal meetings, and other associated management tasks required to complete the project in a timely fashion.

2. COORDINATION PHASE

a. Pre-Application Meeting/Coordination with FDEP, USACE, and BOEM

State and federal permit modifications and approvals will be required to modify Collier County's beach renourishment program. This task will cover meeting with the agencies prior to submitting the permit modification package in order to inform all parties of the project's intent which will aid in expediting the renourishment project. Pre-application coordination with the FDEP will be required in order to expand the construction template. This coordination should be done as soon as possible to negotiate an agreement on the 2013-2014 Renourishment Project. This phase of the project will include discussion with FDEP regarding the updated Hardbottom Biological Monitoring Plan.

b. Submit Minor Permit Modification Requests

In order to prepare for the major permit modification request, two permit modifications will be submitted to the FDEP and USACE. The permit modifications will be for the Collier County Nourishment Project (JCP Permit No. 0222355-001-JC) and the Doctors Pass Maintenance Dredging Project (JCP Permit No. 0235740-001-JC).

i. Doctors Pass Permit Modification Request

A permit modification for the Doctors Pass Maintenance Dredging project will be requested in order to modify the current Doctors Pass disposal area. The disposal area for Doctors Pass maintenance dredging events will be returned to the area immediately south of the pass, using the permitted beach template from the 2005 beach nourishment permit. Bypassing the dredged sand closer to the Pass will help to lengthen the design life of the fill in this area and mitigate directly the hot spot in this region, with the aid of other coastal protection methods. One RAI cycle is expected and included with this task.

ii. Beach Renourishment Permit Modification Request with Updated Hardbottom Biological Monitoring Plan

The permit modification for the Collier County Nourishment Project will request a second nourishment project to occur under the current active FDEP permit. The modification will also request construction from September 15 – May 30 (during a portion of sea turtle nesting season), which will allow for flexibility during the construction and bidding phases. Agency coordination will be provided in order to expedite the permitting process. One RAI cycle is included with this task.

Biologists will prepare an updated Hardbottom Biological Monitoring Plan based on a review of the monitoring methods and results from hardbottom monitoring associated with the 2006 Collier County Beach Renourishment Project. An updated Hardbottom Biological Monitoring Plan, which will cover not only the beach project, but also Doctors Pass and Wiggins Pass, will be developed using the current proposed design for the upcoming 2013-14 Collier County Beach Renourishment Project (including estimated Equilibrium Toe of Fill). The design will avoid direct impacts to hardbottom from fill placement and indirect impacts from offshore and downdrift spreading.

The Hardbottom Biological Monitoring Plan will be designed to detect potential impacts to nearshore hardbottom habitat that could result from the 2013-14

renourishment project. In an effort to maintain continuity with the monitoring conducted for the 2006 project, the Plan will incorporate similar methodologies used in previous monitoring. However, we might recommend that FDEP consider a modification to these methods if it seems warranted in order to improve the effectiveness and efficiency of the monitoring program. CPE biologists will assist Collier County with FDEP coordination throughout the development of the Hardbottom Biological Monitoring Plan. The Hardbottom Biological Monitoring Plan will be submitted to FDEP BCS with the permit modification request for review and approval.

3. INVESTIGATION AND RESEARCH PHASE

a. Prepare 2010 Lidar Bathymetric Map

LiDAR data for the offshore and upland areas will be gathered from National Oceanographic and Atmospheric Administration (NOAA), the U.S. Army Corps of Engineers (USACE), and other sources. The data will be processed using CPE's in-house programs and expertise that will create representations of the offshore bathymetry and beach topography, including the hardbottom, for Collier County in the form of a bare earth digital elevation model (DEM). The LiDAR-derived DEMs will guide our decisions on how to design this specific project. The recent 2010 LiDAR will be used. It will be supplemented with past LiDAR and bathymetric surveys as needed.

CPE will use custom filters to accurately remove vegetation and infrastructure while preserving the complex geomorphology found in coastal environments. The bathymetric and topographic elevations will be compared to recent beach profile surveys and adjusted where appropriate.

The area of coverage will extend approximately from the dunes and offshore to approximately -20 foot depth contour based on the 2004 LiDAR data extents. The DEM will extend from FDEP Monument R-9 south to Gordon's Pass. The bathymetric and topographic map will show pertinent infrastructure, FDEP R-monuments, the location of the existing outfalls and the edge of the nearshore hardbottom from recent side scan sonar and diver survey of the bottom. The map will be used as the basis for design and monitoring.

b. Pipeline Corridors and Operational Areas Investigations

Two new pipeline corridors and two operational areas will be planned in areas containing unconsolidated sediment, avoiding impacts to hardbottom habitat and artificial reefs. The investigation may include a cultural resources survey and report as a precaution to a Division of Historic Resources (DHR) new initiative. The DHR is currently considering a proposal that would require a cultural resources survey for all pipeline corridors in addition to mapping the natural resources. This portion of the pipeline corridor survey is covered in the contingency portion of this contract. Coordination with DHR will occur to determine if it is required.

i. Sidescan Survey

CPE will review existing data in order to plan potential pipeline corridor and operational area locations, to be compatible to the maximum extent practical with

previous surveys. These areas will then be investigated further with a sidescan sonar survey. This task includes a two (2) day sidescan survey of two (2) pipeline corridors at Barefoot Beach and Clam Pass Park and two (2) operational/dredge work areas.

The survey control and accuracy standards will be consistent with FDEP specifications. A report from the surveyor will be submitted certifying that the survey meets Bureau of Beaches and Coastal Systems (BBCS) Technical Standards established in Part II.A of section 01200 in the *BBCS Monitoring Standards for Beach Erosion Control Projects, March 2004* and minimum technical standards of Chapter 61G17-6, Florida Administrative Code.

Sidescan Survey Equipment:

Navigation System. A Trimble Real Time Kinematic Global Positioning (RTK GPS) system with dual frequency receivers will be used on board the survey vessel to provide navigation and tide corrections. In order to maintain the vessel navigation along the profile lines the Hypack Inc.'s hydrographic system Hypack 2012® will be used. This software merges RTK GPS vertical and horizontal positioning with the sounding data. It also provides navigation to the helm to control the deviation from the online azimuth.

Sidescan Sonar Survey. An EdgeTech 4200-HFL sidescan sonar system (or equivalent) will be used to collect sidescan sonar data over the entire area of investigation. The 4200-HFL uses full-spectrum chirp technology to deliver wide-band, high-energy pulses coupled with high resolution and high signal to noise ratio echo data. The portable sidescan package includes a laptop computer running the Discover® acquisition software and a 300/600 kHz dual frequency towfish running in high definition mode. The sidescan sonar can be used to identify hardbottom habitat based on its reflective signature.

Sidescan Data Analysis:

The EdgeTech Discover data acquisition system collects and stores geophysical survey data in a digital format. EdgeTech's Discover is a modular acquisition and processing software package that is compatible with all of EdgeTech's systems. Hardcopy records will be produced during data acquisition.

The digital sidescan data will be merged with positioning data (RTK GPS via HYPACK 2012®) will be recorded to the acquisition computer's hard disk for post processing and/or replay. The position of the sensor relative to the RTK GPS antenna will be documented to enable proper positioning of the data.

