

## REQUEST FOR BID (RFB) 2020-3264

Martin County Board of County Commissioners  
Attn: Purchasing Division  
2401 S.E. Monterey Road  
Stuart, Florida 34996  
[pur\\_div@martin.fl.us](mailto:pur_div@martin.fl.us)  
[www.martin.fl.us](http://www.martin.fl.us)

The Board of County Commissioners, Martin County, Florida, will receive sealed bids for:

### TUCKAHOE MANSION SEAWALL REPLACEMENT

Sealed bids will be received by the Information Desk on the 1<sup>st</sup> Floor at the address above until **2:30 PM** local time, on **Wednesday, October 28, 2020**.

A non-mandatory pre-bid meeting will be held on October 15, 2020 at 10:00 a.m. at Tuckahoe Mansion Seawall site, 1707 NE Indian River Dr, Jensen Beach, FL 34957.

Funds for this project may be derived from state and/or federal grants therefore the successful contractor must comply with all state and federal guidelines.

The complete bid document may be downloaded from [www.demandstar.com](http://www.demandstar.com) (online bidding site).

Martin County is an equal opportunity/affirmative action employer.

By order of the Board of County Commissioners of Martin County, Florida.

Publish:        The Stuart News        September 25, 2020 and October 2, 2020

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## BID DOCUMENTS

Bidders must register with the online bidding site in order to receive all required documents and notification of addenda.

This document includes:

1. Basic Scope of Services
2. Instructions to Bidders
3. Sample Agreement between Owner and Contractor

The following documents must be downloaded separately:

4. Bid Form
5. Permit - U.S. Army Corps of Engineers # SAJ-2014-03008 (NW-CF)
6. Permit – FDEP #43-199775-002-EG-003-EE
7. Permit – FDEP #43-0199775-004-EE
8. Plans
9. Subsurface Soil Exploration and Geotechnical Engineering Evaluation
10. Specific Purpose Survey
11. Technical Specifications
12. FEMA Contract Provisions
13. Certification Regarding Suspension and Debarment
14. Certification Regarding Lobbying
15. Bid Bond
16. Bidder's Qualification Statement
17. Certificate of Corporate Principal
18. Conflict Affidavit
19. Drug Free Workplace Certification
20. List of Subcontractors
21. Public Entity Crimes Statement
22. Vendor Certification Regarding Scrutinized Companies List

**Going Greener!!** One original of the following documents must be returned with bid. **Do not return any other pages or documents unless specifically requested in the RFB.** If e-bidding, upload documents as one complete document rather than separately (no paper copy necessary).

- Bid Form
- Bid Bond
- Bidder's Qualification Statement
- Certificate of Corporate Principal
- Certification Regarding Suspension and Debarment
- Certification Regarding Lobbying
- Conflict Affidavit
- Drug Free Workplace Certification
- List of Subcontractors
- Public Entity Crimes Statement
- Vendor Certification Regarding Scrutinized Companies List
- Addenda, if any

## **BASIC SCOPE OF SERVICES**

The Tuckahoe Mansion Seawall Replacement project is the construction of a new seawall section to replace the undermined existing protective seawall section behind the Tuckahoe Mansion located at Indian Riverside Park (1707 NE Indian River Dr, Jensen Beach, FL 34957).

Substantial completion shall be within 150 calendar days.

Liquidated damages shall be \$1,690.00 per day.

The cost estimate for this project is \$1,500,000.00.

Funds for this project may be derived from state and/or federal grants therefore the successful contractor must comply with all state and federal guidelines.

### **Pre-Bid Meeting**

A non-mandatory pre-bid meeting will be held on October 15, 2020 at 10:00 a.m. at Tuckahoe Mansion Seawall site, 1707 NE Indian River Dr, Jensen Beach, FL 34957.

### **Minimum Qualifications**

Bidder must be a Florida Certified General Contractor.

Bidder shall provide reference information for no less than three (3) projects in which Bidder served as Prime Contractor for a project similar in size and scope.

Bidders that do not meet the minimum qualifications and do not provide the required past project references may be deemed “non-responsive” and/or “non-responsible”.

## INSTRUCTIONS TO BIDDERS

**Bidders are encouraged to read the following instructions carefully. Deviations, changes, modifications or failures to complete the bid can, and in some instances shall, invalidate the bid.**

1. Date and Place of Bid Opening. Sealed bids will be received at the Martin County Administrative Center, Attn: PURCHASING DIVISION, 2401 S.E. Monterey Road, Stuart, Florida 34996, at the time set forth on the Advertisement for Bids (RFB). Bids received after the designated time and date will not be considered. Bids will be publicly opened and read. If an award of the Contract is made, it will be as soon thereafter as is practical. In case of a tie, a selection among the lowest tied responsive and responsible bidders shall be made in accordance with County policy.
2. Inquiries/Addenda. Verbal interpretations of the meaning of the Drawings, Specifications, or other Contract Documents will not be valid. **Every request for interpretation shall be in writing and e-mailed to Purchasing at [pur\\_div@martin.fl.us](mailto:pur_div@martin.fl.us) no later than 5:00 PM on Monday the week prior to the bid due date.** The County will respond to all such requests for interpretation and any supplemental instructions in the form of written addenda and shall publish such addenda on the online bidding site not later than five (5) calendar days prior to the bid opening date fixed for the opening of bids. Bidders must acknowledge receipt of the addenda in their bid. Failure of any bidder to receive, or to acknowledge receipt of any such addenda shall not relieve such bidder from any obligation under its bid as submitted, provided, however, that failure to so acknowledge receipt of any such addenda may render a bid non-responsive and result in its rejection. Bidders are advised to contact the County prior to submitting bids to satisfy themselves as to the existence and number of all such addenda. All addenda so issued shall become part of the Contract Documents.
3. Preparation of Bids. Bids shall be submitted on the Bid Form(s) furnished, or upon an exact copy thereof, and must be signed by an authorized representative of the firm submitting the bid. The County shall not consider any information other than that contained on the Bid Forms; specifically, nothing written on the envelope in which the Bid Forms are contained will be considered except for purposes of identification. Bidders must quote on all items listed and failure to do so will disqualify the bid. The intent of the Bid Form is to secure a price for the work described in the Contract Documents. All bid preparation costs shall be borne by the bidder. The County will not be responsible for paying any bidder for its costs incurred in preparing its bid.
4. Credentials of Bidders/Licenses. All Bidders shall provide proof that they are properly certified or registered as a Contractor by the State of Florida applicable to this type of work. Other information, including, but not limited to, references and financial data shall be provided upon specific request by the County.
5. Bidders Disclosure. In each bid by an individual or firm, there shall be stated the name and address of every person having an interest in the bid; and in case of a corporation the names and addresses of its officers. Bids shall be signed by the person or member of the firm making the same, and in the case of a corporation, by some authorized officer or agent subscribing the name of the corporation and his own name.
6. Public Record. Bids become a “public record” and shall be subject to disclosure consistent with Chapter 119, Florida Statutes, thirty (30) calendar days after the bid opening or upon bid award in accordance with Chapter 119, Fla. Stat.. Marking a proposal “confidential” or “proprietary” does not exclude all or any part of the proposal from disclosure under public records requirements. To claim the proposal or a portion thereof as exempt or confidential and exempt from disclosure, you must

state the basis of the exemption, including the statutory citation to an exemption created or afforded by Florida Statutes; state in writing and with particularity the reasons for the conclusion that the proposal is exempt or confidential and exempt; and if only a portion of the proposal is claimed to be exempt or confidential and exempt, provide a redacted version of the proposal showing those portions claimed to be exempt or confidential and exempt. Proposals submitted with claimed exemptions shall be reviewed and release of these records shall be at the County's discretion. Failure to notify the County of claimed exemptions constitutes a waiver and the submittal will be released as requested.

7. Joint Venture. If the bid involves a joint venture, a copy of the joint venture agreement shall be included with the bid along with the attached "Statement of Business Organization".
8. Public Entity Crimes. Any bidder, or any of his suppliers, subcontractors, or consultants who shall perform work which is intended to benefit the County shall not be a convicted vendor or, if the bidder or any of his suppliers, subcontractors, or consultants of the bidder has been convicted of a public entity crime, a period longer than 36 months shall have passed since that person was placed on the convicted vendor list. The bidder further understands and accepts that any contract issues as a result of this solicitation shall be either voidable by the County or subject to immediate termination by the County, in the event there is any misrepresentation or lack of compliance with the mandates of Section 287.133 Florida Statutes. The County, in the event of such termination, shall not incur any liability to the respondent for any work or materials furnished.
9. Bid Guaranty (bids over \$200,000 only). Bid must be accompanied by the County's Bid Bond form, including those applicable to the sureties for the Statutory Payment Bond and Common Law Performance Bond (upload copy of bond if e-bidding). The bond shall be on the Bid Guaranty form provided by the County, with Power of Attorney Affidavit attached, in the amount of 5% of the total bid amount (base bid plus any and all alternates). Alternate bond forms will not be accepted. Failure to provide the County bond forms may deem the bid non-responsive. In lieu of the Bid Bond, the bid may be accompanied by a certified check of any national or state bank made payable to the County in the amount of 5% of the total bid amount. Any certified check that may be received will be returned to the unsuccessful bidder(s), within thirty (30) calendar days after the opening of the bids. Bid bonds will not be returned to the bidders unless specifically requested by the bidder. Any certified check of the successful bidder(s) will be returned to them promptly after the County and the successful bidder(s) have (i) executed the Contract. Failure of the County to execute the Contract within ninety (90) days after the date of the bid opening shall initiate release of the Bid Bond, certified check, cashier's check, treasurer's check or bank draft of lowest and second lowest bidders unless mutually agreed otherwise.
10. Power of Attorney. Attorneys-in-Fact who sign bonds must file with the board a certified copy of their power of attorney to sign such bonds.
11. Delivery of Bids:  
Bids may be submitted via hand delivery, mail, or e-bid.

