Financial Management Department
Purchasing Division
1112 Manatee Ave W Suite 803
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Phone: (941) 749-3014
www.mymanatee.org

November 17, 2014

TO: All Interested Bidders

SUBJECT: Invitation for Bids #14-1933CD
Cortez groins Removal and Replacement Project

ADDENDUM #1

Bidders are hereby notified that this Addendum shall be acknowledged on page Bid Form-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgment of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. **CHANGE** Section 26.7, Mobilization and Demobilization, on page TP-21 of the Technical Specifications to read as follows:

   26.7 **Mobilization/Demobilization**. Measurement and payment for the Mobilization Bid Item shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, and all required insurance for the project. This may include those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, safety equipment and first aid supplies, and sanitary and other facilities/utilities. The mobilization pay item also includes demobilization of all equipment, personnel, supplies and incidentals from the project site upon final completion. Payment for mobilization shall not exceed 15 percent (15%) of the total Contract cost unless the Contractor can prove to the County that his actual mobilization cost exceeds 15 percent (15%). The basis of payment for all work associated with Mobilization shall be paid for under the Lump Sum Pay Item and in accordance with the following schedule:

   - Twenty-five percent (25%) of the lump sum price for mobilization and demobilization will be paid to the CONTRACTOR after 20-ft of one groin has been demolished and debris removed from the site.
   - Twenty-five percent (25%) of the lump sum price for mobilization and demobilization will be paid to the CONTRACTOR after one 12-ft span of one of the permeable adjustable groins has been constructed as described in the Plans and Specifications.
   - Twenty percent (20%) of the lump sum price for mobilization and demobilization will be paid to the CONTRACTOR after the second groin has been completely constructed as described in the Plans and Specifications.

- Twenty percent (20%) of the lump sum price for mobilization and demobilization **will** be paid to the CONTRACTOR after the third groin has been completely constructed as described in the Plans and Specifications.
- The remaining ten percent (10%) of the lump sum price for mobilization and demobilization will be paid to the CONTRACTOR after the project is been deemed complete and CONTRACTOR has demobilized from the site.

2. **DELETE** Section 26.14.1 First Progress Payment on page TP-22 of the Technical Specifications. Therefore, CHANGE the numbering of Section 26.14.2 and 26.14.3 to 26.14.1 and 26.14.2, respectively.
3. **CHANGE** the new Section 26.14.1 (previously labeled Section 26.14.2) on Page TP-22 of the Technical Specifications to read as below:

   26.14.12 ~~Subsequent~~ Progress Payments. The CONTRACTOR shall be eligible for ~~subsequent~~ progress payments upon the completion and acceptance by the ENGINEER of the work. The progress payments shall be based on the linear footage of groin demolished and debris removed or permeable adjustable groin completed. The OWNER shall not compensate the CONTRACTOR for partial completion of a span. Progress payments for lump sum items will be based on the percent of work complete through the invoice date.

4. **CHANGE** the first sentence of Section 38, on page TP-30 of the Technical Specifications to read as below:

   The ½" thick steel plates~~, welded to the piles~~ that support the bottom beams or transverse deck beams shall be A36 steel of the dimensions and shapes specified in the Plans.

5. **CHANGE** the first sentence of Section 39 on page TP-31 of the Technical Specifications to read as below:

   The CONTRACTOR shall remove all components of the three existing groins and any other structures in the existing groins footprint including all buried or underwater components to a minimum depth of five (5) feet into the sediment or deeper as determined by the CONTRACTOR as necessary to complete installation of the PAGs.

6. **CHANGE** Section 41.1.1 on page TP-32 of the Technical Specifications to read as below:

   The PAG elements shall be secured to the beams prior to placement of the groin beams onto the piles. Carriage bolts are required along the upper layer of longitudinal beams to avoid the potential hazard of exposed threaded rods. Carriage bolts shall be installed on all upper longitudinal beams even if they are buried below sand. Threaded rods ~~or carriage bolts may~~ shall be used to secure the PAG elements to the remaining beams. The threads on both the carriage bolt and the nuts shall be coated with the Never•Seez® Marine Grade prior to placement in the saltwater. Bolts shall be torqued to 1500 in. lbs. after bringing all elements together.

7. **CLARIFICATION** of Appendix T2 of the Technical Specifications, USACE Permit No. SAJ-2013-01353(NW-MEP), Page 3, Condition 4. Turbidity Barriers:

   The use of turbidity barriers is not specifically required by permit or this Contract. However, the project must comply with the State water quality standard for turbidity: less than or equal to 29 NTUs above background at a 150 meter radius from the source of turbidity. It is the Contractor's responsibility to incorporate means and methods by which the Contractor deems necessary in order to maintain compliance. Per Section 53 on page TP-38, the Contractor shall provide adequate turbidity containment and control to prevent any turbidity violations from occurring due to groin demolition, debris removal, grout leakage, storm water runoff at the staging area, excavation, pile driving, placement of groin components and other materials at the groin construction sites, and all other project operations. It is anticipated that turbidity barriers will be required to meet the State water quality standard during the grouting process.

8. **ADD** Section 26.6.1 Unit Price For Additional Pile, to Section 26.6 Unit Price Item on page TP-21 of the Technical Specifications to read as follows:

   26.6.1 Unit Price for Additional Pile. The Bid Form contains a line item to "Provide and Install Additional Pile" in order to establish pricing for additional lengths of pile installation in excess of the quantity and lengths shown on the Plans. This is not a guaranteed pay item and shall only apply to additional pile length approved by the County, as directed by the Engineer, as a result of differing site conditions. The Bid Form includes a nominal quantity to compute an estimated Extended Price based on the Contractor's Unit Price in Linear Feet (LF). Since the actual quantity is undetermined, the LF unit price shall apply regardless of the total quantity installed under this line item.