Sidescan sonar will be processed using the SonarWiz.MAP software package developed by Chesapeake Technologies Inc (or equal). SonarWiz.MAP also produces digital geographic information for sidescan data that are exportable for incorporation into a GIS database. All sidescan sonar, and bathymetric data will be processed and interpreted by CPE personnel.

ii. Diver Investigation

Following the analysis of the sidescan data, diver verified groundtruthing will be conducted to investigate features mapped by the sidescan sonar investigation that may be habitat or natural resources. CPE divers will conduct investigations by diving on the edge of the hardbottom or patches while towing a buoy equipped with a DGPS antenna and attached by a cable to a Trimble AgGPS system on the survey vessel. The positioning data will be recorded. Based on the diver hardbottom investigations within the corridors and operational areas, the sidescan data reduction will be finalized and the location of the pipeline corridors and operational areas will be determined. Results from the diver investigations will be added to the GIS database and CADD files. This survey will be combined with the northern hardbottom investigations described below. The entire survey is expected to require three (3) to four (4) field days.

c. Northern Hardbottom Investigations

The area north of Wiggins Pass will be investigated in order to map and characterize existing hardbottom resources. A sidescan sonar survey will be conducted north of the Pass (from R-9 to R-17, to a distance of 1,000 feet offshore). Sidescan sonar data will be used to verify the unconsolidated sediment surface and to map ocean bottom features such as hardbottom habitat. Hardbottom features will be classified as high or low relief, isolated rock outcrops or by equivalent descriptor for use in mapping the hardbottom edges.

If the sidescan survey documents areas of suspected hardbottom, biologists will map the extent of each hardbottom formation and collect baseline benthic data on these resources. Data obtained during these studies will be used to delineate those hardbottom resources which may have the potential to be impacted by the 2013-14 Beach Nourishment Project. If any impacts are anticipated, these data will serve as the basis for monitoring and mitigation plan development.

i. Sidescan Survey

The sidescan sonar survey will be conducted using the equipment and methods described in Task 3b. It is anticipated that the sidescan sonar survey will be conducted over the course of one (1) day, following the corridor and operational areas survey.

ii. Diver Investigations

CPE divers will map the resources by following the edge of the hardbottom while towing a buoy equipped with a DGPS antenna and attached by a cable to a Trimble AgGPS system on the survey vessel. The positioning data will be recorded. Based on the diver hardbottom investigations, the sidescan data reduction will be finalized.

After mapping existing hardbottom resources, CPE divers will conduct a benthic characterization. The number of transects and quadrats to be assessed will be coordinated with FDEP and will be determined based on the amount of hardbottom documented during mapping investigations. Data collection along monitoring transects will likely include: line-intercept and point-intercept for sediment, benthic characterization, and video and photographic documentation.

Diver investigations (mapping and benthic characterization) will be combined with the groundtruthing survey of the pipeline corridors and operational areas described above. The entire survey is expected to require three (3) to four (4) field days. This task also includes data entry and preparation of an observation report for FDEP summarizing the survey methods and results.

d. Beach Sample Collection and Analysis

Beach samples will be collected from five (5) beaches including Barefoot Beach, Vanderbilt Beach, Clam Pass Park, Park Shore and Naples Beach. Three (3) samples will be collected from the dry beach at each location. Prior to sample collection, CPE will conduct a search to identify whether or not samples were previously collected from these beaches since the 2006 nourishment project. The sample locations will coincide with the site of previous samplings and will be used to support design of the new beach. The sample collections will occur with other survey task.

Table 1. *Mesh sizes to be used for granularmetric analysis.*

Sieve No.	Size (phi)	Size (mm)
3/4	-4.25	19.00
5/8	-4.0	16.00
7/16	-3.5	11.20
5/16	-3.0	8.00
3 1/2	-2.5	5.60
4	-2.25	4.75
5	-2.0	4.00
7	-1.5	2.80
10	-1.0	2.00
14	-0.5	1.40
18	0.0	1.00
25	0.5	0.71
35	1.0	0.50
45	1.5	0.36
60	2.0	0.25
80	2.5	0.18
120	3.0	0.13
170	3.5	0.09
200	3.75	0.08
230	4.0	0.06

Mechanical Sieve Analysis

The sediment samples will be analyzed to determine color and grain size distribution. During sieve analysis, the wet, dry and washed Munsell colors will be noted. Sieve analysis of the sediment samples will be performed in accordance with the American Society for Testing and Materials (ASTM) Standard Methods Designation D 422-63 for particle size analysis of soils. This method covers the quantitative determination of the distribution of sand size particles. For sediment finer than the No. 230 sieve (4.0 phi) the ASTM Standard Test Method, Designation D 1140-00 will be followed. The sieve stack used for mechanical analysis will conform to the BBCS guidelines provided in Table 1.

Weights retained on each sieve will be recorded cumulatively. Grain size results will be entered into the gINT® software program, which computes the mean and median grain size, sorting, silt/clay percentages for each sample using the moment method.

Carbonate Testing

Approximately half of the beach samples will be tested for carbonate content. Carbonate content will be determined by percent weight using the acid leaching methodology described in Twenhofel, W.H. and Tyler, S.A., 1941. *Methods of Study of Sediments*. New York: McGraw-Hill, 183p.

4. DESIGN SURVEY

This task will be completed by another County consultant and will be provided to CPE.

5. FILL DESIGN AND PLANS

a. Update Design Volume and Fill Distribution

Using the recommendations from the conceptual design report and guidance from the County, the design volume and fill distribution will be updated based upon the 2012 survey performed by Atkins, Inc. for the County. The design will address the concerns and suggestions listed in the FDEP memorandum dated December 2, 2011. The design volume will account for current and historic volumetric and MHW change rates. The renourishment interval will be increased, if possible, while avoiding impacts to natural resources. The design will propose a higher and wider beach with an extended project life that can be accomplished with no impact to nearshore hardbottom.

b. Develop Equilibrium Profiles

Using the design volume from Task 5a, the design equilibrium profile will be developed using the Equilibrium Profile Method (EPM) at each profile line and intermediate profile line. The corresponding equilibrium toe of fill will be located at each profile. For the new project areas at Clam Pass Park and Barefoot Beach, the equilibrium profile will be determined through the use of their respective grain size. The design profile will be based on an analysis of monitoring surveys taken from 2006 to 2012.

c. Plot Seaward Limit of Fill and Perform Impact Analysis

The equilibrium toe of fill will be projected onto Lidar bathymetry. This phase will account for the initial equilibration of the profile and spreading. Spreading will be derived from the Unibest model (Deltares). The design template will be modified within this phase with the goal of avoiding direct impacts to hardbottom. A buffer distance will be established between the equilibrium toe of fill and hardbottom.

d. Finalize Beach Fill Design Template

This final design will be developed through an iterative process which accounts for the equilibrium toe of fill locations, spreading, and location of the beach fill in comparison to the hardbottom. A recommendation will be made for structural modifications within the final design, which will either remove or modify the existing northern groins in the Naples and Park Shore Reaches.

e. Modeling

Modeling which was initiated during the conceptual report preparation will be finalized with this task. The modeling will assist with the design method described above.

i. Model Final Beach Design Using Unibest

The performance of the beach fill design(s) to be permitted will be simulated in the Unibest model. The No Action scenario will also be simulated using Unibest model as a contrast. This scenario will be updated to incorporate the most recent beach surveys.

The Unibest model will use a wave climate developed based on *Collier County Conceptual Renourishment Project Analysis - Numerical Modeling* (CPE, 2011), however, the definition of the wave climate will be updated in order to include the seasonality in the simulations (Southwest and Northwest wave dominance) and some sensitivity analysis. The performance of each scenario will be evaluated along the three different sectors of the beach and for the nourishment time interval of 10 years. The Park Shore reach will be run with and without northern Park Shore. The model results will be presented in a report which details the modeling effort and addresses FDEP comments on the 2011 *Conceptual Renourishment Project Analysis* from their December 2, 2011 memorandum.

ii. Model Final Beach and Ebb Shoal Design Using Delft3D at Barefoot Beach

Barefoot Beach will be nourished as part of the 2013-14 re-nourishment project using approximately 100,000 cy of sand from Borrow Area T1. A portion of the sand will be placed on the beach, with the remainder placed in the ebb shoal. The Delft3D modeling suite will be used to evaluate the performance of up to 4 beach fill and ebb shoal disposal alternatives for Barefoot Beach. These simulations will use the model setup developed and calibrated for Wiggins Pass in 2009 and 2010. The simulations will be conducted to evaluate the medium-term (4 years) performance of each alternative. The model will consider the wave climate and the tidal flows through Wiggins Pass to account for the morphology evolution of the different scenarios. The benefits/impacts associated to each alternative will be evaluated along the adjacent beaches and in the navigation channel. The results of the numerical modeling will be incorporated into the engineering report and permit modification request. The Barefoot Beach nourishment will complement the Wiggins Pass inlet management strategy.