Hand Delivery or Mail:

One (1) copy of the Bid must be submitted in a sealed envelope, plainly marked on the outside with the Bidder's name, RFB number and bid due date. Bids shall be delivered to the address detailed on the cover page of this RFB. If forwarded by regular mail or express mail, the sealed envelope containing the bid and marked as directed above, shall be enclosed in another envelope addressed to the U.S. Mail address indicated on the cover page. If forwarded by overnight

courier services (other than United States Postal Service Express Mail), the sealed envelope containing the bid and marked as directed above, shall be enclosed in another envelope addressed to the street address indicated on the cover page. Bids may be hand-delivered. Bids by fax or e-mail will **NOT** be accepted. The County cautions bidders to assure actual delivery of mailed or hand-delivered bids directly to the Martin County Administrative Center (Attn: Purchasing Division), 1st Floor, Information Desk, 2401 S. E. Monterey Road, Stuart, Florida. Confirmation of timely receipt of the bid may be made by e-mailing [pur\\_div@martin.fl.us](mailto:pur_div@martin.fl.us) before bid opening time. Bids received after the established deadline shall **not** be considered.

E-Bidding (via DemandStar) [www.demandstar.com](http://www.demandstar.com)

Upload one (1) electronic copy (single file) in PDF format to DemandStar.

E-bidding through the online bidding site shall be accepted in lieu of a sealed bid as outlined above. However, the bidder shall be responsible for ensuring that the required bid documents are properly uploaded and accepted by the online bidding site. The County shall not be responsible for nor accept bids not properly uploaded by the bid due date and time.

12. Withdrawal of Bids. Prior to the bid opening, a bid may be withdrawn provided that the bidder submits a written request that is signed by an authorized representative of the firm that submitted the bid. However, modifications will not be accepted or acknowledged.
13. Notice of Intended Award. A bid tabulation will be posted as soon after the bid opening as possible on our website at [www.martin.fl.us](http://www.martin.fl.us). Notice of award will be posted on the online bidding site. The County does not notify all bidders of award or intent to award.
14. Acceptance or Rejection of Bids. The County reserves the right to reject any and all bids when (i) such rejection is in the interest of the County; (ii) such bid is void per se; or (iii) the bid contains any irregularities, provided, however, that the County reserves the right to waive any minor irregularities and to accept the lowest responsible and responsive bid determined by the County. Bids may be considered irregular if there are omissions, unauthorized alterations of any forms, additions not called for, conditional or unauthorized alternate bids, or other irregularities of any kind. The County reserves the right to request a written confirmation of the bid and the responsibility of the bidder prior to the awarding of the Contract. Failure of the bidder to confirm the bid within seven (7) working days from the date of the County's request may render the bid unresponsive and will entitle the County to award to the next lowest bidder and may require forfeiture of the bid bond.
15. Contractor's Financial Ability. The apparent low, responsive bidder shall provide evidence of financial health prior to bid award upon request including but not limited to financial statements, cash flow projections, bank statements and tax returns. Failure to provide requested information shall deem the bidder non-responsible.
16. Responsible Bidder. Florida Statute 287.012(25) states that a "Responsible vendor" means a vendor who has the capability in all respects to fully perform the contract requirements and the integrity and reliability that will assure good faith performance. The County shall review factors, including but not limited to, past project performance, references and length of time in business and shall make the determination of responsibility in its sole discretion. A Contractor Performance Evaluation will be completed at the end of each project. An overall rating of "poor" will result in the Contractor being deemed "non-responsible" for future bids and will result in rejection of bid.
17. Responsive Bidder. A vendor that has submitted a bid, offer, proposal, quotation or response that conforms in all material respects to the solicitation.

18. Reliance Upon Bid. The County shall be entitled to rely upon all representations, including financial and other terms of performance, contained within a bid. The bidder further agrees to be bound to perform in accordance with its bid terms, including price. All bid terms, including price, shall be valid for a period of **90 calendar days** from the date of the bid opening.
19. Contract. The bidder understands that this Request for Bids does not constitute a Contract with the bidder. County contracts are awarded only when a fully executed written agreement has been returned to the Bidder by the County. No one shall be entitled to rely on any other action as an award. The County will not be liable for any costs incurred by the bidder prior to execution of the contract by the parties. The bidder to whom the award is made shall, within fourteen (14) calendar days after receipt of the Contract, execute the Contract on the form attached and return it to the County. The executed Contract should be returned to the County accompanied by the required performance and payment bonds as set forth herein. If the bidder fails to execute the Contract or provide the insurance and bonds within fourteen (14) calendar days, there shall be just cause for the annulment of the award and forfeiture of the Bid Guaranty to the County. Award may then be made to the next lowest, responsible, and responsive bidder or the work may be re-advertised at the County's sole discretion.
20. Substitute Material and Equipment. A Contract, if awarded, will be on the basis of material and equipment described in the Drawings and the Technical Specification without consideration of possible substitute or an "or equal" item of material or equipment may be furnished or used by the Contractor if acceptable to the Engineer, application for such acceptance will not be considered by the Engineer until after the date of execution of the Contract. In all cases, the low bidder shall be determined on the basis of the base bid which shall reflect the costs for the materials and equipment specified. Any bidder unable to provide the specified materials and equipment shall be determined unresponsive.
21. Equal Opportunity. The County recognizes fair and open competition as a basic tenet of public procurement. Contractors doing business with the County are prohibited from discriminating on the basis of race, color, creed, national origin, handicap, age or sex.
22. Award. For the purpose of award, the County will consider as the bid the correct summation of each unit price multiplied by the estimated quantities or the submitted total of all line items at the County's sole discretion and in the County's best interest. The County may award based on the basis of quantities included in the BASE BID or quantities included in the base bid plus bid alternatives, if any, and/or number of days to complete, at the County's sole discretion.
23. Performance during emergency. By submitting a bid, bidder agrees and promises that, during and after a public emergency, disaster, hurricane, flood, or acts of God, Martin County shall be given "first priority" for all goods and services under this contract (if applicable). Bidder agrees to provide all goods and services to Martin County throughout the emergency/disaster at the terms, conditions, and prices as provided in this solicitation, and with a priority above, a preference over, sales to the private sector. Bidder shall furnish a 24-hour phone number and address to the County in the event of such an emergency. Failure to provide the stated priority/preference during an emergency/disaster shall constitute breach of contract and make the bidder subject to sanctions from further business with the County.
24. Utilitization of Small Business Concerns. It is the Policy of the United States, the State of Florida, or the County that small business concerns, veteran-owned small business concerns, service-disabled

veteran-owned small business concerns, hubzone small business concerns, small disadvantaged business concerns, and women-owned small business concerns (hereinafter “small business concerns”) shall have the maximum practicable opportunity to participate in performing contracts, including contracts and subcontracts. it is further the policy that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns. the contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. the contractor further agrees to cooperate in any studies or surveys as may be conducted by the appropriate government agency as may be necessary to determine the extent of the contractor’s compliance with this clause.