9. **CHANGE** Article C.01, Minimum Qualification of Bidders, on page C-1 of the Invitation for Bid to read as below:

   No person who is not certified or registered as a General Contractor pursuant to Florida Statutes, Chapter 489 on the day the bid is submitted, and who has continuously held that certification or registration for a period of at least three (3) consecutive years immediately prior to the day the bid is submitted, may be qualified to bid on this Work. In the event that a bidder is a business organization, including a partnership, corporation, business trust or other legal entity as set forth in Florida Statutes § 489.119(2), then the bidder shall only be qualified to bid on this Work if: 1) the bidder (the business organization) is on the day the bid is submitted, and for at least three (3) consecutive years immediately prior to the day the bid is submitted has been, in continuous existence, properly licensed and registered as required by Florida law; and 2) the bidder, on the day the bid is submitted, has a certified or registered Qualifying Agent, as required by Florida Statutes § 489.119, and that Qualifying Agent has been ~~the same~~ a Qualifying Agent ~~of the bidder~~ for a period of at least three (3) consecutive years immediately prior to the day the bid is submitted. The Bidding Contractor (company supplying the Bid) shall have a minimum of three (3) years' experience in marine contracting and similar coastal work which is the subject of this IFB to be considered for award.

10. **DELETE** Bid Form page Bid Form-2 and **INSERT** the REVISED Bid Form page Bid Form-2 that is attached to this Addendum #1. The bid form has been revised to include separate line items for demolition and debris removal for each existing groin: north (PAG-N), central (PAG-C) and south (PAG-S), and to add a unit price line item for additional pile lengths.

11. **DELETE** the Plans and replace with the revised Plans attached to this Addendum #1. The Plans have been updated to address the clarification and questions in the addendum and replace the Plans that were issued with the Bid Documents. The following sheets have been revised: sheet 6 (DE-2), sheet 7 (DE-3), sheet 9 (DE-5) dated 11/12/14; sheet 11 (XS-1), sheet 12 (XS-2), sheet 13 (XS-3) dated 11/10/14.
12. The Subsurface Soil Exploration for Proposed "Cortez Groin Replacement," Gulf Drive, Anna Maria Island, Manatee County, Florida by Ardaman & Associates, Inc. shown on the geotechnical data plan sheets 14 (GE-1), 15 (GE-2) and 16 (GE-3) is attached to this Addendum #1.
13. **CHANGE** the Due Date and Time to **Tuesday, November 25, 2014 at 3:00 PM.**

The following questions have been presented by potential bidders:

Question #1: Please clarify the payment schedule (Article 26.14.1)

Response #1: Please refer to item #1 on Page 1 of this addendum for revisions to the payment schedule, and items #2 and #3 on Page 2 regarding changes to the progress payment section (Article 26.14.1).

Question #2: Can the Contractor make his own pre-cast material? (Article 11.5)

Response #2: The Contractor is allowed to make his own pre-cast material at an off-site location. All pre-cast material must be done at an off-site location with suitable resources, area, equipment and supplies to complete the pre-cast work. The Contractor is not required to use a subcontractor. The Contractor must comply with the plans and specifications, including providing the details of the prefabrication yard as described in section 11.5 (TP-8) and 33.1 (TP-29).

Question #3: Can the pre-cast work be done on site?

Response #3: No, the pre-cast work may not be done on site. Please refer to the response to Question #2.

Question #4: Please define hardbottom (Article 10.1)

Response #4: Hardbottom refers to exposed areas of submerged rock, which may or may not be characterized by a thin veneer of live or dead biota.

Question #5: Pile lengths are shown on the elevation drawings (XS-1, 2 & 3) since we are required to drive to both 10 tons capacity and depth. How do we get paid for additional footage if the piles don't meet the requirements at the lengths shown?

Response #5: Piles are to be installed per section 42 on page TP-33. If the piles are driven in accordance with the plans and specifications, and the 10 ton bearing capacity is not met, the Contractor shall notify the Engineer as per section 42 on page TP-33 for a determination. This condition is not expected based on the information gathered from the borings and jet probes, and if encountered, may be an indication of a differing site condition. If additional length is required as a result of differing site conditions, compensation for the additional length will be paid for at the unit price specified on the Bid Form. The Bid Form has been revised to include a line item to "Provide and Install Additional Pile" and Section 26.6.1 Unit Price for Additional Pile has been added to the specifications as described in items #8 and #10 on page 3 of this addendum.

Question #6: Performance and Payment Bonds for the project are to be included in Mobilization per the specs. Per the specs, no payment to the contractor is to be made until the first section of one groin is complete 100%. This could mean that the contractor might have to wait several months to receive his first payment for anything on the project including the bond. Is this the true intent of the documents to make the contractor wait for any payment until one of these segments have passed inspection, at the time when he is spending the most money to get the project set up and rolling?

Response #6: Please see item #1 on Page 1 of this addendum which addresses the mobilization/demobilization payment schedule.

Question #7: The access points at each of the groins from the parking lot are too narrow to bring heavy equipment, trucks and over width concrete segments through them without disturbing lots of the upland vegetation, is that acceptable?

If we are to use the south access point for these items:

a) **Can we traverse on the beach from one site to the other?**
b) **Can we close off the section of the beach to the public where we are traveling?**

Response #7: Disturbing dune vegetation is not permissible by the permit. The south access is wider than the other accesses at the landward end of each groin, and provides access to the project area for larger equipment and materials. The Contractor can traverse along the beach from one site to the other. The County will work with the Contractor to establish a travel corridor to exclude the public on the beach for transporting materials and equipment from the access points to the construction areas; however, safety is the sole responsibility of the Contractor. Please note that during shorebird breeding and sea turtle nesting seasons, the Contractor must comply with permit conditions related to travel corridors.

Question #8: The County will provide the monitoring to comply with the permits for the turtles and sea birds, correct?

Response #8: Yes, the County will provide the monitoring to comply with the permits for the sea turtles and shorebirds.

Question #9: Can we get a written definition of "Hard Bottom"?

Response #9: Please see the response to Question #4.

Question #10: Temporary turbidity barrier is not required?

Response #10: Please see item #7 on Page 3 of this addendum which clarifies the use of temporary turbidity barriers.

Question #11: Can we get another copy of Ardamen's geotechnical report?

Response #11: The Subsurface Soil Exploration for Proposed "Cortez Groin Replacement," Gulf Drive, Anna Maria Island, Manatee County, Florida by Ardaman & Associates, Inc. shown on the geotechnical data plan sheets 14 (GE-1), 15 (GE-2) and 16 (GE-3) is attached to this addendum.

Question #12: On plan sheets XS-1 and XS-3, the quantity descriptions do not all match the pictorial elevations. For example on XS-1 at the 280' to 360' location, the description indicates (2) longitudinal crib beams and (4) transverse crib beams. Elevation shows (4) longitudinal crib beams and (6) transverse crib beams. There are similar issues on XS-1 at the 365' location and on XS-3 at the 290' to 325' location. Please clarify if we are to be on descriptive or pictorial quantities.