6. FINALIZE ENGINEERING REPORT

The design method described above will be document in an engineering report for use in permitting and coordination. The basis of the wider and higher beach design which avoids hardbottom habitat impacts and provides a 10 year design life will be described and documented.

7. OBTAIN BOEM LEASE FOR BORROW AREA T1

a. Prepare Supplemental Environmental Assessment (EA)

It is necessary to obtain a lease from the Bureau of Ocean Energy Management (BOEM) for use of Outer Continental Shelf (OCS) sand from Borrow Area T1, which is located within the federal waters of the United States. As a prerequisite for this lease, BOEM requires that the 2005 Environmental Assessment (EA) be updated in order to comply with the National Environmental Policy Act (NEPA). NEPA requires federal agencies to consider environmental impacts during their decision making process for major federal actions, such as borrow area development of a federal mineral resource. An EA is a public document that provides supporting reasons and analyses for determining whether to prepare an Environmental Impact Statement (EIS) or Finding of No Significant Impacts (FONSI). If necessary, it also considers and selects measures for mitigating identified adverse environmental impacts.

An EA was prepared in coordination with BOEM (formerly Minerals Management Service) and submitted in 2005 in preparation for the 2006 Collier County Beach Renourishment Project. Based on discussions with BOEM during two conference calls (November 1, 2011 and April 24, 2012), BOEM has determined that a “supplemental” EA (an updated version of the 2005 EA) is required to meet NEPA requirements. Based on their review the 2005 Collier County EA, BOEM will provide specific guidance on which information will need to be updated for the next project and how the updated EA should be formatted.

CPE will develop a Draft Supplemental EA in coordination with BOEM. Following review by BOEM and receipt of comments, a Final Supplemental EA will be developed and submitted. Once the EA has been reviewed and BOEM signs the Finding of No Significant Impact (FONSI), the lease agreement for use of Borrow Area T1 can be processed.

b. Assist with Processing BOEM Lease

During processing of the BOEM lease agreement, CPE will provide assistance to the County in answering questions, providing additional documentation to BOEM and reviewing the final BOEM lease stipulations for accuracy.

8. PREPARE AND SUBMIT MAJOR PERMIT MODIFICATION REQUEST

a. Prepare Biological Assessment (BA)

CPE biologists will prepare a Biological Assessment (BA) to assist BOEM and USACE with Endangered Species Act (ESA) Section 7 Consultation with National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS). The purpose of the BA is to evaluate the project and potential effects to federally listed (threatened and endangered) species and critical habitat.

BOEM will be required to coordinate with NMFS Protected Resources Division (PRD) for potential impacts from dredging of Borrow Area T1, which is located in federal waters. In order to initiate Section 7 Consultation with NMFS, BOEM requires that a Biological Assessment (BA) be prepared to evaluate potential impacts to federally listed species. CPE will develop a Draft BA in coordination with BOEM. Following review by BOEM and receipt of comments, a Final BA will be developed integrating the BOEM’s additional information and addressing their comments. BOEM will submit the Final BA to NMFS in order to obtain a

NMFS Biological Opinion (BO) allowing utilization of Borrow Area T35 for the 2013-14 Collier County Beach Renourishment Project. CPE will request that the Gulf of Mexico Biological Opinion and the Programmatic Biological Opinion be used to the maximum extent possible.

The Final BA will also be submitted to USACE to support any potential Section 7 Consultation that may be required with USFWS and/or NMFS in order to modify the existing USACE permit for the 2013-14 Collier County Beach Renourishment Project. It is anticipated that USACE will request that USFWS allow the 2013-14 Collier County Beach Renourishment Project to use the Gulf of Mexico Biological Opinion and the Programmatic Biological Opinion.

b. Environmental Data

CPE biologists will review and compile updated environmental data (e.g. sea turtle nesting data, shorebird nesting, hardbottom resources) that may be requested by FDEP and/or USACE. Results of hardbottom biological monitoring data collected pre- and post-construction for the 2006 Collier County Beach Renourishment Project will be summarized. Biologists will also provide additional information for the USACE which may be required for consultation with USFWS and NMFS, such as the Manatee Biological Evaluation (USFWS) and the Section 7 Consultation Checklist (NMFS).

c. Develop Sediment QA/QC Plan

CPE will coordinate with the Bureau of Beaches and Coastal Systems to develop an updated QA/QC sediment (borrow area) plan.

d. Beach and Borrow Area Sediment Description

A final report summarizing the results of the geophysical and geotechnical surveys will be developed. This report will include sub-bottom (seismic) survey profiles, beach sample granulometric reports and grain size distribution curves. This report will be incorporated into the final engineering report.

CPE will provide all geophysical information in an electronic format suitable for input to the FDEP Reconnaissance Offshore Sand Search (ROSS) database. The submission will include shapefiles (with the associated FGDC compliant metadata) of seismic tracklines. Seismic data will be provided in HTML format. HTML formatting embeds all navigation data, making timestamps and shot points obsolete.

e. Engineering

Engineering tasks will be performed as needed in order to submit the permit modification package. Submittals may include, but are not limited to, project description, construction methods, and engineering report.

f. Prepare Permit Sketches

Permit sketches will be developed using the finalized design developed in TASK 5. Permit sketches will include a plan-view design with corresponding beach profile cross-sections along with borrow area design.

g. RAI Responses

CPE will prepare responses to up to three (3) Requests for Additional Information (RAI) from FDEP and/or USACE. We will attend meetings and/or participate in teleconferences with Agencies as needed. CPE will compile and resubmit pertinent 2005 permit files and documents in support of permit modification requests to FDEP and USACE.

h. Finalize Hardbottom Biological Monitoring Plan

If FDEP requests proposed modifications to the Hardbottom Biological Monitoring Plan (which will be submitted to FDEP in the Pre-Application Coordination phase), or if Collier County proposes any modification to previous monitoring methodologies, CPE biologists will assist Collier County with FDEP coordination throughout the continued development of the Hardbottom Biological Monitoring Plan. It is anticipated that several meetings/teleconferences may be required during coordination with FDEP to complete a final Hardbottom Biological Monitoring Plan that meets with approval from both FDEP and Collier County.

The proposed design of the 2013-14 Collier County Beach Renourishment Project is not anticipated to have any direct or indirect (equilibration or downdrift) impacts to nearshore hardbottom resources. Therefore, it is anticipated that no mitigation will be required.

Based on a review of results from hardbottom monitoring associated with the 2006 Collier County Beach Renourishment Project, it appears there were no project-related impacts to the nearshore hardbottom resources; as a result, Collier County may request that FDEP credit the County for the 1.09 acres of mitigation they were required to build for that project. If data show that the area for which mitigation was required was not impacted by the 2006 project, then the artificial reef should be considered “excess mitigation”, which may be credited towards any potential future mitigation requirements.

i. Update Physical Monitoring Plan

CPE will update the current physical monitoring plan to incorporate new portions of the project into the existing monitoring plan.

9. PREPARE PLANS AND SPECIFICATIONS

CPE will develop all construction plans and specifications for the project. The cost of constructing the renourishment project will be estimated. In addition, a cost comparison between alternatives will be displayed. A project schedule will be created to estimate project duration.