25. Disadvantaged Business Enterprise. Contractors, consultants, sub-contractors and/or sub-recipients shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of Department of Transportation (DOT) assisted contracts. Failure by the contractor to carry out these requirements is a material breach of the contract which may result in termination of the contract or such other remedy as the recipient deems appropriate.
26. Additional Vendor Requirements. The successful bidder(s) will be required to monitor the performance of his employee on a periodic basis while they are assigned to the County. The successful bidder(s) is required to comply with the Immigration Reform Act of 1986 (IRCA) which requires all individuals hired after November 6, 1986, to provide employers with proof of citizenship or authorization to work in the United States.
27. Federal, State and County Regulations. The successful bidder(s) and their employees shall conform to all Federal, State and County regulations while in performance of their contracts. Any individual found not to conform shall not be allowed to start to work or if started shall be required to leave the job site immediately. Continued violations by any Successful Bidder shall result in the immediate termination of the Successful Bidder contract.
28. Prohibited Communications. Potential bidders shall not communicate in any way regarding this contract with the Board of Commissioners, County Administrator or any County staff other than Purchasing personnel regarding this Request for Bid (RFB) from the time of bid advertisement through and including bid award. Such communication shall result in disqualification.
29. Conflict of Interest. Section 112.313, Fla. Stat., prohibits contracts with County employees, officers and advisory board members. All bidders must disclose the name of any Martin County officer or employee who owns, directly or indirectly an interest in the bidder's firm or any of its branches. Advisory Board Members may qualify for an exemption by submitting Commission on Ethics Form 3A with bid and filing such form with the Supervisor of Elections in accordance with Section 112.313(12)(b), Fla. Stat.
30. Bid Pricing. Bid prices shall be inclusive of all work included in the plans and specs (if any) regardless of itemization on bid form.
31. Any actual or prospective bidder who protests the reasonableness, necessity or competitiveness of the terms and/or conditions of the request for bid; selection or award recommendation shall file such protest in writing to the Purchasing Manager in accordance with the written protest procedures stated in the Martin County Purchasing Manual available at [www.martin.fl.us](http://www.martin.fl.us)



**SAMPLE AGREEMENT BETWEEN COUNTY AND CONTRACTOR  
FOR HORIZONTAL CONSTRUCTION**

THIS AGREEMENT, effective this \_\_\_\_ day of \_\_\_\_ in the year, 20\_\_\_\_, between:

MARTIN COUNTY BOARD OF COUNTY COMMISSIONERS, a political subdivision of the State of Florida, (hereinafter COUNTY), located at 2401 S.E. Monterey Road, Stuart, FL 34996

AND the CONTRACTOR:  
(hereinafter CONTRACTOR)

Project Name:

Project Number: RFB

In accordance with the following terms:

Total Contract Price: \$

Substantial Completion Time: calendar days

Liquidated Damages: \$ per day following substantial completion

Final Completion Time: Not-to-Exceed 60 calendar days following substantial completion

Liquidated Damages: \$ per day following final completion

## INDEX

Article 1:	Definitions
Article 2:	Work / Preliminary Requirements
Article 3:	Contract Price
Article 4:	Contractor Responsibilities
Article 5:	Payment
Article 6:	Time of Performance
Article 7:	Liquidated Damages
Article 8:	Claims for Additional Time
Article 9:	Site Conditions
Article 10:	Indemnification
Article 11:	Termination
Article 12:	Suspension of the Work
Article 13:	Changes in the Work
Article 14:	Materials, Equipment, and the Workmanship; Substitutions
Article 15:	Compliance
Article 16:	Non-Discrimination
Article 17:	Defective Work
Article 18:	Bonds and Insurance
Article 19:	Performance Guarantee and Warranty
Article 20:	Shop Drawings, Product Data and Samples
Article 21:	Safety
Article 22:	Protection of the Work and Property
Article 23:	Tests and Inspections
Article 24:	Utility Coordination
Article 25:	Hazardous Materials
Article 26:	Audit
Article 27:	Public Records
Article 28:	Assignment
Article 29:	Attorney's Fees and Court Costs
Article 30:	Notices
Article 31:	Resolution of Claims and Disputes; Certified Claims
Article 32:	Miscellaneous
Article 33:	Local, State and Federal Obligations
Exhibit A:	Contractor's Bid Form

## **ARTICLE 1 DEFINITIONS**

Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

1. Actual Costs. The real Project costs attributable to:
  - A. labor, including social security, insurance, fringe benefits required by Agreement or custom, and workers' compensation insurance;
  - B. materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
  - C. rental machinery and equipment, exclusive of hand tools, whether rented from the CONTRACTOR or others;
  - D. premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
  - E. field supervision and field office personnel directly attributable to the charge, exclusive of the cost of estimating, contract administration, and purchasing.
2. Addenda. Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
3. Agreement. The written instrument which is evidence of the Agreement between the COUNTY and the CONTRACTOR covering the Work. Also referred to as "Contract".
4. Bid Package. The Bid Advertisement, Instructions to Bidders, all Addenda, the Bonds, the Notice of Award, and the Notice to Proceed.
5. Bonds. The performance bond and payment bond and other instruments of security, furnished by the CONTRACTOR and its surety in accordance with the Contract Documents and in accordance with the laws of Florida.
6. Change Order. A written document, which is signed by the CONTRACTOR and the COUNTY, that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
7. Claim. Any action, change order, demand, invoice, lawsuit, request, or statement, for money, property, or services made to any agent, employee, or officer of the County. Claim does not include tort claims as that term is used in Section 768.28(5) Florida Statutes as amended from time to time.
8. Contract Documents. The documents that establish the rights and obligations of the parties and include the following:
  - A. the Agreement (including Exhibits);
  - B. the CONTRACTOR's entire completed Bid Package;
  - C. the Design Documents;

- D. the Bid Package; and
- E. the approved submittals, and other documents provided by, through, or under the CONTRACTOR that fix, depict, and/or describe the size, quality and character of the Project; however, Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.
9. Contract Price. The monies paid to the CONTRACTOR under the Contract Documents.
10. Contract Times. The number of days or the dates stated in the Agreement to: (A) achieve Substantial Completion; and (B) complete the Work so that it is ready for final payment as evidenced by the COUNTY's written recommendation of final payment.
11. CONTRACTOR. The individual or entity with whom the COUNTY has entered into this Agreement.
12. Day means a calendar day unless noted otherwise
13. Design Documents. The Drawings (Construction Plans) and Specifications, surveys, permits, estimates, photographs, and reports, together with all Written Amendments, Change Orders, the Work Change Directives, Field Orders, and the COUNTY's written interpretations and clarifications issued on or after the Effective Date of the Agreement.
14. Drawings. That part of the Contract Documents prepared or approved by an engineer that graphically shows the scope, extent, and character of the Work to be performed by the CONTRACTOR (Shop Drawings or other the CONTRACTOR submittals are not Drawings). Also referred to as Construction Plans.
15. Effective Date of the Agreement. The date indicated in the Agreement on which it becomes effective (if no such date is indicated, the date on which the Agreement is signed and delivered by the last of the two parties).
16. Field Order. A written order issued by the COUNTY that requires minor changes in the Work and may involve a minor change in the Contract Price or the Contract Time.
17. Final Completion or Final Acceptance. The completion of all the Work called for under the Contract Documents, including, but not limited to:
- A. satisfactory operation of all equipment supplied by the CONTRACTOR;
  - B. correction of all punch list items to the satisfaction of the COUNTY;
  - C. payment of all trade contractors, subcontractors, and materialmen;
  - D. settlement of all claims, if any;
  - E. payment and release of all mechanic's, materialmen's, and similar liens;
  - F. delivery of all guarantees, equipment operation and maintenance manuals, Record Drawings, required certificates, and all other required approvals and acceptances by any municipality within Martin County, Martin County itself, the State of Florida or other authorities or agencies having jurisdiction; and

G. removal of all rubbish, tools, scaffolding, and surplus materials and equipment from the Work site.

18. Lump Sum Bid. The total cost that the CONTRACTOR submits to the COUNTY which includes all Work reflected on Plans and Specifications included in the COUNTY'S Request for Bids (RFB).

19. Notice to Proceed. A written notice given by the COUNTY to the CONTRACTOR fixing the date on which the Contract Times will commence and on which the CONTRACTOR shall start to perform the Work under the Contract Documents.

20. Project Manager. The individual appointed by and acting on behalf of the COUNTY for the duration of the Project; the individual that is responsible for receiving the Applications for Payments from the CONTRACTOR on behalf of the COUNTY.

21. Public Record. All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business between the COUNTY and the CONTRACTOR.

22. Samples. Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

23. Shop Drawings. All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for the CONTRACTOR and submitted by the CONTRACTOR to illustrate some portion of the Work.

24. Specifications. That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

25. Substantial Completion. For the purpose of this Agreement, and for the compliance of those procedures, duties and obligations as set forth in the Florida Statutes' "Local Government Prompt Payment Act", the term "Substantial Completion" is defined as that point where the COUNTY is able to enjoy beneficial occupancy of the Work and where the Work has achieved that level of completion such that the COUNTY is able to utilize the entire the Project for its intended purposes, including but not limited to the completion of all specified systems and items relating to life, safety and regulatory use, with the exception of incidental or incomplete items except where a lack of completion of such incidental or incomplete items of the Work will adversely affect the complete operation of other areas of the Work. Additional conditions (if any) needed to achieve Substantial Completion of the Work and which are project specific as set forth in Exhibits (if any). The Project should be completed to the point that the Work can be utilized for the purposes for which it was intended, as well as the satisfaction of the following requirements: (A) the items that affect operational integrity and function of the Project must be capable of continuous use; (B) all permits and other regulatory requirements must be satisfied; and (C) where required, a Certificate of Occupancy must be issued.

26. Superintendent. The individual appointed by and acting on behalf of the CONTRACTOR, as approved by the COUNTY, for the duration of the Project.

27. Surety. The corporate body that is responsible for the CONTRACTOR in connection with the Work as set forth in the Bonds and that is included in the most recent United States Department of the Treasury List of Acceptable Sureties and authorized to issue surety bonds in Florida, and which maintains a surety rating of "A-" or better.