Response #12: Plan sheets XS-1, XS-2 and XS-3 have been revised to correct the descriptive quantities addressing longitudinal crib beams and transverse crib beams. The revised plan sheets are attached to this addendum and dated 11/10/14.

Question #13: Plan sheets XS-1, XS-2 and XS-3 all mention the SOUTH GROIN in the right hand title block. This really should be corrected.

Response #13: Plans sheets XS-1 and XS-2 have been revised to indicate the north groin (XS-1) and the central groin (XS-2). The revised plan sheets are attached to this addendum and dated 11/10/14.

Question #14: Can the concrete PAG members be fabricated by contractor at an off-site location? Section TP-33.1 mentions precast subcontractor.

Response #14: Please refer to the response to Question #2.

Question #15: Please confirm that unless refusal is reached, the bearing capacity of the piles will be determined by one of the formulas indicated in Section 1822.2 of the 2010 Florida Building Code. See TP-33, Section 42.

Response #15: Yes, unless refusal is reached, the bearing capacity of the piles will be determined by one of the formulas indicated in Section 1822.2 of the 2010 Florida Building Code in accordance with the technical specifications written in Section 42, page TP-33.

Question #16: Section D.09 indicates a 3 year warranty while TP-26, 26.4 indicates a 1 year warranty. Please clarify the desired warranty period.

Response #16: The warranty period is three (3) years as defined in Section D.09.

Question #17: TP-22, Section 26.14.1 seems a little harsh and may restrict the contractor from receiving mobilization money, existing groin removal money, payment for stored materials money, etc. Can this section be reworded somehow to only indicate "payment for new groin construction, less any payments for approved stored materials?"

Response #17: Please refer to item #1 on Page 1 and items #2 and #3 on Page 2 of this addendum. The County will not pay for stored materials on this project.

Question #18: Final pipe pile quantity (LF) is unknown as the tip elevations will be determined by the piles reaching the required bearing, or refusal, and the minimum tip elevation. It would be advisable to create a separate item on the bid sheet for the 8" pipe piling. The bid form would have the engineer's estimated quantity, in lineal feet, of the piling. This is commonly known as the "plan quantity." The bidder would provide a unit price for the piling, per lineal foot. Bid would be based on the estimated quantity times the bidder's unit price. Actual payment would be based on furnished lengths of piling.

Response #18: Payment for the construction of the permeable adjustable groins will be on a lump sum basis for construction of the entire groin, which includes the piling and all elements of the groins. Please also refer to response to Question #5.

Question #19: TP-30, Section 38, seems to suggest that the ½" plate that supports the "lowest" transverse crib beam is welded to the pipe piles. Plan sheets DE-4 & DE-5 do not indicate any welded connection for these plates. The only welded connection would be for the deck adjustment plate. The lower plate rests on a 2-bolt pipe clamp according to the plan details. Please advise on how we are to proceed.

Response #19: Per Comment #5 on Page 2 of this addendum, Page TP-30, Section 38 has been revised to indicate that the ½" plate that supports the lowest transverse crib beam is not required to be welded to the pipe piles as shown on plan sheets DE-4 and DE-5.

Question #20: Please clarify where carriage bolts are to be used and where threaded rod is to be used. TP-32, 41.1.1 says that carriage bolts are to be used on all upper longitudinal beams. Threaded rod for other beams. I assume that upper means any longitudinal beam above the longitudinal base beam. Plans sheet DE-5 indicates carriage bolts on a transverse crib beam. This contradicts TP-32, 41.1.1.

Response #20: The carriage bolts shall be used on the first longitudinal beam below the deck only. Threaded rods shall be used to secure the PAG elements to all other beams. Plan sheet DE-5 has been revised to indicate threaded rod on the transverse crib beam. Section 41.1.1, TP-32 has been revised in agreement with plan sheet DE-5; please refer to Comment #7 on Page 2 of this addendum.

Question #21: Can we use the parking lot adjacent to the access points to the groins, as shown in the drawings to cast the concrete segments?

Response #21: No, all concrete casting work must be done off-site. Please refer to the response to Question #3.

Question #22: BID FORM-2, item #2. Should the unit of measure be EACH in lieu of LS?

Response #22: The bid form has been revised to include separate line items for demolition and debris removal for each existing groin: north (PAG-N), central (PAG-C) and south (PAG-S).

Question #23: Technical Provisions (TP-2) item 3.1 "Construction Access". In discussions at the Pre-Bid meeting, it appears that the Contractor will be approved to utilize some beach area between the groins for access from one to the other. It does not show that this is a designated option on the Drawings. Please clarify if the contractor will be able to move from groin to groin by utilizing an access corridor to the west of the dunes along the beach between the groins. Please Advise.

Response #23: Please refer to the response to Question #7.

Question #24: Technical Provisions (TP-6) item 10. "Natural and Artificial Hardbottom Communities Protection" states that the contractor shall avoid contact with any hardbottom communities. The permit drawing PV-3 shows temporary trestle in the 50' buffer no anchor zone. Will the contractor be able to place trestle piles and new groin elements in this 50' buffer zone as shown on PV-3 or will they have to abide by TP-6 item 10 in this work area? Please Advise.

Response #24: Yes, the contractor will be able to put the temporary trestle and new groins in the footprint shown on the plans.

Question #25: Technical Provisions (TP-21) item 26.7 "Mobilization and Demobilization" states that the first 50% will be paid to contractor after one span of one of the permeable adjustable groins has been constructed. This is also mentioned at (TP-22) item 26.14.1 "First Progress Payment". Please clarify that one span is the first 12' section and not the entire groin. In addition, please consider revising this to allow the contractor to bill for the first 50% of this item once on site with equipment and crews. Please Advise.

Response #25: Please see item #1 on Page 1 of this addendum for the revised payment schedule. Also, please see items #2 and #3 on Page 2 of this addendum regarding progress payments. One span is a 12-ft section and not the entire groin.

Question #26: Technical Provisions (TP-26) 26.24 "One Year Correction Period" states that within (1) year of completion the contractor is to correct any defective work caused by the contractor. Section D of the General Terms and Conditions (D.09) "Warranty and Guarantee Provisions" states bidder shall warrant work for 3 years. Please confirm or clarify that the Technical Provisions (1) year governs.

Response #26: Please refer to the response to Question #16.