The construction plans will include plan views and cross-sections sufficient for the construction of the beach nourishment project. The plans will provide survey monumentation information which will allow the contractor to control and construct the beach nourishment project. Borrow areas will be delineated and the allowable depth of dredging indicated for each borrow area in order to place the appropriate quality sand on the beach. The plans will prioritize borrow area dredging to enable future

use of the borrow area. Aerial photographs, cultural resources, hardbottom, and other natural resource features will be incorporated into the plans. The plans will show beach access, staging areas and pipeline corridors for use by the contractor. The plans will include only those segments identified for construction. Boundaries such as the erosion control line will be shown on the plans.

The specifications to be developed for the project will be divided into two general categories. The first section will include bidding requirements and contract forms supplied by Collier County for retention of construction contractors. The Consultant will develop the bid form with the project quantities.

The second section of the specifications will include General Conditions, Technical Provisions and Environmental Protection. The General Conditions portions of the contract will be provided by the County. The consultant will prepare the supplemental General Conditions, which will address general conditions specific to this dredging project.

The Technical Provisions will identify the work to be accomplished. It will include the order of work, the project schedule, excavation requirements, beach fill requirements, grading requirements and other issues related to construction. It will address issues such as clean-up, nighttime operations and beach tilling, if required by the State. The QA/QC Sediment Management Plan approved by FDEP will be incorporated into these provisions.

A section on environmental protection will be included in the specifications. This section will identify the important clauses contained in the permits, including a copy of permits received for the project. The contractor will be advised that he is required by law to abide by all the conditions provided by Federal and State permits and licenses for the project. Issues to be addressed in this section include turbidity control, protection of environmental resources, restoration of landscape damage, maintenance of pollution control facilities, and a requirement for an environmental protection plan.

Plans and specifications in Acrobat (pdf) format will be provided for distribution and review by the County, State and City of Naples, and other agencies identified by the County. One hard copy will be provided to each agency. The plans and specifications will be modified once, based on comments from the above government entities. Copies for bidding and construction will be covered under a future proposal that addresses construction services. The final plans and specification submitted to FDEP will be signed and sealed to meet permit requirements.

10. FUNDING AND OTHER ASSISTANCE

a. Re-apply for Critical Erosion Area Status for Clam Pass Park

Based upon coordination with the FDEP, the Critical Erosion Area status for Clam Pass Park will be re-evaluated and re-submitted. A new calculations using refine surge levels and a profile extended landward will be developed to recalculate the recession due to the 25 return interval storm. This task is awaiting further clarification from FDEP.

b. Prepare Local Government Funding Request

CPE will assist the County with preparation of this year's Local Government Funding Request for the county beach nourishment projects. The size and make-up of each component will be

evaluated in order to increase FDEP rating and cost sharing opportunities. This will include research to identify all short term rental units in addition to hotels, and to modify the LGFR to incorporate the latest rating guidelines and the lessons learned for the April 27, 2012 meeting at FDEP. The plan will be based on the latest approved 62B-36 Beach guidelines. Recommendations will be made to the County for change to the funding request and the project that would increase eligibility and funding.

c. Assist County Staff with Local Government Joint Construction Coordination

CPE will aid the County in coordinating with other regional projects in order to develop a cost savings opportunity for the County from a lower mobilization/demobilization and unit cost. CPE has already worked with the County and the dredging industry to identify potential cost savings. One method is to make the draft Plans and Specifications available early to the dredgers in order to enable cost savings for the County.

PHASE II: PRE-CONSTRUCTION AND CONTINGENT TASKS

11. BIDDING AND PRE-CONSTRUCTION PERIOD TASK

a. Assist County with Bidding

CPE will also assist in the bidding process by preparing pertinent bid documents and attending the pre-bid meeting. We will develop specifications and a construction plan which will encourage low bid prices. This includes provisions for a long and flexible construction timetable. CPE will attend the pre-bid meeting.

The Engineer will assist the County in the selection of a contractor for the project. The County's purchasing department will manage the bidding process with assistance from the Engineer and Coastal Zone Management Department. The Engineer will assist the County in reviewing the bids and evaluation of the low bidder, taking into consideration the capability of the contractor (low bidder) in constructing the project. The Engineer will provide the County a recommendation concerning the selection of the contractor or contractors.

There will be one pre-construction meeting for the project. CPE will coordinate, prepare for, and attend the pre-construction conference. During the pre-construction meeting, the permit will be reviewed with the Contractor prior to commencement of activity authorized by the permit. An overview of the project scope of work, construction methodology, technical specifications, schedule, construction access, specifications, and specific monitoring requirements for the permit will occur with the Contractor and all interested agencies.

b. Pre-Construction Beach Survey and Aerials

Beach and Nearshore Hydrographic Survey

This section of scope is contingent upon the new Physical Monitoring Plan for this project that requires this work. This work shall be conducted in accordance to Section 01000 (Beach Profile Topographic Surveying) and 01100 (Offshore Profile Surveying) of the March 2004 Bureau of Beaches and Coastal Systems Monitoring Standards for Beach Erosion Control Projects including field methodology and final deliverables. <http://www.dep.state.fl.us/beaches/publications/pdf/standard.pdf>

Beach profiles will be collected at FDEP monuments R7-R84 including any applicable intermediate profile lines. All data seaward of the dune shall be collected using RTK GPS technology. Upland areas inaccessible to RTK GPS shall be collected using standard differential leveling techniques. Upland topography shall extend approximately 150 feet landward of the vegetation line or until an obstacle is encountered.

The nearshore survey will be conducted using an Odom Hydrotrac sounder with digitizer fathometer on CPE's twenty-four (24) foot Privateer survey vessel with a centrally located hull-mounted transducer. A Trimble RTK GPS and a TSS Motion Compensator will be used onboard the survey vessel to provide instantaneous tide corrections as well as heave, pitch, and roll corrections. In order to maintain the vessel navigation along the profile lines, the HYPACK navigation software will be used. This software provides horizontal position to the sounding data allowing real-time review of the profile data in plan view or cross section format. HYPACK also provides navigation to the helm to control the deviation from the online azimuth. Horizontal and vertical positioning checks are conducted at the beginning and end of each day using 2nd order FDEP "A" monuments located in the project area. The sounder will be calibrated via bar-checks and a sound velocity probe at the beginning and end of the day. Bar-checks will be performed from a depth of five feet to a minimum depth of twenty-five feet. Analog data showing the results of the bar-check calibration will be displayed on the sounder charts at five foot increments during descent and ascent of the bar.

Controlled Aerial Photography Using FDEP Environmental Standards

Color aerial photography shall be obtained for the Collier County Beach Project from R-7 through R-89. Surveyors shall coordinate ground control and GPS logging from HARN and/or CORS with the designated sub-contractor. A representative from Collier County will conduct the pre-flight sea condition monitoring and coordinate with the surveyor and the sub-contractor about the flight timing. Flight must occur during a 24 hour period of calm sea conditions, low tide levels, and low sun/water surface angle to ensure good water clarity. The flight window will be established by the sub-contractor. The sub-contractor shall provide 9"x9" photographs and CD-ROM controlled raster imagery files. The photography will be collected following FDEP's standards for:

Environmental Aerial Photography Acquisition for Beach Erosion Control Projects
<http://www.dep.state.fl.us/beaches/publications/pdf/standard.pdf> (section 02100: March 2004).

c. Pre-Construction Sidescan Survey and Diver Groundtruthing

This work is contingent upon the final FDEP-Approved Hardbottom Biological Monitoring Plan that requires new measurements to establish the pre-project condition. This task includes mapping and characterization of the hardbottom between FDEP Monument R-9 to R-80, or the southern terminus of the know nearshore hardbottom at approximately R-70.

i. Sidescan Survey

Sidescan sonar data will be used to verify the unconsolidated sediment surface and to map ocean bottom features such as hardbottom habitat. Hardbottom features will be classified as high or low relief, isolated rock outcrops or by equivalent descriptor for use in mapping the hardbottom edges.

Following initial reduction of the sidescan data, the sidescan data will be groundtruthed by divers to observe any features mapped during the sidescan sonar investigation. The sidescan data reduction will be finalized based on this field investigation.