28. Underground Facilities. All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

29. Unit Price Work. The Work to be paid for on the basis of unit prices included in the Project bid.

## **ARTICLE 2 WORK / PRELIMINARY REQUIREMENTS**

2.1 The CONTRACTOR agrees to furnish and complete all authorized and approved work, materials, supplies, tools, furnishings, fixtures, labor, services, equipment, site development, permitting, regulatory matters, environmental mitigation, traffic control, accounting, coordination, and construction of the Project, more specifically described in the Design Documents, as applicable.

2.2 The CONTRACTOR shall be responsible to produce a color audio-visual recording of the Project site prior to construction and upon completion of construction. The CONTRACTOR shall provide the audio-visual recordings on a DVD or USB Flash Drive/Thumb Drive. The purpose of the audio-visual recording is to document the condition of the Project site prior to construction with attention focused on the existence of any faults, fractures, or defects. Therefore, the recording shall be produced by a skilled videographer that is regularly engaged in the production of pre-construction recordings. The video recording shall be produced with sharp picture and accurate colors and shall be free of vibrations, distortion, or other significant picture imperfections; it shall be recorded during daylight hours and when the Project site is free of debris or obstructions. The pan rate, rate of travel, camera height, and zoom rate shall be maintained steady and clear at all times. The audio commentary shall be produced with proper volume and clarity and shall be free of distortion; it shall be simultaneously recorded with the video to assist the COUNTY with the orientation, location, identification, and description of the recorded features that are included in or adjacent to the Project site, which include, but are not limited to: (A) each side of the roadways; (B) sidewalks, bicycle paths, and other modes of transportation facilities; (C) buildings, walls, retaining walls, and seawalls; (D) elements of the stormwater management system, including ponds, culvert ends, and visible drainage structures; and (E) landscaping/trees, visible components of the irrigation system, and fencing.

2.3 Prior to the issuance of the Notice to Proceed, the COUNTY shall schedule a pre-construction meeting with the CONTRACTOR. At the pre-construction meeting, the CONTRACTOR shall submit for the COUNTY's review its audio-visual recording of the Project site, the proposed Critical Path Method (CPM) Schedule, the Final Schedule of Values, personnel and subcontractor lists, and the proposed mobilization requirements. It is the intent of the pre-construction meeting to ensure that the Project Manager and the Superintendent have a clear understanding of the proposed Work and the requirements of this Agreement and to establish the appropriate Date of Commencement, which may or may not coincide with the date of the pre-construction meeting.

2.4 The Date of Commencement of the Work shall be the date indicated in the Notice to Proceed. The Notice to Proceed shall be issued by the Project Manager after the CONTRACTOR has delivered to the COUNTY the executed Agreement together with the Bonds and Insurance Certificates required in accordance with the Agreement and the Martin County Board of County Commissioners has approved this Agreement. No Work shall be performed by the CONTRACTOR or its Professionals, subconsultants, or subcontractors, and no irrevocable commitments to vendors shall be made prior to the Date of Commencement, at which time, the CONTRACTOR may commence to perform the Work.

**ARTICLE 3  
CONTRACT PRICE**

3.1 The COUNTY shall pay the CONTRACTOR for the performance of this Agreement and completion of the Work under the Project in accordance with the Contract Documents, subject to adjustment by Change Order, the fixed Contract Price as stated on Page 1 of this Agreement, based on the unit costs and quantities in the Bid. The obligations of the COUNTY under this Agreement are subject to the availability of funds lawfully appropriated for the Project by the COUNTY.

3.2 The CONTRACTOR fully understands that the Lump Sum and/or Unit Price for all items includes a sufficient allowance for the completion of all Work associated with the Project, as depicted in the Contract Documents, including, but not limited to, all profit and overhead, incidentals, all labor, supervision, testing, County inspections, machinery, equipment, tools, utility coordination, clean up, and other means of construction necessary to complete the Work in accordance with all applicable regulatory agencies.

**ARTICLE 4  
CONTRACTOR RESPONSIBILITIES**

4.1 The CONTRACTOR represents that it has familiarized itself with, and assumes full responsibility for having familiarized itself with, the nature and extent of the Contract Documents, the Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that may in any manner affect performance of the Work, and represents that it has correlated its study and observations with the requirements of the Contract Documents. The CONTRACTOR also represents that it has studied all surveys and investigation reports of subsurface and latent physical conditions referred to in the Specifications and made such additional surveys and investigations as it deems necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents and that it has correlated the results of all such data with the requirements of the Contract Documents.

4.2 The CONTRACTOR shall give all notices and comply with all municipal, local, state and federal laws, ordinances, codes, rules, licenses, and regulations applicable to the Work. If the CONTRACTOR observes that any of the Agreement is contradictory to such laws, rules, and regulations, it shall notify the Project Manager promptly in writing. If the CONTRACTOR performs any the Work that it knows or should have known to be contrary to such laws, ordinances, rules, and regulations, it shall bear all related costs.

4.3 The CONTRACTOR understands and acknowledges that all documents and materials provided with the Request for Bid package and any addenda are general and preliminary, and that the CONTRACTOR shall not rely on the accuracy or completeness thereof. The CONTRACTOR acknowledges that its duties hereunder shall not be excused or discharged in any respect based on the incompleteness or inaccuracy of any such documents or materials.

4.4 The CONTRACTOR shall be responsible to the COUNTY for acts and omissions of the CONTRACTOR and the CONTRACTOR's agents, employees, professionals, subconsultants, subcontractors, and all other parties performing the Work by, through, and under the CONTRACTOR.

4.5 The CONTRACTOR shall be responsible for the management, coordination and supervision of all construction means, methods, techniques, sequences, and procedures for completion of the Work.

4.6 The CONTRACTOR agrees to bind specifically every professional, subconsultant and subcontractor to the applicable terms and conditions of the Agreement, for the benefit of the COUNTY.

- 4.7 The CONTRACTOR represents that it is fully experienced and properly qualified to perform the Work under the Contract Documents and that it is properly licensed, equipped, organized, and financed to perform such the Work.
- 4.8 The CONTRACTOR shall act as an independent contractor and not as the agent of the COUNTY. The CONTRACTOR shall supervise and direct the Work and shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction subject to compliance with the Contract Documents.
- 4.9 The CONTRACTOR shall employ and maintain a full-time on-site Superintendent who shall have been designated in writing by the CONTRACTOR and pre-approved by the COUNTY. The Superintendent shall be dedicated to this the Project full time and shall have full authority to act on behalf of the CONTRACTOR. The superintendent shall be capable of properly interpreting the Contract Documents and be thoroughly experienced in the type of work being performed. The Superintendent shall have full authority to receive instructions from the Engineer and to execute the orders or directions of the Engineer, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. A Superintendent shall be provided regardless of the amount of work sublet. The Superintendent shall speak and understand English, and the CONTRACTOR shall maintain at least one other responsible person who speaks and understands English, on the project during all working hours. All communications given to the Superintendent shall be as binding as if given to the CONTRACTOR. Copies of written communications given to the Superintendent of the CONTRACTOR shall be mailed to the address set forth in the Agreement for notices. Nothing contained herein shall be construed as modifying the CONTRACTOR's duty of supervision and fiscal management as provided by Florida law. The COUNTY shall have the right of direct removal of any Superintendent of the CONTRACTOR. Any change in the Superintendent of the CONTRACTOR assigned to the Project shall be subject to the COUNTY's prior written approval. The Superintendent shall have full authority to receive instructions from the Owner and/or Engineer, and to execute the orders or directions of the Owner and/or Engineer, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. The Superintendent shall provide such superintendence regardless of the amount of work sublet.
- 4.10 The CONTRACTOR shall perform at least 30% (thirty percent) of the total amount of the Work in-house. The foregoing 30% (thirty percent) is exclusive of administrative work performed by the CONTRACTOR in connection with the Work.
- 4.11 The CONTRACTOR shall not employ any subcontractor or Consultant against whom the COUNTY may have reasonable objection in the COUNTY'S sole discretion.
- 4.12 The CONTRACTOR represents to the COUNTY that the CONTRACTOR (and its officers, directors, partners, or shareholders holding ten 10% (ten percent) or more of the outstanding stock of the CONTRACTOR), does not have any financial interest in or with (i.e. is not an officer, director, partner or 10% (ten percent) plus shareholder) any person, entity, subcontractor, consultant, design professional, materialmen, supplier, or any other subcontractor performing the Work or the Project. The CONTRACTOR agrees to obtain prior written consent from the COUNTY before entering into any agreement on this the Project in which it has a common financial interest.
- 4.13 The CONTRACTOR shall keep on-site one record copy of all Drawings, Specifications, Addenda, Modifications, and Shop Drawings that is annotated to show all changes made during the construction process. Final acceptance of the Work will be withheld until all such modifications have been properly inserted electronically into the design documents, thus creating Record Drawings, and the Record Drawings are accepted by the COUNTY.