Question #27: Technical Provisions (TP-29) item 33.1 "Prefabrication Yard" states concrete cannot be cast on site. Please confirm that the contractor will not be able to cast the groin elements on site. In addition please clarify if the Contractor can fabricate the groin elements or if they are required to be cast by a certified precast concrete company. If the elements are required to be cast by a certified precast concrete company, what certifications are required? Please Advise.

Response #27: The Contractor is not permitted to cast any concrete on site. Please refer to the response to Question #2. The elements are not required to be cast by a certified precast concrete company; however, this does not relieve the Contractor from meeting the requirements of the plans and specifications.

Question #28: Drawing DE-6 Shows that the turtle barrier is to follow FDOT index 414. FDOT index 414 does not call out MMFX2 rebar or any special concrete mixes or additives. Please clarify if standard 5000psi concrete and standard ASTM A615, Gr 60 deformed rebar is acceptable for these elements or will these be required to be constructed with the same rebar and concrete as the groin elements. In addition, index 414 shows exposed rebar loops on the ends to pin them together. If standard index 414 barriers are acceptable, what are we to do with these exposed rebar loops. Please Advise.

Response #28: The Contractor shall utilize MMFX2 rebar and the same concrete mix as required for the other elements of the project. Omit the exposed rebar end loops from FDOT Index 414.

Question #29: PAG Construction Materials, item 33.4 "Reinforced Concrete Material Testing" calls for reinforcing steel testing. Who is to cover the costs for this testing? In addition, will concrete testing be allowed to be completed by a precast concrete company if they are a FDOT approved facility or will an independent testing company still be required?

Response #29: Reinforcing steel testing is to be paid for by the Contractor. Concrete testing is allowed to be completed by a FDOT approved precast concrete company. If the precast concrete company is an FDOT approved facility, an independent testing laboratory will not be required to conduct the tests. Nonetheless, reinforced concrete materials testing is required as specified in the Contract Documents.

Question #30: Technical Provisions (TP-33) item 42 "Steel Piles" states that the piles are to be driven to depths indicated in the plans and to a minimum capacity of 10 tons. In order to ensure we achieve the 10 ton requirement, we would need to know the pile driving criteria to ensure we achieve this. This is normally completed with a test pile (PDA) to determine the hammer requirements to achieve the 10 ton load. Please clarify as how the contractor should address establishing the pile driving criteria to ensure the required load is achieved.

Response #30: Please see response to Question #15.

Question #31: During the Pre-Bid meeting, it was discussed if turbidity barriers will be required or not. The Corp Permit states that turbidity barrier would need to be utilized during work activities. Please clarify if the contractor is required to maintain turbidity barrier around the work areas if turbidity stays within allowable turbidity tolerances (29 ntu above background). Please Advise.

Response #31: Please refer to item #7 on Page 3 of this addendum.

Question #32: Drawing XS-1. Please review quantities of precast members for the sections with three and four levels. Drawing shows all the sections having the same amount of members, however sections with three and four levels need more precast members than sections with only two levels. Description of members per section on Drawing XS-1 should match Drawings XS-2 and XS-3.

Response #32: Please refer to the response to Question #12.

Question #33: Technical Provisions (TP-29) Item 35. Steel Piles. Please clarify if all piles need to be coated full length.

Response #33: All steel piles shall be coated **full** length inside and outside.

Question #34: Drawing DE-2. Cross section V-V' shows #6 stirrups. All other stirrups are #4. Please clarify if these #6 stirrups meet the bending requirements or they should be #4.

Response #34: On sheet DE-2, cross section V-V' has been revised to No 4 stirrups at 8 inches on center. The revised plan sheet is attached and dated 11/12/14.

Question #35: Drawing DE-3. Clarify if Section Z-Z' is applicable for the Longitudinal Base Beam. This drawing shows both details as "Longitudinal Crib Beam".

Response #35: Sheet DE-3 has been revised to identify the bottom beam as the Longitudinal Base Beam. The revised plan sheet is attached and dated 11/12/14.

Question #36: Drawings DE-4 and DE-5. Will 0.75" diameter 316 SS all thread with double nuts and washers at each end be an acceptable alternative to the 0.75" diameter carriage bolt shown on the drawings?

Response #36: No. An equivalent connection would be 0.75" diameter 316 SS all thread with a single hex nuts and washers at each end, and a 0.75 inch diameter acorn nut on the top of the bolt with the bolt adjusted vertically such that the appropriate numbers of threads are exposed on the top of the all thread to accept the acorn nut.

Question #37: Please clarify if we can work on more than one groin at the time.

Response #37: The County recognizes that work on multiple groins may overlap; however, it is not the intent for the groins to be simultaneously demolished or constructed for an extended period. The County does not want the beach to be at risk of excessive erosion due to prolonged unprotected exposure to the Gulf of Mexico. As stated in Section 47, TP-34, the Contractor must submit their proposed work plan for approval by the County and Engineer prior to execution.

Question #38: Will the County approve payment for stored materials such as pre-cast concrete, steel pilings, etc.?

Response #38: No, the County will not pay for stored materials. Materials will be paid for in place, in accordance with the Contract Documents.

Question #39: What is the expected start date of construction?

Response #39: The expected start of construction is January 2015, pending the Notice to Proceed from the FDEP and County.

Question #40: The documents state that the General Contractor is to pay for all permits for the project. We understand that all permits have already been secured and have been paid for. Please confirm that there will be no costs for permits on this project for the General Contractor.

Response #40: The FDEP and USACE permits have been secured by the County. The Contractor is responsible for any other permit required to conduct the work.

Question #41: Can we be provided with "as-builts" of the existing structures that are schedule to be removed as part of this project?

Response #41: As-builts for these structures are unavailable. They were constructed in the 1960's and 1970's and no record of their as-built condition is obtainable.

Question #42: If, during demolition of the existing structures, portions of the concrete piles be fractured well below the sea floor, what will be the remedy should obstacles, such as the fractured pile, obstruct the new steel piling? Would the permits permit a slight shifting of the new groins either north or south to avoid such obstructions?

Response #42: The permits will not allow a slight shifting of the new groins to avoid obstructions. It is the responsibility of the Contractor to remove materials according to the plans and specifications including obstacles that may interfere with the construction of the new PAGs.

Question #43: Please confirm that a bid will be considered responsive if a Contractor's Qualifying Agent has changed in the last three years due to unforeseen circumstances as long as the change does not affect the number of continuous years the company has been in business under the same name and has more than the minimum years of experience required in the bid documents.