The sidescan sonar survey will be conducted using the equipment and methods described in Task 3b. CPE anticipates that the remote sensing survey can be conducted in two (2) days, followed by a period of data reduction and comparative analysis.

ii. Diver Groundtruthing

After remote sensing data are analyzed, diver groundtruthing will be conducted at select sites where comparative analysis indicates significant change in the location of the hardbottom edge has occurred or there is uncertainty in the sidescan results. These dives will take place after the initial data reduction of the side scan result, and before the biological monitoring is conducted. CPE divers will conduct hardbottom investigations by following the edge of the hardbottom while towing a buoy equipped with a DGPS antenna and attached by a cable to a Trimble AgGPS system on the survey vessel. The positioning data will be recorded.

The sidescan data reduction will be finalized based on the diver hardbottom investigations. Data obtained during these studies will be used to delineate those hardbottom resources which may have the potential to be impacted by the 2013-14 Beach Nourishment Project; if any impacts are anticipated, these data will serve as the basis for any mitigation plan development, if required. The GIS database will be updated. It is anticipated that two (2) days will be required to groundtruth the findings of the remote sensing survey.

d. Pre-Construction Hardbottom Biological Monitoring

If required by the final FDEP-Approved Hardbottom Biological Monitoring Plan, a pre-construction hardbottom biological monitoring survey will be conducted. This survey will follow the methodology contained in the final Plan, which is expected to be the same as, or similar to, the methodology used in previous monitoring required for the 2006 project.

If the final Plan requires a pre-construction survey, then this survey will be conducted jointly utilizing two (2) CPE biologists and two (2) Collier County divers. The survey will take approximately nine (9) field days and will be completed using a County research vessel and captain. This pre-construction survey will likely follow the methodologies utilized in the previous monitoring plan (required for the 2006 project), though these methods may be modified during coordination with FDEP. This task includes data entry and preparation of an informal observation report; it is unlikely that FDEP will require a formal pre-construction report. If the final FDEP-Approved Hardbottom Biological Monitoring Plan does not require a pre-construction survey, Collier County may elect to conduct a modified survey that would utilize a reduced sampling effort in order to document pre-construction conditions of nearshore hardbottom communities.

12. CONTINGENT TASKS

a. Essential Fish Habitat (EFH) Assessment

In addition to NEPA compliance and ESA Section 7 Consultation, BOEM (and possibly USACE) will also be required to coordinate with NMFS – Habitat Conservation Division (HCD) to evaluate potential impacts to Essential Fish Habitat (EFH) in compliance with the Magnuson-Stevens Fishery Conservation and Management Act. NMFS did not have any EFH comments for the 2006 Collier County Beach Renourishment Project; therefore, preparation of an EFH Assessment is not anticipated. If NMFS-HCD requests an EFH Assessment be prepared for the 2013-14 project, that will be an additional task.

b. Uniform Mitigation Assessment Method (UMAM)

During coordination with FDEP and USACE, the agencies may request additional data in order to conduct a Uniform Mitigation Assessment Method (UMAM) assessment. This task includes coordination with FDEP and/or USACE, providing data and assistance with conducting a UMAM assessment, but this task does not include any additional field investigations that might be requested by the agencies.

c. Borrow Area T1 Survey

The survey of Borrow Area T1 may be considered too old, and agencies may require a new survey. A bathymetric survey of Borrow Area T1 will be conducted using the equipment and methods described in Task 3b.

d. Cultural Resources for Pipeline Corridors.

The investigation may be required if a cultural resources survey is necessary under the Division of Historic Resources (DHR) new initiative. Coordination with DHR will be initiated prior to this additional field investigation to determine if this requirement can be eliminated or reduced. The extra survey will take two additional (2) days more than the basic sidescan survey described above. It will include subbottom profiling using the EdgeTech X-Star SB-216 “chirp sonar system”, a magnetometer survey, and a bathymetric survey. These methods are required for a full cultural resources investigation. This task will also include the addition data reduction and use of a qualified marine archeologist.

Seismic Reflection Profile Surveys. An EdgeTech X-STAR 216 (or equivalent) seismic sub-bottom system will be used to conduct the seismic reflection profile surveys. The X-STAR SB-216 Full Spectrum Sonar is a versatile wideband FM sub-bottom profiler that collects digital normal incidence reflection data over a number of frequency ranges. This instrumentation generates cross-sectional images of the seabed. Throughout the offshore seismic reflection survey, selection of the chirp pulse will be modified in real time to obtain the acceptable resolution of geological features and the sequence stratigraphy (*i.e.* vertical sequence and lateral distribution of sediment bodies comprised by different grain sizes and sediment composition) for better data quality enhancing subsequent interpretation

Magnetometer Survey. A Geometrics G-882 Digital Cesium Marine Magnetometer (or equivalent) will be used to perform a cursory investigation of magnetic anomalies within the potential pipeline corridor. The purpose of the magnetometer survey is to establish the presence, and subsequent exclusion zones around any potential underwater wrecks, submerged hazards, or other ferrous metal features that would affect borrow area delineation and dredging

activities. The Hypack 2012® software will record magnetic anomalies directly from the Geometrics magnetometer.

Bathymetric Survey. The Odom Hydrographic Systems, Inc.'s Hydrotrac, a single frequency portable hydrographic echo sounder, will be used to perform the bathymetric survey. The Hydrotrac will be operated at a frequency of 210 kHz and is a digital, survey-grade sounder. The sounder will be calibrated using an Odom Hydrographic Systems, Inc.'s Digital Pro® speed-of-sound velocity meter. Speed of sound through water and other selected parameters will be adjusted to reflect physical water conditions in the survey area.

Data Reduction and Report. Seismic reflection data will be processed using the SonarWiz.MAP software package developed by Chesapeake Technologies Inc (or equal) in conjunction with side scan and bathymetric data described above. After processing, the magnetometer data will be reviewed by a qualified archaeologist for cultural resource interpretation. CPE will coordinate with Tidewater Atlantic Research (TAR) to develop a cultural resource report for the two (2) pipeline corridors and the two (2) operational areas surveyed. CPE will coordinate with the State Historic Preservation Office (SHPO) as needed.

e. Survey and Process ECL (Barefoot Beach and Clam Pass Park)

The decision to survey the new ECLs will be delay until the final budgetary decisions on these two areas are made. The decision must be made in time to allow timely processing before the project is started.

ECL Survey and Processing

This survey is designed to establish an Erosion Control Line as defined in Chapter 161 of the Florida Statutes. A mean high water (MHW) survey will be conducted in accordance with standards set by the Florida Department of State Lands. Surveys will be platted and submitted to the State for approval and recording.

Prior to the start of the survey, a reconnaissance of the monuments will be conducted to confirm that the survey control is in place and undisturbed. Real Time Kinematics (RTK) Global Positioning System (GPS) will be used to locate and confirm the survey control for this project. In order to achieve required accuracy, the survey will be controlled using FDEP 2nd order monuments.

Upon completion of the control reconnaissance survey, the mean high water survey will be initiated. The MHW survey will be conducted using MHW elevation values obtained from LABINS and/or other state approved MHW values. Upon completion of the field survey data will be plotted and derived MHW line drawn on the survey map. If possible, a draft version of the plat will be sent to State Lands for review.

Survey deliverables will consist of four (4) 22"X34" survey maps signed and sealed by a Florida Surveyor and Mapper compliant with requirements Chapter 161 and other county recording standards. Maps and legal descriptions will also be provided in digital format. The maps will be developed so that they can be separable.

Public Notification and Conduct ECL Meeting

Once the survey has been approved by State Lands, a public meeting will be planned, following FDEP's procedures. Notification will be made in the local newspaper, in the State

publication and by registered letter to residents/owners within the prescribed limits. The public meeting will be held to collect comments from the public for consideration by FDEP in evaluating the establishment of a new Erosion Control Line for Clam Pass Park and Barefoot Beach.