4.14 The CONTRACTOR shall provide the COUNTY two copies of the Record Drawings verifying the as-built conditions for all installed and constructed components of the Work, including, but not limited to, the surface water management, traffic control, lighting, water distribution, and wastewater collection systems. The Record Drawings, which shall be signed and sealed by a Professional Engineer or Surveyor and Mapper, licensed in the State of Florida, must demonstrate to the Project Manager that the Project components were constructed in substantial conformance with the approved Construction Plans and applicable permits and that the Project will function as designed and intended. The Record Drawings must be certified based on an As-Built Survey prepared in accordance with the Minimum Technical Standards established in Florida Administrative Code (FAC) 5J-17.051 and 5J-17.052. If the Project Manager determines that the as-built conditions of one or more components are not constructed in substantial conformance with the approved Construction Plans or that the Record Drawings do not sufficiently demonstrate conformance with the Construction Plans, one set of the Record Drawings will be returned to the CONTRACTOR that identify the deficient component(s) of the Work. The CONTRACTOR shall correct the component(s) or the Record Drawing in the timeframes set forth in Article 6 of this Agreement. Upon acceptance by the Project Manager, the CONTRACTOR shall provide the COUNTY with one (1) copy of the Record Drawings electronically in AutoCAD® and Adobe Acrobat®. The Adobe Acrobat® file shall be a replica of the signed and sealed Record Drawing.

4.15 The CONTRACTOR shall, at its expense, attend any and all meetings called by the COUNTY to discuss the Work under the Agreement.

4.16 The CONTRACTOR shall not establish and shall not allow its employees to engage in any non-Project related commercial activities on the Project site.

4.17 The CONTRACTOR shall, at its expense, arrange for, develop, and maintain all utilities required to execute the Work. Such utilities shall be furnished by the CONTRACTOR at no additional cost to the COUNTY, including, but not be limited to: telephone service for the CONTRACTOR's use; construction power; and potable water, and sanitary sewer. Prior to Final Acceptance of the Work, the CONTRACTOR shall, at its expense, satisfactorily remove and dispose of all temporary utilities developed to meet the requirements of the Agreement.

4.18 The CONTRACTOR shall be responsible for the proper control, maintenance, and detour of traffic in the construction area, at all times during the course of the Work. Contractor shall provide and maintain Maintenance of Traffic (MOT) by a certified Advanced Work Zone Traffic Control officer. All traffic control and maintenance procedures shall be in accordance with the requirements of the Florida Department of Transportation, Martin County, or the local municipality, within their respective area of jurisdiction. It shall be the CONTRACTOR's responsibility, as Bidder, prior to submitting its Bid, to determine the requirements of these agencies so that its Bid reflects all costs to be incurred. No claims for additional payment will be considered for costs incurred in the proper control, maintenance, detour of traffic. The CONTRACTOR shall notify all such agencies and the COUNTY at least 7 (seven) days in advance of any traffic detour. No road closures will be permitted unless approved by the COUNTY. The CONTRACTOR shall notify all such agencies and the COUNTY at least 14 (fourteen) days in advance of any road closure.

4.19 The CONTRACTOR is responsible for adequate NPDES-compliant drainage at all times. Existing functioning storm sewers, gutters, ditches, and other run-off facilities shall not be obstructed. Stabilization measures, as defined by the State of Florida Department of Environmental Protection Generic Permit For Stormwater Discharge from Large and Small Construction Activities, as amended, shall be initiated as soon as practicable, but in no case more than 7 days, in portions of the site where construction activities have temporarily or permanently ceased.

4.20 The CONTRACTOR shall ensure that all fire hydrants on or adjacent to the Project shall be kept accessible and no obstruction shall be placed within fifteen feet of any hydrant.

4.21 The CONTRACTOR shall ensure that heavy equipment is not operated close enough to COUNTY assets or other structures to cause their displacement.

4.22 CONTRACTOR certifies that it and any of its affiliates are not scrutinized companies as identified in Section 287.135, F.S. In addition, CONTRACTOR agrees to observe the requirements of Section 287.135, F.S., for applicable sub-agreements entered into for the performance of Work under this Agreement.

## **ARTICLE 5 PAYMENT**

5.1 A Schedule of Values shall be approved by the COUNTY prior to the commencement of the Work. The approved Schedule of Values will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the COUNTY. Progress payments on account of Unit Price Work will be based on the number of units completed.

### 5.2 Applications for Payments

- A. The CONTRACTOR shall submit to the COUNTY for review, an Application for Payment filled out and signed by the CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as required by the Contract Documents. Such supporting documents shall include but not be limited to: (i) a current release from the CONTRACTOR releasing all claims, other than those previously submitted pursuant to Article 10 herein, through the date of the Application for Payment; and (ii) a monthly dated Critical Path Method (CPM) Schedule for the Project. Written consent from the surety in a form acceptable to the County regarding the project or payment may be given in lieu of waivers. Submission of this supporting documentation shall be a condition precedent to the CONTRACTOR's entitlement to receive payment. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that the COUNTY has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect the COUNTY's interest therein, all of which must be satisfactory to the COUNTY.
- B. Beginning with the second Application for Payment, each Application shall include:
  - (i) an affidavit by the CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge the CONTRACTOR's legitimate obligations associated with prior Applications for Payment and
  - (ii) a "Conditional Waiver of Right to Claim Against Payment Bond and Martin County" completed by the CONTRACTOR and all subcontractors.
- C. The amount of retainage with respect to progress payments will be 10% (ten percent) of the Contract Price or as otherwise stipulated in the Agreement. After 50% (fifty percent) completion of the construction, the amount of retainage withheld from each subsequent progress payment shall be 5% (five percent). "Fifty Percent Completion" of the Work is

defined as that point in time when 50% (fifty percent) of the overall value of the Work items are incorporated and will remain in place subsequent to final completion of the Work based upon the schedule of values contained in the Agreement. As such, and by way of example, the value of the CONTRACTOR's mobilization, general conditions, supervision or like items which do not involve permanent incorporation of the Work do not apply to the determination of "Fifty Percent Completion" of the Work for purposes of establishing entitlement to a reduction of retainage.

- D. The Application for Final Payment shall be made after the CONTRACTOR has, in the opinion of the COUNTY, satisfactorily completed all corrections identified during the Final Inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, and other documents.
- E. The Application for Final Payment shall be accompanied (except as previously delivered) by:
  - (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required;
  - (ii) consent of the surety, if any, to final payment;
  - and (iii) complete and legally effective releases or waivers (satisfactory to the COUNTY) of all Lien rights arising out of or Liens filed in connection with the Work.
- F. In lieu of the releases or waivers of Liens and as approved by the COUNTY, the CONTRACTOR may furnish receipts or releases in full and an affidavit of the CONTRACTOR that:
  - (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed;
  - and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which the COUNTY or the COUNTY's property might in any way be responsible have been paid or otherwise satisfied. If any subcontractor or supplier fails to furnish such a release or receipt in full, the CONTRACTOR may furnish a Bond or other collateral satisfactory to the COUNTY to indemnify the COUNTY against any Lien.

### 5.3 Review of Applications

- A. The COUNTY's approval of any payment requested in an Application for Payment will constitute a representation by the COUNTY that to the best of the COUNTY's knowledge, information and belief:
  - (i) the Work has progressed to the point indicated;
  - (ii) the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price the Work, and to any other qualifications stated in the recommendation); and
  - (iii) the conditions precedent to the CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is the COUNTY's responsibility to observe the Work.
- B. The COUNTY's approval of any payment requested in an Application for Payment will not thereby be deemed to have represented that:
  - (i) inspections made to check the quality or the quantity of the Work performed have been exhaustive, extended to every aspect of the Work, or were detailed inspections of the Work; or
  - (ii) there may not be other matters or issues

between the parties that might entitle the CONTRACTOR to be paid additionally by the COUNTY or entitle the COUNTY to withhold payment to the CONTRACTOR.

- C. The COUNTY may reject the payment request or invoice within 20 (twenty) days after the date on which the payment request or invoice is stamped as received by the COUNTY. The rejection must be in writing and must specify the deficiency in the payment request or invoice and the action necessary to make the payment request or invoice proper. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application.
- D. The COUNTY may refuse to make payment of the full amount because:
  - (i) claims have been made against the COUNTY on account of the CONTRACTOR's performance or furnishing of the Work;
  - (ii) Liens have been filed in connection with the Work, except where the CONTRACTOR has delivered a specific Bond satisfactory to the COUNTY to secure the satisfaction and discharge of such Liens;
  - (iii) there are other items entitling the COUNTY to a set-off against the amount recommended.
  - (iv) the Work is defective or the completed Work has been damaged, requiring correction or replacement;
  - (v) the Work for which payment is requested cannot be verified;
  - (vi) the CONTRACTOR failed to make proper payments to subcontractor(s) for labor, materials or equipment in connection with the Work;
  - (vii) the Contract Price has been reduced because of modifications or there is reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
  - (viii) the COUNTY has been required to correct defective Work or complete the Work in accordance with the Contract Documents;
  - (ix) the CONTRACTOR failed to carry out the Work in accordance with the Contract Documents, or otherwise unsatisfactory prosecution of the Work;
  - (x) of any other breach of, default under, violation of, or failure to comply with the provisions of the Contract Documents.
- E. If the COUNTY refuses to make payment of the full amount, the COUNTY must give the CONTRACTOR written notice within 10 (ten) days of receipt of invoice stating the reasons for such action and promptly pay the CONTRACTOR any amount remaining after deduction of the amount so withheld. The COUNTY shall promptly pay the CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by the COUNTY and the CONTRACTOR, when the CONTRACTOR corrects the reasons for such action to the COUNTY's satisfaction.