Response #43: Please refer to item #9 on page 3 of this addendum.

END OF ADDENDUM #1

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until **Tuesday, November 25, 2014 at 3:00 PM.**

Sincerely,

Melissa M. Wendel, CPPO
Purchasing Official

BID FORM

(Submit in Duplicate)

CORTEZ GROINS REMOVAL AND REPLACEMENT PROJECT

Bid Based on Completion Time of 285 Calendar Days

ITEM NO.	DESCRIPTION	EST. QTY.	U/M	UNIT PRICE	EXTENDED PRICE
1	MOBILIZATION/ DEMOBILIZATION	1	LS	$	$
2	EXISTING GROIN DEMOLITION & DEBRIS REMOVAL- NORTH GROIN (PAG-N)	1	LS	$	$
3	EXISTING GROIN DEMOLITION & DEBRIS REMOVAL- CENTRAL GROIN (PAG-C)	1	LS	$	$
4	EXISTING GROIN DEMOLITION & DEBRIS REMOVAL- SOUTH GROIN (PAG-S)	1	LS	$	$
5	PROVIDE & PLACE NORTH PERMEABLE ADJUSTABLE GROIN (PAG-N)	1	LS	$	$
6	PROVIDE & PLACE CENTRAL PERMEABLE ADJUSTABLE GROIN (PAG-C)	1	LS	$	$
7	PROVIDE & PLACE SOUTH PERMEABLE ADJUSTABLE GROIN (PAG-S)	1	LS	$	$
8	SURVEYS	1	LS	$	$
9	ENVIRONMENTAL PROTECTION	1	LS	$	$
10	PROVIDE AND INSTALL ADDITIONAL PILE- (USED ONLY WITH ENGINEER AND COUNTY APPROVAL)	100	LF	$	$
	TOTAL BASE BID - Based on Completion Time of 285 Calendar Days				$
11	CONTRACT CONTINGENCY WORK (USED ONLY WITH COUNTY APPROVAL)		5% OF TOTAL BASE BID		$
	TOTAL OFFER FOR BID with Contract Contingency - Based on Completion Time of 285 Calendar Days				$

Bidder Name: _____

Authorized Signature: _____

SUBSURFACE SOIL EXPLORATION
FOR PROPOSED
"CORTEZ GROIN REPLACEMENT"
GULF DRIVE,
ANNA MARIA ISLAND,
MANATEE COUNTY, FLORIDA

Ardaman & Associates, Inc.

OFFICES

FLORIDA

Orlando, 8008 S. Orange Avenue, Orlando, Florida 32809, Phone (407) 855-3860
Bartow, 1525 Centennial Drive, Bartow, Florida 33830, Phone (863) 533-0858
Cocoa, 1300 N. Cocoa Boulevard, Cocoa, Florida 32922, Phone (321) 632-2503
Fort Myers, 9970 Bavaria Road, Fort Myers, Florida 33913, Phone (239) 768-6600
Miami, 2608 W. 84th Street, Hialeah, Florida, 33016, Phone (305) 825-2683
Port St. Lucie, 460 NW Concourse Place, Unit #1, Port St. Lucie, Florida 34986-2248, Phone (772) 878-0072
Sarasota, 78 Sarasota Center Boulevard, Sarasota, Florida 34240, Phone (941) 922-3526
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Baton Rouge, 316 Highlandia Drive, Baton Rouge, Louisiana 70810, Phone (225) 752-4790
Monroe, 1122 Hayes Street, Monroe, Louisiana 71292, Phone (318) 387-4103
New Orleans, 1305 Distributors Row, Suite 1, Jefferson, Louisiana 70123, Phone (504) 835-2593
Shreveport, 7222 Greenwood Road, Shreveport, Louisiana 71119, Phone (318) 636-3723

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Geotechnical, Environmental and
Materials Consultants

April 11, 2013
File No. 13-7053

TO: Coastal Planning & Engineering, Inc.
4171 Essen Lane
Baton Rouge, LA 70809

Attention: Jill Congemi

SUBJECT: Subsurface Soil Exploration for Proposed "Cortez Groin Replacement,"
Gulf Drive, Anna Maria Island, Manatee County, Florida

Dear Ms. Congemi:

As requested, our firm has completed an exploration of subsurface soil conditions at the above-referenced site. This report will present the results of our exploration and selected soil properties.

This report was prepared for the exclusive use of Coastal Planning & Engineering, Inc., and their consultants for specific application to the subject site, in accordance with generally-accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

SCOPE

The scope of our services has included the following items:

1. Conducting six (6) Standard Penetration Test borings to determine the nature and condition of the subsurface soils.

2. Reviewing each soil sample obtained in our field testing program by a geotechnical engineer in the laboratory for further investigation and classification.

3. Analyzing the existing soil conditions with respect to the proposed construction.

4. Preparing this report to document the results of our field testing program, laboratory analysis and engineering analysis.

FIELD EXPLORATION

Our field exploration program consisted of conducting six (6) Standard Penetration Test borings at the locations shown on the attached Figure 1. The borings were performed to determine the nature and condition of the subsurface soils to a maximum depth of 20 feet below the existing ground surface. The equipment and procedures utilized in the Standard Penetration Test are described in the Appendix of this report.

Test boring depths, location and number were determined by others. Test borings were located in the field by using a 100-foot tape to measure distances to available site landmarks. Test boring locations should be considered accurate only to the degree implied by the method used. Should more accurate locations be required, a registered land surveyor should be retained. All borings were performed on the beach above the existing waterline.

SOIL CONDITIONS

The general subsurface conditions encountered during the field exploration program are shown on the soil boring logs, which are included on Figure 2 of this report. Soil stratification is based on examination of recovered soil samples and interpretation of field boring logs. The stratification lines represent the approximate boundaries between the soil types, while the actual transitions may be gradual.

On the date of our field exploration program, the groundwater table was encountered at depths ranging from approximately 2 to 7 feet below the existing ground surface. The groundwater table is anticipated to fluctuate due to seasonal rainfall variations and tidal influences.

LABORATORY INVESTIGATION

Representative soil samples obtained during our field sampling operation were packaged and transferred to our office and, thereafter, examined by a geotechnical engineer to obtain more accurate descriptions of the existing soil strata. No additional testing was deemed necessary. The soil descriptions shown on the soil boring logs are based on a visual classification procedure in general accordance with the Unified Soil Classification System (ASTM D-2487 or D-2488).