13. JETTY SPUR STRUCTURAL DESIGN (SEPARATE)

The jetty spur at the Doctors Pass south jetty is a means to conserve sand in the hot spot region south of the Pass. It will be designed and permitted separately from the beach nourishment to avoid possible delays with permit agencies.

a. Survey New Structural Foundation Areas

An area 300 ft by 400 ft will be surveyed for construction of the spur to the south jetty at Doctors Pass. This task includes the hydrographic survey in the area of the proposed rock jetty spur. This survey is intended to aid engineering calculations and has not been designed to meet any regulatory objectives. Data will be collected within 100 feet of the proposed construction at a sufficient density to provide an accurate depiction of the seafloor. Standard hydrographic procedures will be followed as described in section 11.b of this scope. A legal description for a state easement will be developed based on this survey and the final design.

This task also includes seafloor push probes to attempt to locate the depth of the hard substrate. Probes will be conducted by scuba divers using hand held probes. Diver probes are limited to 1-2 feet of penetration in sandy sediments. No jet probes or coring is proposed.

b. Model Jetty Spur in Delft 3D

Using the Delft3D hydrodynamic and sediment transport model developed in the 2011 *Conceptual Renourishment Project Analysis*, the effect of the Doctors Pass spur jetty extension on sand retention and conservation will be evaluated. In addition, circulation and debris trapping will be evaluated. Specifically, the model will be used to evaluate flows and sediment transport potential with and without the spur extension in place. Delft3D-PART model (particle tracking simulations, lagrangian approach) will also be used to evaluate whether the spur jetty extension will trap debris in an excessive manner. Up to 4 different configurations of the jetty extension will be considered to minimize debris trapping effects. The modeling procedures and results will be presented in a report. FDEP comments from their December 2, 2011 memorandum will be addressed.

c. Develop Public Outreach Drawing

CPE will prepare a drawing and project description for use by the County in public outreach for the jetty spur, addressing its size and impact on views. The document will address the spur's benefit.

d. Design Jetty Spur

A design will be developed for the jetty spur. The design will take into account coastal processes and modeling results. The effectiveness of a turtle friendly design will be researched for possible incorporation into the spur. The design will develop the rock type and

size, the foundation design, the positioning of the structures and integration with the existing jetty. The design will accommodate circulation to the extent practical.

e. Develop Permit Modification and Sketches

Using the survey and preliminary design, CPE will prepare a JCP permit modification package for the FDEP for the structural addition to the southern jetty at Doctors Pass. Permit sketches, legal descriptions, and all other pertinent biological, geological, and engineering portions will be prepared as needed. This phase accounts for one (1) RAI cycle and is not a new permit application.

f. Diver Resource Investigations

Divers will conduct a survey of the southern jetty to observe any submerged resources located in or near the proposed spur location. This survey will be planned in coordination with FDEP, NMFS, and USACE to address agency requirements. This survey will take approximately one (1) field day. It will either be conducted jointly utilizing two (2) CPE biologists and a Collier County diver, boat and captain or this survey will be added on to another planned biological survey, whichever is more time- and cost-effective. This task includes data entry and preparation of an informal observation report, if any resources are observed.

g. Plans and Specifications

CPE will prepare final construction plans, technical specifications and the bid form for the jetty spur project. The task will incorporate all permit requirements into the documents and will provide copies of the draft plans and technical specifications for the County's review. County comments will be incorporated into the final set. CPE will prepare an opinion of the estimated construction cost for this project.

SCHEDULE B
BASIS OF COMPENSATION

TIME AND MATERIAL

1. MONTHLY STATUS REPORTS

B.1.1 As a condition precedent to payment, CONSULTANT shall submit to OWNER as part of its monthly invoice, a progress report reflecting the Project design and construction status, in terms of the total work effort estimated to be required for the completion of the Basic Services and any then-authorized Additional Services, as of the last day of the subject monthly billing cycle. Among other things, the report shall show all Service items and the percentage complete of each item.

B1.1.1 All monthly status reports and invoices shall be mailed to the attention of: Gary McAlpin, Coastal Zone Management Director
3299 Tamiami Trail East, Suite 103, Naples, FL 34112-5746

2. COMPENSATION TO CONSULTANT

B.2.1. For the Basic Services provided for in this Agreement, OWNER agrees to make monthly payments to CONSULTANT based upon CONSULTANT'S Direct Labor Costs and Reimbursable Expenses in accordance with the terms stated below. Provided, however, in no event shall such compensation exceed the amounts set forth in the table below.

ITEM	PHASE	NOT TO EXCEED AMOUNT:
2.	Phase I – Permitting and Design	\$484,044.00
3.	Phase II – Pre-Construction and Contingent Tasks	\$364,510.00
TOTAL FEE (Total Items 1-10)		\$ 848,554.00

B.2.2. Direct Labor Costs mean the actual salaries and wages (basic, premium and incentive) paid to CONSULTANT'S personnel, with respect to this Project, including all indirect payroll related costs and fringe benefits, all in accordance with and not in excess of the rates set forth in the Attachment I to this Schedule B.

B.2.3. With each monthly Application for Payment, CONSULTANT shall submit detailed time records, and any other documentation reasonably required by OWNER, regarding CONSULTANT'S Direct Labor Costs incurred at the time of billing, to be reviewed and approved by OWNER.

B.2.4 For Additional Services provided pursuant to Article 2 of the Agreement, OWNER agrees to pay CONSULTANT a negotiated total fee and Reimbursable Expenses based on the services to be provided. The negotiated fee shall be based upon the rates specified in Attachment 1 to this Schedule B and all Reimbursable Expenses shall comply with the provisions of Section 3.5.1 below. There shall be no overtime pay on Basic Services or Additional Services without OWNER'S prior written approval.

- B.2.5. The compensation provided for under Sections 2.1 of this Schedule B, shall be the total and complete amount payable to CONSULTANT for the Basic Services to be performed under the provisions of this Agreement, and shall include the cost of all materials, equipment, supplies and out-of-pocket expenses incurred in the performance of all such services.
- B.2.6 Notwithstanding anything in this Agreement to the contrary, CONSULTANT acknowledges and agrees that in the event of a dispute concerning payments for Services performed under this Agreement, CONSULTANT shall continue to perform the Services required of it under this Agreement, as directed by OWNER, pending resolution of the dispute provided that OWNER continues to pay to CONSULTANT all amounts that OWNER does not dispute are due and payable.

3. SCHEDULE OF PAYMENTS:

- B.3.1. CONSULTANT shall submit, with each of the monthly status reports provided for under Section 1.1 of this Schedule B, an invoice for fees earned in the performance of Basic Services and Additional Services during the subject billing month. Notwithstanding anything herein to the contrary, the CONSULTANT shall submit no more than one invoice per month for all fees and Reimbursable Expenses earned that month for both Basic Services and Additional Services. Invoices shall be reasonably substantiated, identify the services rendered and must be submitted in triplicate in a form and manner required by Owner. Additionally, the number of the purchase order granting approval for such services shall appear on all invoices.
- B.3.1.1 Payments will be made for services furnished, delivered, and accepted, upon receipt and approval of invoices submitted on the date of services or within six (6) months after completion of contract. Any untimely submission of invoices beyond the specified deadline period is subject to non-payment under the legal doctrine of "laches" as untimely submitted. Time shall be deemed of the essence with respect to the timely submission of invoices under this agreement.
- B.3.2. Invoices not properly prepared (mathematical errors, billing not reflecting actual work done, no signature, etc.) shall be returned to CONSULTANT for correction. Invoices shall be submitted on CONSULTANT'S letterhead and must include the Purchase Order Number and the Project name and shall not be submitted more than one time monthly.
- B.3.3 Notwithstanding anything herein to the contrary, in no event may CONSULTANT'S monthly billings, on a cumulative basis, exceed the sum determined by multiplying the applicable not to exceed task limits set forth in the table in Section 2.1 by the percentage Owner has determined CONSULTANT has completed such task as of that particular monthly billing.
- B.3.4 Payments for Additional Services of CONSULTANT as defined in Article 2 hereinabove and for reimbursable expenses will be made monthly upon presentation of a detailed invoice with supporting documentation.
- B.3.5 Unless specific rates have been established in Attachment 1, attached to this Schedule B, CONSULTANT agrees that, with respect to any subconsultant or subcontractor to be utilized by CONSULTANT for Additional Services, CONSULTANT shall be limited to a

maximum markup of 5% on the fees and expenses associated with such subconsultants and subcontractors.