5.4 All payments made to the CONTRACTOR, whether Progress or Final, shall be in strict accordance with the "Local Government Prompt Payment Act" addressing payment, retainage, and punchlist procedures for the performance of the Work.

5.5 The CONTRACTOR warrants and guarantees that title to all the Work covered by an Application for Payment, whether incorporated in the Work or not, shall pass to the COUNTY prior to

the making of the Application for Payment, free and clear of all liens, claims, security interests, purchase money security interest, chattel paper or encumbrances of any nature whatsoever ("Liens").

5.6 The CONTRACTOR shall promptly pay all subcontractors, laborers, materialmen, and suppliers upon receipt of payment from the COUNTY out of the amount paid to the CONTRACTOR on account of such person's portion of the Work, the amount to which such person is entitled, reflecting percentages actually retained from payments to the CONTRACTOR. The CONTRACTOR shall, by appropriate agreement with each subcontractor or other person, require each subcontractor or other person to make payments to sub-subcontractors in similar manner.

5.7 A Certificate of Payment, a progress payment, or partial or entire use of the Project by the COUNTY shall not constitute acceptance of Work not in accordance with the Contract Documents.

5.8 In accordance with the provisions of §255.05, Florida Statutes, where the CONTRACTOR requires a waiver from laborers, materialmen, subcontractors, or sub-subcontractors (as each such term is defined by §713.01, Florida Statutes) of the right to make a claim against the Payment Bond in exchange for or to induce payment of a progress payment or a final payment, such waivers shall comply with the form set forth in §255.05, Florida Statutes, as amended from time to time.

5.9 If one or more Notice of Non-Payment is received by the COUNTY, no further payments will be approved until non-payment(s) have been satisfied and a Release of Claim for each Notice of Non-Payment has been submitted to the COUNTY. Upon request, the CONTRACTOR shall furnish acceptable evidence that all such claims or liens have been satisfied. If the CONTRACTOR fails to satisfy the non-payment, the COUNTY may make payment and back-charge the CONTRACTOR for any and all costs associated with such payment.

5.10 If at any time during the progress of the Work, the CONTRACTOR's actual progress is inadequate to meet the requirements of the Agreement, the COUNTY may, but is not required to, notify the CONTRACTOR to implement some or all of the following remedial actions at the sole cost and expense of the CONTRACTOR:

- A. Increase construction manpower in such quantities and crafts as necessary to eliminate the schedule progress deficiency;
- B. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the schedule progress deficiency;
- C. Reschedule the Work in conformance with the specification requirements.

5.11 Neither such notice by the COUNTY nor the COUNTY's failure to issue such notice shall relieve the CONTRACTOR of its obligation to achieve the quality of the Work and rate of progress required by the Agreement.

## **ARTICLE 6 TIME OF PERFORMANCE**

**TIME IS OF THE ESSENCE UNDER THIS AGREEMENT.**

6.1 Prior to requesting an inspection for Substantial Completion, as defined in Article 1.25, the CONTRACTOR shall confirm that:

- A. All construction is complete, the project components are clean, and all systems fully functional.

- B. All utilities are installed or adjusted, as required, and are fully functional.
- C. The Project site is clear of the CONTRACTOR's excess equipment, temporary facilities and/or trailers.
- D. All operations and maintenance manuals for all equipment have been delivered to the COUNTY.
- E. All operations and maintenance training related literature, software, and back-up disks have been delivered to the COUNTY.
- F. All manufacturers' certifications and warranties have been delivered to the COUNTY.
- G. All required spare parts, materials, as well as any special measuring devices and tools have been delivered to the COUNTY.

6.2 The COUNTY shall have the right to exclude the CONTRACTOR from the Project after the date of Substantial Completion, but the COUNTY shall allow the CONTRACTOR reasonable access to complete or correct items on the punch list.

6.3 When the CONTRACTOR considers the Work ready for its intended use, the CONTRACTOR shall notify the COUNTY, in writing, that the Work is substantially complete (except for items specifically listed by the CONTRACTOR as incomplete) and request that the COUNTY issue a certificate of Substantial Completion. Promptly thereafter, the COUNTY and the CONTRACTOR shall make an inspection of the Work to determine the status of completion. For the purpose of this Agreement, and for the compliance of those procedures, duties, and obligations as set forth in §218.70 et seq. and §218.735 et seq., Florida Statutes, the term "Substantial Completion" is defined as that point where the COUNTY is able to enjoy beneficial occupancy of the Work and where the Work has achieved that level of completion such that the COUNTY is able to utilize the entire Project for its intended purposes, including but not limited to the completion of all specified systems and items relating to life, safety, and regulatory use, with the exception of incidental or incomplete items except where a lack of completion of such incidental or incomplete items of the Work will adversely affect the complete operation of other areas of the Work. Additional conditions (if any) needed to achieve Substantial Completion of the Work and which are project specific are as set forth in attached Exhibits. If the COUNTY does not consider the Work substantially complete, the COUNTY will notify the CONTRACTOR in writing giving the reasons therefore. If the COUNTY considers the Work substantially complete, the COUNTY will issue and deliver to the CONTRACTOR a certificate of Substantial Completion, which shall fix the date of Substantial Completion. In addition to §218.735(7)(a), Florida Statutes, punch list procedures for construction projects having an estimated cost of less than \$10,000,000 (ten million dollars) to render the Work complete, satisfactory, and acceptable are established as follows:

- A. The intent of this section is for the COUNTY and the CONTRACTOR to cooperate to develop a Final Punchlist no later than 30 (thirty) days from the date of reaching Substantial Completion.
- B. Within 5 (five) days of Substantial Completion of the Project, the CONTRACTOR shall schedule a walkthrough with the COUNTY ("Punchlist Walkthrough"). The purpose of the Punchlist Walkthrough is to determine that the project has achieved Substantial Completion, and if so, to develop a Punchlist of items to be performed by the CONTRACTOR, based upon observations made jointly between the CONTRACTOR and the COUNTY during the Punchlist Walkthrough. The COUNTY shall issue the Final Punchlist within 30 (thirty) days of the Substantial Completion date.

- C. The CONTRACTOR shall endeavor to address and complete as many items as possible noted on the Punchlist either during the Punchlist Walkthrough itself or within 25 (twenty-five) days from the date of the Punchlist Walkthrough.
- D. No more than 20 (twenty) days following the issuance of the Final Punchlist, the CONTRACTOR shall again initiate and request a second walkthrough (“Final Walkthrough”) of the Project with the COUNTY. The purpose of the Final Walkthrough is to identify which items on the Punchlist remain incomplete and to supplement that list as legally necessary (based, for example, upon work which may have been damaged as a result of the CONTRACTOR’s performance of completion of items contained on the Punchlist.
- E. The CONTRACTOR shall complete the Final Punchlist items within 30 (thirty) days of the date of its issuance by the COUNTY.
- F. In no event may the CONTRACTOR request payment of final retainage under §218.735(7)(e), Florida Statutes, until the CONTRACTOR considers the Final Punchlist to be 100% (one hundred percent) complete.
- G. The CONTRACTOR acknowledges and agrees that no item contained on the Final Punchlist shall be considered a warranty item until such time as: (i) the Final Punchlist is 100% (one hundred percent) complete; and (ii) the COUNTY has been able to operate or utilize the affected punchlist item for 15 (fifteen) days, whichever occurs last.
- H. The CONTRACTOR acknowledges and agrees that the COUNTY may, at their option, during performance of the Work and prior to Substantial Completion, issue lists of identified non-conforming or corrective work for the CONTRACTOR to address. The intent of any such lists prior to Substantial Completion is to streamline the Punchlist process upon achieving Substantial Completion, and to allow for the CONTRACTOR to address needed areas of corrective work as they may be observed by the COUNTY during performance of the Work.
- I. The CONTRACTOR acknowledges and agrees that in calculating 150% (one hundred fifty percent) of the amount which may be withheld by the COUNTY as to any Final Punchlist item for which a good faith basis exists as to it being complete, as provided for by §218.735(7)(e), Florida Statutes, the COUNTY may include within such percentage calculation its total costs for completing such item of work, including its administrative costs as well as costs to address other services needed or areas of work which may be affected in order to achieve full completion of the Final Punchlist item. Such percentage shall in no event relate to the schedule of value associated with such the Work activity, but rather total costs are based upon the cost of completing the Work activity based upon market conditions at the time of Final Punchlist completion.