ANALYSIS AND RECOMMENDATIONS

This section includes recommended soil parameters for use in design of earth retaining and erosion protection structures.

Based upon the laboratory test data, soil classifications and SPT "N" values, the internal friction angle, cohesion and unit weights can be estimated for the soils encountered at the site. These are listed at the respective sample depth in the following table.

Depth (feet)	Boring A			Boring B			Boring C		
	γ_{sat} (pcf)	φ (°)	c (ksf)	γ_{sat} (pcf)	φ (°)	c (ksf)	γ_{sat} (pcf)	φ (°)	c (ksf)
1	128	34	0	127	24	0	124	31	0
2.5	129	35	0	131	36	0	129	35	0
4	131	37	0	133	39	0	129	35	0
5.5	133	39	0	135	41	0	131	37	0
7	135	41	0	135	41	0	135	40	0
8.5	133	39	0	135	41	0	128	34	0
10	132	38	0	135	41	0	120	30	0
14.5	135	40	0	133	38	0	113	28	0
19.5	113	28	0	133	39	0	127	33	0

Depth (feet)	Boring D			Boring E			Boring F		
	γ_{sat} (pcf)	φ (°)	c (ksf)	γ_{sat} (pcf)	φ (°)	c (ksf)	γ_{sat} (pcf)	φ (°)	c (ksf)
1	126	32	0	125	32	0	129	35	0
2.5	129	35	0	122	31	0	129	35	0
4	132	37	0	133	39	0	134	40	0
5.5	132	38	0	132	38	0	135	41	0
7	129	35	0	131	37	0	134	39	0
8.5	113	28	0	135	40	0	134	40	0
10	113	28	0	134	39	0	135	41	0
14.5	122	31	0	128	34	0	125	32	0
19.5	131	36	0	124	31	0	132	38	0

γ_{sat} = saturated unit weight (pcf)
φ = internal friction angle (degrees)
c = cohesion (kip/sq.ft.)

Please note that the unit weights listed are saturated unit weights (i.e. assuming that the water table reaches the ground surface). To determine the buoyant unit weight, 62 pcf should be subtracted from these values.

The values listed in the table are for the soils in their in situ condition. If backfill is to be placed next to structures, these values may not be relevant. For a clean well compacted granular (sand) backfill, we recommend an internal friction angle of 32° and a saturated unit weight of 125 pcf.

Lateral earth pressures include lateral loading due to soil and water. The lateral earth pressure will be a function of both the submerged soil unit weight and the depth below the ground surface. For clean well compacted granular backfill, the coefficient of earth pressure at rest (Ko) is 0.5. The active and passive earth pressure coefficients (Ka and Kp) are a function of the internal friction angle of the soil and are summarized in the following table.

Internal Friction Angle (degrees)	Active Earth Pressure Coef.	Passive Earth Pressure Coef.
28	0.361	2.77
29	0.347	2.88
30	0.333	3.00
31	0.320	3.12
32	0.307	3.25
33	0.295	3.39
34	0.283	3.54
35	0.271	3.69
36	0.260	3.85
37	0.249	4.02
38	0.238	4.20
39	0.228	4.40
40	0.217	4.60
41	0.208	4.81

In selecting earth pressure coefficients suitable for design, the methods of construction should also be considered. As stated above, a clean well compacted granular backfill will have an internal friction angle of 32°. The active and passive earth pressure coefficients corresponding to this friction angle should, therefore, also be used for this backfill. Methods of construction, such as augering or other methods which disturb the subsurface soils may reduce the internal friction angle of the soils immediately surrounding the structure. In general, we recommend that

internal friction angles greater than 34° (and their corresponding lateral earth pressures coefficients) only be used where there would be no significant disturbance of the soils during construction.

GENERAL COMMENTS

The analysis and recommendations submitted in this report are based upon the data obtained from six (6) Standard Penetration Test borings performed at the locations indicated on the attached Figure 1. While the boring is representative of the subsurface conditions at the vertical reach, local variations characteristic of the subsurface materials of the region are anticipated and may be encountered. The boring log and related information are based upon the driller's log and visual examination of selected samples in the laboratory. The delineation between soil types shown on the log is approximate, and the description represents our interpretation of the subsurface conditions at the designated boring location on the particular date drilled.

The water table level shown on the boring log represents the water table surface encountered on the date shown. Fluctuations in the water table levels should be anticipated throughout the year. The absence of a water table listing on a boring log does not imply that the water table does not occur within the boring depth, unless expressly so stated.

It has been a pleasure to be of assistance to you with this project. Please contact us when we may be of further service to you, or should you have any questions concerning this report.

Very truly yours,

ARDAMAN & ASSOCIATES, INC.
Certificate of Authorization No. 5950

4/11/13

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Senior Project Engineer
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JHK/GHS:ly

APPENDIX I

SOIL BORING, SAMPLING & TEST METHODS

SOIL BORING, SAMPLING AND TESTING METHODS

Standard Penetration Test

The Standard Penetration Test (SPT) is a widely accepted method of in situ testing of foundation soils (ASTM D-1586). A 2-foot long, 2-inch O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches into the ground by successive blows of a 140-pound hammer freely dropping 30 inches. The number of blows needed for each 6 inches of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch increments of penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load. The following tables relate N-values to a qualitative description of soil density and, for cohesive soils, an approximate unconfined compressive strength (Qu):

Cohesionless Soils:

N-Value	Description
0 to 4	Very loose
4 to 10	Loose
10 to 30	Medium dense
30 to 50	Dense
Above 50	Very dense

Cohesive Soils:

N-Value	Description	Qu (ton/ft^2)
0 to 2	Very soft	Below 0.25
2 to 4	Soft	0.25 to 0.50
4 to 8	Medium stiff	0.50 to 1.0
8 to 15	Stiff	1.0 to 2.0
15 to 30	Very stiff	2.0 to 4.0
Above 30	Hard	Above 4.0

The tests are usually performed at 5-foot intervals. However, more frequent or continuous testing is done by our firm through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is a bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, NX-size flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid.

Representative split-spoon samples from each sampling interval and from every different stratum are brought to our laboratory in air-tight jars for further evaluation and testing, if necessary. After thorough examination and testing of the samples, the samples are discarded unless prior arrangements have been made. After completion of a test boring, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed, if necessary, and backfilled.