B.3.5.1 Reimbursable Expenses associated with Additional Services must comply with section 112.061, Fla. Stat., or as set forth in the Agreement, be charged without mark-up by the CONSULTANT, and shall consist only of the following items:

B.3.5.1.1. Cost for reproducing documents that exceed the number of documents described in this Agreement and postage and handling of Drawings and Specifications.

B.3.5.1.2. Travel expenses reasonably and necessarily incurred with respect to Project related trips, to the extent such trips are approved by OWNER. Such expenses, if approved by OWNER, may include coach airfare, standard accommodations and meals, all in accordance with section 112.061, F.S. Further, such expenses, if approved by OWNER, may include mileage for trips that are from/to destinations outside of Collier or Lee Counties. Such trips within Collier and Lee Counties are expressly excluded.

B.3.5.1.3. Permit Fees required by the Project.

B.3.5.1.4 Expense of overtime work requiring higher than regular rates approved in advance and in writing by OWNER.

B.3.5.1.5 Expense of models for the County's use.

B.3.4.1.6 Other items on request and approved in writing by the OWNER.

END OF SCHEDULE B.

Attachment 1 to Schedule B

<u>Personnel Category</u>	<u>Standard Hourly Rate</u>
Principal	\$195
Senior Project Manager	\$165
Project Manager	\$148
Senior Engineer	\$155
Engineer	\$119
Environmental Specialist	\$115
Senior GIS/CAD Specialist	\$145
GIS Specialist	\$100
Clerical	\$ 60
Surveyor and Mapper	\$130
CADD Technician	\$ 85
Coastal Modeler II	\$130
Professional Geologist	\$150
Project Geologist	\$125
Geologist II	\$110
Geologist I	\$ 95
Senior Marine Biologist	\$135
Project Biologist	\$120
Marine Biologist	\$ 95
Project Surveyor	\$120
Surveyor	\$ 95
Survey Technician	\$ 82
Boat Captain	\$ 82
Bookkeeper	\$ 74

This list is not intended to be all-inclusive. Hourly rate fees for other categories of professional, support and other services shall be mutually negotiated by the County and firm on a project by project basis as needed.

Schedule C
PROJECT SCHEDULE

Phase I work to be completed within one hundred eighty (180) days from issuance of Notice to Proceed

Phase II work to be completed as directed in writing by the County.

SCHEDULE D INSURANCE COVERAGE

(1) The amounts and types of insurance coverage shall conform to the following minimum requirements with the use of Insurance Services Office (ISO) forms and endorsements or their equivalents. If CONSULTANT has any self-insured retentions or deductibles under any of the below listed minimum required coverages, CONSULTANT must identify on the Certificate of Insurance the nature and amount of such self-insured retentions or deductibles and provide satisfactory evidence of financial responsibility for such obligations. All self-insured retentions or deductibles will be CONSULTANT'S sole responsibility.

(2) The insurance required by this Agreement shall be written for not less than the limits specified herein or required by law, whichever is greater.

(3) Coverages shall be maintained without interruption from the date of commencement of the services until the date of completion and acceptance of the Project by the OWNER or as specified in this Agreement, whichever is longer.

(4) Certificates of insurance (3 copies) acceptable to the OWNER shall be filed with the OWNER within ten (10) calendar days after Notice of Award is received by CONSULTANT evidencing the fact that CONSULTANT has acquired and put in place the insurance coverages and limits required hereunder. In addition, certified, true and exact copies of all insurance policies required shall be provided to OWNER, on a timely basis, if requested by OWNER. Such certificates shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least thirty (30) days prior written notice has been given to the OWNER. CONSULTANT shall also notify OWNER, in a like manner, within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, non-renewal or material change in coverages or limits received by CONSULTANT from its insurer, and nothing contained herein shall relieve CONSULTANT of this requirement to provide notice. In the event of a reduction in

the aggregate limit of any policy to be provided by CONSULTANT hereunder, CONSULTANT shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy.

(5) All insurance coverages of the CONSULTANT shall be primary to any insurance or self insurance program carried by the OWNER applicable to this Project.

(6) The acceptance by OWNER of any Certificate of Insurance does not constitute approval or agreement by the OWNER that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of this Agreement.

(7) CONSULTANT shall require each of its subconsultants to procure and maintain, until the completion of the subconsultant's services, insurance of the types and to the limits specified in this Section except to the extent such insurance requirements for the subconsultant are expressly waived in writing by the OWNER.

(8) Should at any time the CONSULTANT not maintain the insurance coverages required herein, the OWNER may terminate the Agreement or at its sole discretion shall be authorized to purchase such coverages and charge the CONSULTANT for such coverages purchased. If CONSULTANT fails to reimburse OWNER for such costs within thirty (30) days after demand, OWNER has the right to offset these costs from any amount due CONSULTANT under this Agreement or any other agreement between OWNER and CONSULTANT. The OWNER shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the OWNER to purchase such insurance coverages shall in no way be construed to be a waiver of any of its rights under the Agreement.

(9) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the services required hereunder or termination of the Agreement, the

CONSULTANT shall furnish to the OWNER, in triplicate, renewal or replacement Certificate(s) of Insurance not later than three (3) business days after the renewal of the policy(ies). Failure of the Contractor to provide the OWNER with such renewal certificate(s) shall be deemed a material breach by CONSULTANT and OWNER may terminate the Agreement for cause.

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY

Required by this Agreement? Yes No

(1) Workers' Compensation and Employers' Liability Insurance shall be maintained by the CONSULTANT during the term of this Agreement for all employees engaged in the work under this Agreement in accordance with the laws of the State of Florida. The amounts of such insurance shall not be less than:

- a. Worker's Compensation - Florida Statutory Requirements
- b. Employers' Liability (check one, if applicable)

\$100,000 Each Accident
\$500,000 Disease Aggregate
\$100,000 Disease Each Employee

\$1,000,000 Each Accident
\$1,000,000 Disease Aggregate
\$1,000,000 Disease Each Employee

(2) The insurance company shall waive all claims rights against the OWNER and the policy shall be so endorsed.

(3) United States Longshoreman's and Harborworker's Act coverage shall be maintained where applicable to the completion of the work.

Applicable Not Applicable

(4) Maritime Coverage (Jones Act) shall be maintained where applicable to the completion of the work.