6.4 If Substantial Completion has not been obtained at the Punchlist Walkthrough inspection called by the CONTRACTOR, for reasons that are the fault of the CONTRACTOR, the cost of any subsequent inspections requested by the CONTRACTOR for the purpose of determining Substantial Completion shall be at the cost of the CONTRACTOR and shall be assessed against the final payment application. Punch list items recorded as a result of inspections for Substantial Completion are to be corrected by the CONTRACTOR within the timeframe established.

6.5 Use by the COUNTY, at the COUNTY’s option, of any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which the COUNTY and the CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by the COUNTY for its intended purpose without significant interference with the CONTRACTOR’s performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.

- A. The COUNTY may request, in writing, the CONTRACTOR permit the COUNTY to use any such part of the Work which the COUNTY believes to be ready for its intended use and substantially complete. If the CONTRACTOR agrees that such part of the Work is ready for its intended use and substantially complete, the CONTRACTOR will certify to the COUNTY that such part of the Work is substantially complete and will request the COUNTY issue a certificate of Substantial Completion for that part of the Work. The CONTRACTOR may notify, in writing, the COUNTY that the CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request the COUNTY issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either a request or notification is made, the COUNTY and the CONTRACTOR shall inspect that part of the Work to determine its status of completion. If the COUNTY does not consider that part of the Work to be substantially complete, the COUNTY will notify the CONTRACTOR in writing giving the reasons therefore.
- B. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of this Agreement regarding property insurance.

6.6 Upon written notice from the CONTRACTOR that the entire Work, or an agreed portion thereof, is complete, the COUNTY will promptly make a final inspection with the CONTRACTOR and will notify the CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. The CONTRACTOR shall immediately take such measures necessary to complete such Work or remedy such deficiencies.

## **ARTICLE 7 LIQUIDATED DAMAGES; FORCE MAJEURE**

7.1 Upon failure of the CONTRACTOR to Substantially Complete the Agreement within the specified period of time, plus approved time extensions, the CONTRACTOR shall pay to the COUNTY daily liquidated damages in the amount shown on Page 1 of this Agreement to reflect the COUNTY's estimated damages resulting from the delay to Substantial Completion.

7.2 Upon failure of the CONTRACTOR to Finally Complete the Agreement within the specified period of time, plus approved time extensions, the CONTRACTOR shall pay to the COUNTY daily liquidated damages in the amount shown on Page 1 of this Agreement to reflect the COUNTY's estimated damages resulting from the delay to Final Completion.

7.3 Milestones, milestone completion dates, and applicable Liquidated Damages shall be in accordance with the Contract Documents.

7.4 If the milestones are not strictly complied with, then Liquidated Damages will be assessed against the CONTRACTOR, which are agreed upon, and it is further agreed that such Liquidated Damages bear a reasonable relationship to damages to be incurred by the COUNTY, and are not a penalty.

7.5 Force Majeure. A party shall not be liable for any failure of or delay in the performance of this agreement for the period that such failure or delay is beyond the reasonable control of a party, materially affecting the performance of any of its obligations under this agreement, and could not reasonably have been foreseen or provided against, but will not be excused for failure or delay resulting from only general economic conditions or other general market effects. If either party invokes this provision to avoid performance of any obligation under this Agreement and a Court determines that party wrongfully invoked this provision to evade performance of such an obligation, the aggrieved party shall be entitled to its reasonable attorney's fees and costs for obtaining the Court's determination of the same.



**ARTICLE 8  
CLAIMS FOR ADDITIONAL TIME**

8.1 If the CONTRACTOR's performance of this Agreement is delayed, either by delays that are beyond the reasonable control and without the fault or negligence of the CONTRACTOR or its subcontractors or by changes ordered in the Work, and in either event where such delay or change in the Work affects the critical path, then the Agreement Time shall be extended by Change Order as determined by the COUNTY. If the CONTRACTOR wishes to make Claim for an increase in the Contract Time, the CONTRACTOR shall provide the COUNTY a written notice of claim upon discovering the cause of the alleged delay. Such notice of claim shall include the following information, or else be waived:

- A. Nature of the delay or change in the Work;
- B. Dates of commencement and cessation of the delay or change in the Work;
- C. Activities on the current progress schedule affected by the delay or change in the Work;
- D. Identification and demonstration that the delay or change in the Work affects the critical path;
- E. Identification of the source of delay or change in the Work;
- F. Anticipated extent of the delay or change in the Work; and
- G. Recommended action to minimize the delay.

8.2 The CONTRACTOR shall not be entitled to any extension of time for delays resulting from any cause unless the CONTRACTOR has notified the COUNTY in writing within 7 (seven) days of commencement of the delay.

8.3 No Damages for Delay; Exclusive Remedy. The CONTRACTOR shall not be entitled to and hereby waives any and all claims for damages which it may suffer by reason of delay, acceleration, loss of efficiency, or other related time or impact-based claims (hereinafter collectively "delay") or for delay attributable to any foreseen or unforeseen condition, or for delays claimed to be the result of active, intentional, knowing, or passive interference by the COUNTY, or its agents, and waives damages that it may suffer by reason of such claims for lost profits, loss or impairment of bonding capacity, destruction of business, extended overhead, supervision, extended, unabsorbed home office overhead; the extension of time granted herein, being the CONTRACTOR's sole remedy, with the exception that in the event of demonstrated critical, compensable, non-concurrent delay suffered by the CONTRACTOR, the CONTRACTOR may claim as its sole and exclusive remedy any associated, extended direct jobsite general conditions expended by the CONTRACTOR (hereinafter "applicable extended general conditions") in a sum not to exceed \$250.00 per each day of delay. Apart from extensions of time or acceleration costs approved by the COUNTY and any applicable extended general conditions, no payment of claim for delay damages shall be made to the CONTRACTOR as compensation for damages for any delays or hindrances from any cause whatsoever in the progress of the Work, whether such delay be avoidable or unavoidable. Notwithstanding anything herein to the contrary, provided the CONTRACTOR has otherwise satisfied the requirements of this Agreement, the CONTRACTOR shall be entitled to an increase in the Contract Price based upon approved general condition, insurance, and bond premium costs resulting from delays for which the COUNTY has approved by Change Order or Construction Change Directive, provided, however, the COUNTY shall not be required to pay such additional amounts for any days following the date on which the CONTRACTOR achieves Final Completion for the appropriate portion of the Work.

8.4 The time during which the CONTRACTOR is delayed in the performance of the Work by the acts or omissions of the COUNTY, acts of God, unusually severe and abnormal climatic conditions or other conditions beyond the CONTRACTOR's control and which the CONTRACTOR could not reasonably have foreseen and provided against, shall be added to the Contract Time stated in the Agreement; provided, however, that no claim by the CONTRACTOR for an extension of time for such delays be considered unless made in accordance with Paragraph 8.1.

8.5 The COUNTY shall not be obligated or liable to the CONTRACTOR for and the CONTRACTOR hereby expressly waives any claims against any damages, costs, or expenses of any nature whatsoever which the CONTRACTOR, its subcontractors or sub-subcontractors may incur as a result of any delays, interferences, suspensions, rescheduling, changes in sequence, congestion, disruptions or the like, arising from or out of any act or omission of the COUNTY, or any of the events referred to in Paragraph 8.4 above, it being understood and agreed that the CONTRACTOR's sole and exclusive remedy in such event shall be an extension of Contract Time, but only if claim is properly made in accordance with Paragraph 8.1.

8.6 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled critical path of construction. Based on 30-Year, National Weather Service historical rainfall averages for Martin County, the CONTRACTOR shall anticipate the amount of rainfall days affecting the schedule as normal conditions outlined in the following months below:

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
2	2	3	2	3	5	5	6	6	5	3	2

## ARTICLE 9 SITE CONDITIONS

9.1 Field Measurements. Before undertaking each part of the construction, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. The CONTRACTOR shall promptly report in writing to the COUNTY any conflict, error, or discrepancy that the CONTRACTOR or any of its subcontractors or Suppliers may discover and shall obtain a written interpretation or clarification from the COUNTY before proceeding with any Work affected. The CONTRACTOR shall remain liable to the COUNTY for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents prepared by the CONTRACTOR.

9.2 Differing Site Conditions. The CONTRACTOR shall promptly, and before such conditions are disturbed, notify the COUNTY in writing of: (A) subsurface or latent physical conditions at the site differing materially from those indicated in this Agreement; or (B) unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work of the character provided for in this Agreement. The COUNTY will promptly investigate the conditions, and if it finds that such conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or the time required for, performance of any part of the Work under this Agreement, an equitable adjustment shall be made and the Agreement modified in writing accordingly. The CONTRACTOR's failure to provide notice upon discovery of the differing site condition shall waive any entitlement to such an adjustment in the Contract Price or Contract Time.