Laboratory Test Methods

Soil samples returned to our laboratory are examined by a geotechnical engineer or geotechnician to obtain more accurate descriptions of the soil strata. Laboratory testing is performed on selected samples as deemed necessary to aid in soil classification and to further define engineering properties of the soils. The test results are presented on the soil boring logs at the depths at which the respective sample was recovered, except that grain size distributions or selected other test results may be presented on separate tables, figures or plates as described in this report. The soil descriptions shown on the logs are based upon a visual-manual classification procedure in general accordance with the Unified Soil Classification System (ASTM D-2488-84) and standard practice. Following is a list of abbreviations which may be used on the boring logs or elsewhere in this report.

-200 - Fines Content (percent passing the No. 200 sieve); ASTM D1140
DD - Dry Density of Undisturbed Sample; ASTM D2937
Gs - Specific Gravity of Soil; ASTM D854
k - Hydraulic Conductivity (Coefficient of Permeability)
LL - Liquid Limit; ASTM D423
OC - Organic Content; ASTM D2974
pH - pH of Soil; ASTM D2976
PI - Plasticity Index (LL-PL); ASTM D424
PL - Plastic Limit; ASTM D424
Qp - Unconfined Compressive Strength by Pocket Penetrometer;
Qu - Unconfined Compressive Strength; ASTM D2166 (soil), D7012 (rock)
SL - Shrinkage Limit; ASTM D427
ST - Splitting Tensile Strength; ASTM D3967 (rock)
USCS - Unified Soil Classification System; ASTM D2487, D2488
w - Water (Moisture) Content; ASTM D2216

Soil Classifications

The soil descriptions presented on the soil boring logs are based upon the Unified Soil Classification System (USCS), which is the generally accepted method (ASTM D-2487 and D-2488) for classifying soils for engineering purposes. The following modifiers are the most commonly used in the descriptions.

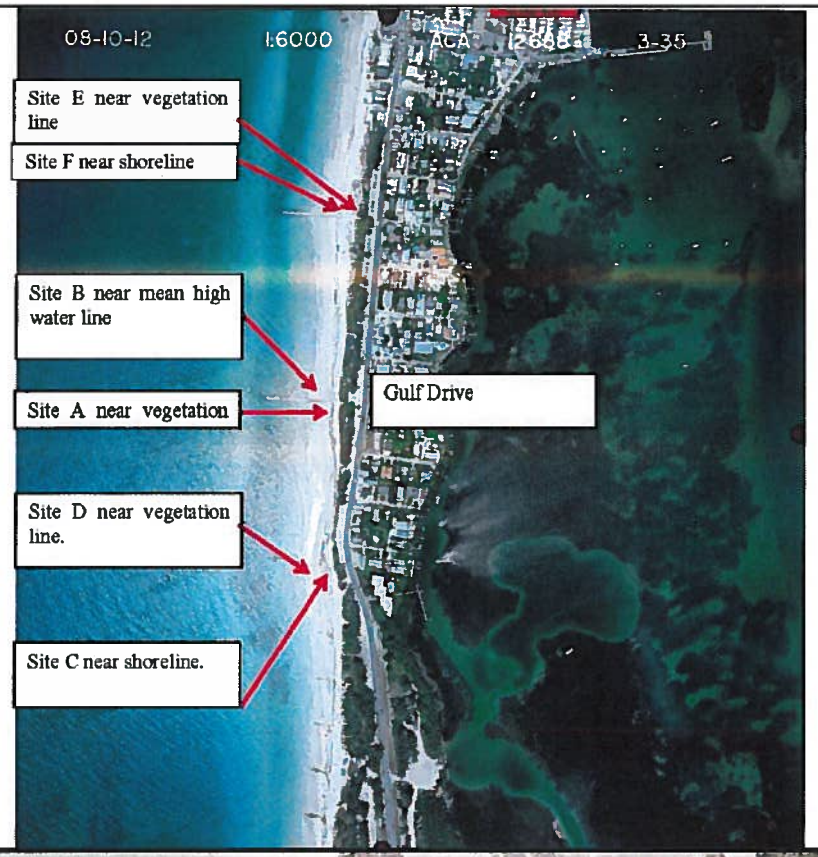
For Sands:	Modifier	Fines, Sand or Gravel Content*
	with silt or with clay	5% to 12% fines
	silty or clayey	12% to 50% fines
	with gravel or with shell	15% to 50% gravel or shell

For Silts or Clays	Modifier	Fines, Sand or Gravel Content*
	with sand	15% to 30% sand and gravel; and % sand > % gravel
	sandy	30% to 50% sand and gravel; and % sand > % gravel
	with gravel	15% to 30% sand and gravel; and % sand < % gravel
	gravelly	30% to 50% sand and gravel; and % sand < % gravel

* may be determined by laboratory testing or estimated by visual/manual procedures. Fines content is the combined silt and clay content, or the percent passing the No. 200 sieve.

Other soil classification standards may be used, depending on the project requirements. The AASHTO classification system is commonly used for highway design purposes and the USDA soil textural classifications are commonly used for septic (on-site sewage disposal) system design purposes.