Applicable Not Applicable

COMMERCIAL GENERAL LIABILITY

Required by this Agreement? Yes No

(1) Commercial General Liability Insurance, written on an "occurrence" basis, shall be maintained by the CONSULTANT. Coverage will include, but not be limited to, Bodily Injury, Property Damage, Personal Injury, Contractual Liability for this Agreement, Independent Contractors, Broad Form Property Damage including Completed Operations and Products and Completed Operations Coverage. Products and Completed Operations coverage shall be maintained for a period of not less than five (5) years following the completion and acceptance by the OWNER of the work under this Agreement. Limits of Liability shall not be less than the following:

<input type="checkbox"/>	General Aggregate	\$300,000
	Products/Completed Operations Aggregate	\$300,000
	Personal and Advertising Injury	\$300,000
	Each Occurrence	\$300,000
	Fire Damage	\$ 50,000

<input type="checkbox"/>	General Aggregate	\$500,000
	Products/Completed Operations Aggregate	\$500,000
	Personal and Advertising Injury	\$500,000
	Each Occurrence	\$500,000
	Fire Damage	\$ 50,000

<input checked="" type="checkbox"/>	General Aggregate	\$1,000,000
	Products/Completed Operations Aggregate	\$1,000,000
	Personal and Advertising Injury	\$1,000,000
	Each Occurrence	\$1,000,000
	Fire Damage	\$ 50,000

(2) The General Aggregate Limit shall apply separately to this Project and the policy shall be endorsed using the following endorsement wording. "This endorsement modifies insurance provided under the following: Commercial General Liability Coverage Part. The General Aggregate Limit under LIMITS OF INSURANCE applies separately to each of your projects

away from premises owned by or rented to you." Applicable deductibles or self-insured retentions shall be the sole responsibility of CONSULTANT. Deductibles or self-insured retentions carried by the CONSULTANT shall be subject to the approval of the Risk Management Director or his/her designee.

(3) The OWNER, Collier County Government, shall be named as an Additional Insured and the policy shall be endorsed that such coverage shall be primary to any similar coverage carried by the OWNER.

(4) Coverage shall be included for explosion, collapse or underground property damage claims.

(5) Watercraft Liability coverage shall be carried by the CONSULTANT or the SUBCONSULTANT in limits of not less than the Commercial General Liability limit shown in subparagraph (1) above if applicable to the completion of the Services under this Agreement.

Applicable Not Applicable

(6) Aircraft Liability coverage shall be carried by the CONSULTANT or the SUBCONSULTANT in limits of not less than \$5,000,000 each occurrence if applicable to the completion of the Services under this Agreement.

Applicable Not Applicable

AUTOMOBILE LIABILITY INSURANCE

Required by this Agreement? Yes No

(1) Automobile Liability Insurance shall be maintained by the CONSULTANT for the ownership, maintenance or use of any owned, non-owned or hired vehicle with limits of not less than:

Bodily Injury & Property Damage - \$ 500,000

Bodily Injury & Property Damage - \$1,000,000

UMBRELLA LIABILITY

(1) Umbrella Liability may be maintained as part of the liability insurance of the CONSULTANT and, if so, such policy shall be excess of the Employers' Liability, Commercial General Liability, and Automobile Liability coverages required herein and shall include all coverages on a "following form" basis.

(2) The policy shall contain wording to the effect that, in the event of the exhaustion of any underlying limit due to the payment of claims, the Umbrella policy will "drop down" to apply as primary insurance.

PROFESSIONAL LIABILITY INSURANCE

Required by this Agreement? Yes No

(1) Professional Liability Insurance shall be maintained by the CONSULTANT to insure its legal liability for claims arising out of the performance of professional services under this Agreement. CONSULTANT waives its right of recover against OWNER as to any claims under this insurance. Such insurance shall have limits of not less than:

\$ 500,000 each claim and in the aggregate

\$1,000,000 each claim and in the aggregate

\$2,000,000 each claim and in the aggregate

\$5,000,000 each claim and in the aggregate

(2) Any deductible applicable to any claim shall be the sole responsibility of the CONSULTANT. Deductible amounts are subject to the approval of the OWNER.

(3) The CONSULTANT shall continue this coverage for this Project for a period of not less than five (5) years following completion and acceptance of the Project by the OWNER.

(4) The policy retroactive date will always be prior to the date services were first performed by CONSULTANT or OWNER, and the date will not be moved forward during the term of this Agreement and for five years thereafter. CONSULTANT shall promptly submit Certificates of Insurance providing for an unqualified written notice to OWNER of any cancellation of coverage or reduction in limits, other than the application of the aggregate limits provision. In addition, CONSULTANT shall also notify OWNER by certified mail, within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, non-renewal or material change in coverages or limits received by CONSULTANT from its insurer. In the event of more than a twenty percent (20%) reduction in the aggregate limit of any policy, CONSULTANT shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy. CONSULTANT shall promptly submit a certified, true copy of the policy and any endorsements issued or to be issued on the policy if requested by OWNER.

VALUABLE PAPERS INSURANCE

In the sole discretion of the County, CONSULTANT may be required to purchase valuable papers and records coverage for plans, specifications, drawings, reports, maps, books, blueprints, and other printed documents in an amount sufficient to cover the cost of recreating or reconstructing valuable papers or records utilized during the term of this Agreement.

PROJECT PROFESSIONAL LIABILITY

(1) If OWNER notifies CONSULTANT that a project professional liability policy will be purchased, then CONSULTANT agrees to use its best efforts in cooperation with OWNER and OWNER'S insurance representative, to pursue the maximum credit available from the professional liability carrier for a reduction in the premium of CONSULTANT'S professional liability policy. If no credit is available from CONSULTANT'S current professional policy underwriter, then CONSULTANT agrees to pursue the maximum credit available on the next

renewal policy, if a renewal occurs during the term of the project policy (and on any subsequent professional liability policies that renew during the term of the project policy). CONSULTANT agrees that any such credit will fully accrue to OWNER. Should no credit accrue to OWNER, OWNER and CONSULTANT, agree to negotiate in good faith a credit on behalf of OWNER for the provision of project-specific professional liability insurance policy in consideration for a reduction in CONSULTANT'S self-insured retention and the risk of uninsured or underinsured consultants.

(2) CONSULTANT agrees to provide the following information when requested by OWNER or OWNER'S Project Manager:

- a. The date the professional liability insurance renews.
- b. Current policy limits.
- c. Current deductibles/self-insured retention.
- d. Current underwriter.
- e. Amount (in both dollars and percent) the underwriter will give as a credit if the policy is replaced by an individual project policy.
- f. Cost of professional insurance as a percent of revenue.
- g. Affirmation that the design firm will complete a timely project errors and omissions application.

(3) If OWNER elects to purchase a project professional liability policy, CONSULTANT to be insured will be notified and OWNER will provide professional liability insurance, naming CONSULTANT and its professional subconsultants as named insureds.

END OF SCHEDULE D

SCHEDULE E
TRUTH IN NEGOTIATION CERTIFICATE

In compliance with the Consultants' Competitive Negotiation Act, Section 287.055, Florida Statutes, **Coastal Planning and Engineering, Inc.** hereby certifies that wages, rates and other factual unit costs supporting the compensation for the services of the CONSULTANT to be provided under the Professional Services Agreement, concerning **Design, Engineering and Permitting Services for Re-nourishment of the Barefoot, Vanderbilt, Clam Pass, Park Shore, and Naples Beaches** are accurate, complete and current as of the time of contracting.

Coastal Planning and Engineering, Inc.

BY: _____

TITLE: _____

DATE: _____

SCHEDULE F
KEY PERSONNEL, SUBCONSULTANTS AND SUBCONTRACTORS

Dedicated to Name	Position	Project (%)
Thomas Campbell, P.E.	Principal Engineer	0.20%
Steve Keehn, P.E.	Senior Engineer and Senior Project Manager	12.00%
Doug Mann, P.E.	QA/QC Engineer	2.00%
Tom Pierro, P.E.	Senior Coastal Engineer	2.00%
Chris Day, P.E.	Project Manager Modeling QA	1.00%
Samantha Danchuck, P.E. Ph.D.	Coastal Engineer	4.00%
Nicole Sharp, EI	Coastal Engineer	24.00%
Michelle Rees	Coastal Engineer	4.00%
Beau Suthard, P.G.	Remote Sensing Manager	1.60%
Melany Larenas, P.G.	Geology Manager	1.60%
William Robertson PhD.	Lidar Specialist	2.00%
Lauren Floyd	Project Biologist	26.00%
Angela Belden	Senior GIS/CAD Specialist	1.20%
Lindino Benedet	Project Manager Modeling	1.40%
Sub-Consultants		
CPE Branch Offices		
Tidewater Atlantic Research		
ACA Aerial Photographs.		