OVERALL



NOT TO SCALE

SITE A&B

SITE C&D

SITE E&F

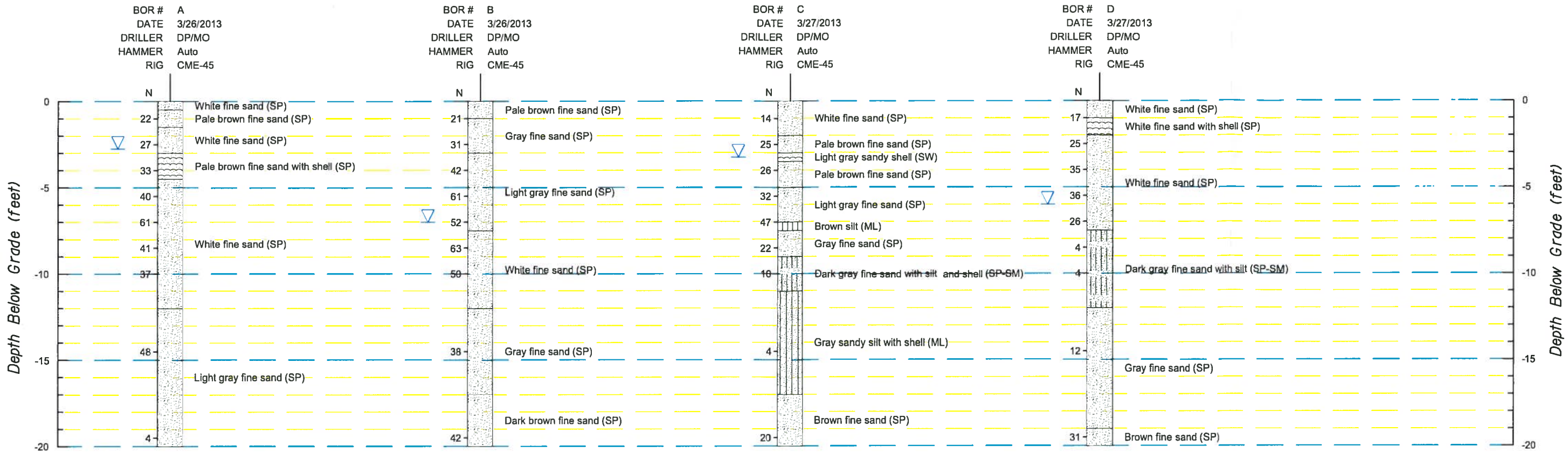
TEST BORING LOCATIONS

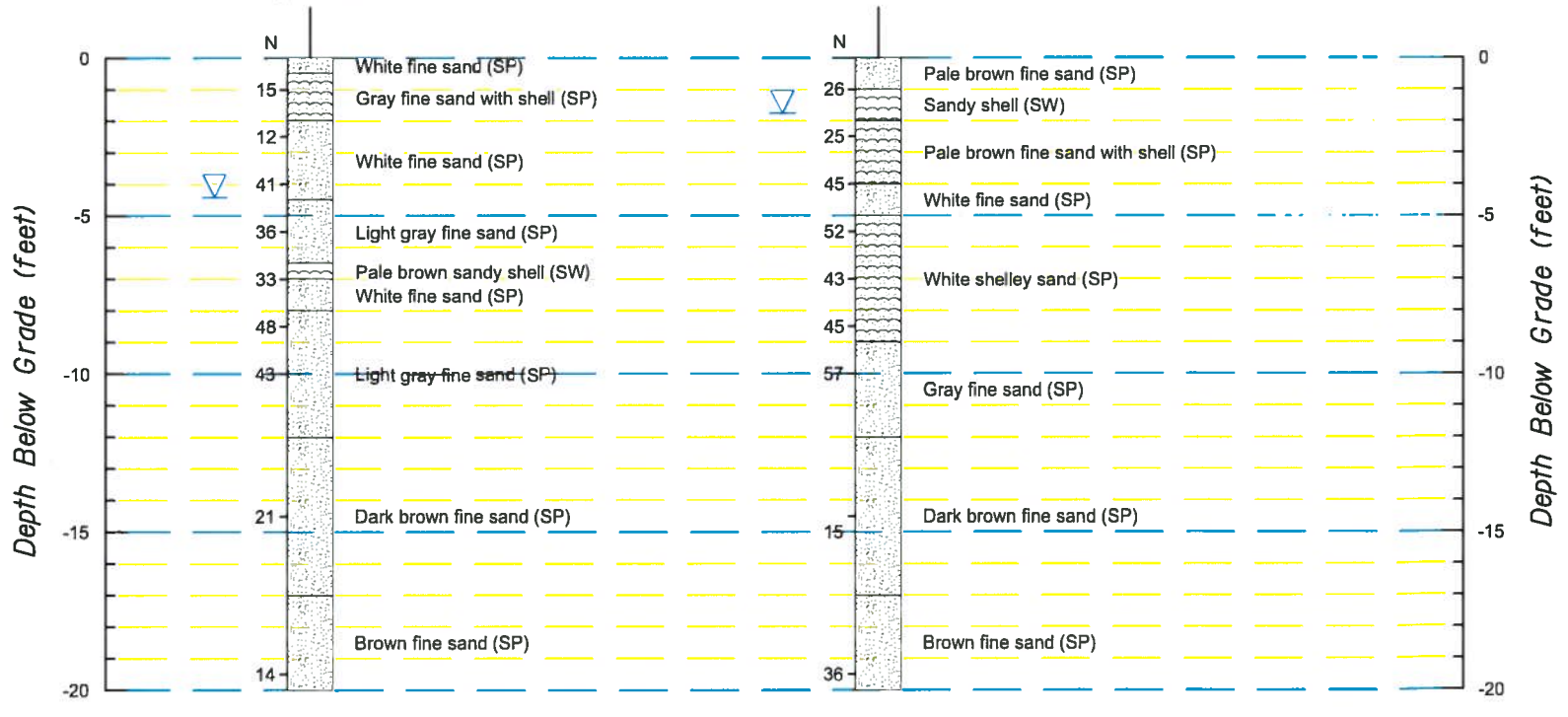
Base OVERALL PDF Image By: Coastal Planning & Engineering, Inc
Base SITE Aerials From Manatee County GIS

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

Test Locations
Cortez Groin Replacement
Gulf Drive, Anna Maria
Manatee County, Florida

DRAWN BY: KGS	CHECKED BY:	DATE: 4/1/13
FILE NO. 13-7053	APPROVED BY:	FIGURE: 1





LEGEND

- ▽ GROUNDWATER LEVEL MEASURED ON DATE DRILLED
- N SPT N-VALUE IN BLOWS PER FOOT (UNLESS OTHERWISE NOTED)

SPT N VALUES CONVERTED TO EQUIVALENT SAFETY HAMMER

GRANULAR MATERIALS–RELATIVE DENSITY	SPT (BLOWS/FOOT)
VERY LOOSE	LESS THAN 4
LOOSE	4–10
MEDIUM DENSE	10–30
DENSE	30–50
VERY DENSE	GREATER THAN 50

SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/FOOT)
VERY SOFT	LESS THAN 4
SOFT	2–4
FIRM	4–8
STIFF	8–15
VERY STIFF	15–30
HARD	GREATER THAN 30

Ardaman & Associates, Inc.
Geotechnical, Environmental and Materials Consultants

Boring Logs
Cortez Groin Replacement
Gulf Drive, Anna Maria
Manatee County, Florida

DRAWN BY: KGS	CHECKED BY:	DATE: 4/10/13
FILE NO. 13-7053	APPROVED BY:	FIGURE: 2