9.3 Physical Conditions (Including Underground Facilities). The CONTRACTOR shall have full responsibility for physical conditions, and Underground Facilities owned by the COUNTY or others, as shown or indicated in the Contract Documents. The CONTRACTOR shall have full responsibility for reviewing and checking all such information and data. The COUNTY shall not be responsible for accuracy or completeness of data, plans, and specifications and the CONTRACTOR shall have full responsibility for checking all information and data. If the Contract Documents necessitate amending to order changes in the Work due to Underground Facilities owned by the COUNTY or others, whether they be shown or indicated or newly discovered, the COUNTY shall authorize the required changes in the Work by Change Order. If those Underground Facilities owned by the COUNTY or others cause or will cause delays in the performance or extend completion of all or part of the work, the CONTRACTOR shall absorb all related delay, extension, or acceleration costs, however caused, except that if the COUNTY and the CONTRACTOR agree that the delays require a change in Contract Time, the COUNTY shall authorize the necessary change in Contract Time only to the extent that such delays exceed 30 (thirty) days impact to controlling work items. However, an extension in Contract Time, when and if so granted shall be the CONTRACTOR's sole and exclusive remedy with respect to the COUNTY for any delay, disruption, interference, inefficiency, acceleration, extension or hindrance, and associated costs, however caused, resulting from variance in the location or configuration of Underground Facilities owned by the COUNTY or others as shown or indicated, or from newly discovered Underground Facilities owned by the COUNTY or others.

9.4 Special Requirements for Underground Facilities. The CONTRACTOR shall have full responsibility for the following list. Except as otherwise provided, all costs involved and time required to perform these responsibilities shall be considered as having been included in the Contract Price and in the CONTRACTOR's schedule for the performance of the Work within the Contract Time, even if the Contract Documents need amending to authorize minor deviations or changes in the Work due to those Underground Facilities including utilities.

- A. Field locating any and all Underground Facilities including utilities shown or indicated as to depth and alignment in advance of excavation;
- B. Notifying the COUNTY of any newly discovered Underground Facility and promptly notifying that the COUNTY of that discovery;
- C. Shoring, blocking and protecting Underground Facilities including utilities shown, indicated or discovered;
- D. Coordination, scheduling and sequencing the Work with the COUNTY's of all Underground Facilities shown, indicated or discovered;
- E. Repairing any damage to the satisfaction of the COUNTY, to the extent that the damage was due to the CONTRACTOR's failure to adhere to the requirements, or to the fault or negligence of the CONTRACTOR; and
- F. The safety and protection of any affected the Work, and for repairing any damage done to the work.

9.5 If those Underground Facilities owned by the COUNTY or others cause or will cause delays in the performance or extend completion of all or part of the work, the CONTRACTOR shall absorb all related delay, extension or acceleration costs, however caused, except that if the COUNTY and the CONTRACTOR agree that the delays require a change in Contract Time, the COUNTY shall authorize the necessary change in Contract Time only to the extent that such delays exceed 30 (thirty) days impact to controlling work items. However, an extension in Contract Time, when and if so granted shall be the

CONTRACTOR's sole and exclusive remedy with respect to the COUNTY for any delay, disruption, interference, inefficiency, acceleration, extension or hindrance and associated costs, however caused, resulting from variance in the location or configuration of Underground Facilities owned by the COUNTY or others shown or indicated, or from newly discovered Underground Facilities owned by the COUNTY or others.

9.6 Unless it prejudices the Work already excavated and uncovered, the CONTRACTOR shall schedule layout, excavation and uncovering of the Work or Underground Facilities a sufficient time in advance to allow the COUNTY'S design professional's review, and the possible amending or supplementing of the Contract Documents.

## **ARTICLE 10 INDEMNIFICATION**

The CONTRACTOR hereby assumes entire responsibility and liability for any and all damage or injury of any kind or nature whatever (including death resulting therefrom) to all persons, whether employees of any tier of the CONTRACTOR, its SUBCONTRACTS, CONSULTANTS or SUPPLIERS or otherwise, and to all property caused by, resulting from, arising out of or occurring in connection with the execution of the Agreement, or in preparation for the work and services under this Agreement, or any extension, modification, or amendment thereto by change order to otherwise.

The CONTRACTOR hereby agrees to indemnify and hold harmless the Martin County Board of County Commissioners, its officers and employees from liabilities, damages, lawsuits, and costs, including but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness or intentional wrongful misconduct of the CONTRACTOR or persons employed or utilized by the CONTRACTOR in the performance of this Agreement.

## **ARTICLE 11 TERMINATION**

11.1 Notwithstanding any other provision of this Agreement, the CONTRACTOR may be held in default of its contractual obligation under this Agreement if the CONTRACTOR:

- A. refuses or fails to supply enough properly skilled workers or proper and sufficient materials and equipment;
- B. fails to make payment to subcontractor for materials or labor in accordance with the respective agreements between the CONTRACTOR and the subcontractors;
- C. disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction;
- D. performs the Work that does not conform to Contract Documents requirements;
- E. fails to meet the Contract Schedule or fails to make progress on the Work so as to endanger performance of the Agreement;
- F. abandons or refuses to proceed with any or all the Work; or
- G. otherwise breaches, fails to comply fully with, or is in default of any provision of the Contract Documents.

11.2 The COUNTY must provide written notice to the CONTRACTOR notifying it that the COUNTY is declaring it in default and providing the CONTRACTOR with 3 (three) business days after

receipt of such written notice of default, to cure such default. In the event that the CONTRACTOR fails to cure the default within the 3 (three) business day default period, the COUNTY may:

- A. take possession of the Work site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the CONTRACTOR; and
- B. accept assignment of subcontracts pursuant to this Agreement; and
  - (i) finish the Work by whatever reasonable method the COUNTY may deem expedient, and charge all completion costs against any monies owed or to be owed to the CONTRACTOR, or back charge the CONTRACTOR for any and all such completion costs, or
  - (ii) terminate the CONTRACTOR and hire a completion contractor to finish the Work by whatever reasonable method the COUNTY may deem expedient, and charge all completion costs, including costs for construction, architectural, engineering, project management, and any other expenses, against any monies owed or to be owed to the CONTRACTOR, or backcharge the CONTRACTOR for any and all such completion costs, or
- C. set off any and all such completion costs against any monies then due or to become due on any other projects that the COUNTY has with the CONTRACTOR.

11.3 Upon default, the CONTRACTOR shall not be entitled to receive further payment until the Work is finished.

11.4 If, after notice of termination, it is determined for any reason that the CONTRACTOR was not in default, or that the delay was excusable under the provisions of the Contract Documents, the rights and obligations of the parties shall be the same as if the notice of termination had been a Termination by the COUNTY for Convenience.

11.5 Pursuant to Section 287.135, F.S., the COUNTY may immediately terminate this Agreement for cause if the CONTRACTOR, its affiliates, or its subcontractors are found to have submitted a false certification per Section 4.22 of this Agreement; or if the CONTRACTOR, its affiliates, or its subcontractors are placed on any applicable scrutinized companies list or engaged in prohibited contracting activity during the term of this Agreement. As provided in Subsection 287.135(8), F.S., if federal law ceases to authorize these contracting prohibitions then they shall become inoperative.

11.6 Termination by the COUNTY for Convenience. Notwithstanding any other provision to the contrary in the Contract Documents, the COUNTY reserves the right at any time and in its sole and absolute discretion to terminate the services of the CONTRACTOR with respect to the Work by giving written notice to the CONTRACTOR. In such event, the CONTRACTOR shall be entitled to, and the COUNTY shall reimburse the CONTRACTOR for, an equitable portion of the Contract Price based on the portion of the Work completed prior to the effective date of termination and for any other reasonably expended costs attributable to such termination. However, the CONTRACTOR shall not be entitled to receive its anticipated profits for any unperformed Work.

## **ARTICLE 12 SUSPENSION OF WORK**

The COUNTY may, without cause, order the CONTRACTOR in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the COUNTY may determine.

**ARTICLE 13**  
**CHANGES IN THE WORK**

13.1 The COUNTY may, at any time or from time to time, order additions, deletions, or revisions in the Work by requesting a proposal from the CONTRACTOR detailing the proposed additions, deletions, or revisions to the Work. The proposal shall include such details as man-hours, man-hour rates, quantities, quantity unit rates, equipment, equipment unit rates, and mark-ups. The CONTRACTOR shall complete and return the proposal to the COUNTY within 10 (ten) days from receipt thereof. The proposal shall include any increases or decreases in Contract Time or Contract Price and shall include any additional modifications required by virtue of the requested change, whether or not such additional modifications were specifically identified in the request for proposal. The proposal may then be: (A) issued as a Change Order in accordance with the provisions of the Contract Documents; (B) modified and thereafter issued as a Change Order in accordance with the provisions of the Contract Documents; or (C) withdrawn.

13.2 The COUNTY may authorize minor changes or alterations in the Work involving minimal cost or time and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the CONTRACTOR believes that any minor change or alterations authorized by the COUNTY entitles it to an increase in the Contract Price or extension of Contract Time, it shall treat the Field Order as a request for proposal and issue a proposal for the change in Contract Price and Contract Time prior to proceeding with the Work covered in the Field Order. The procedures outlined in the Contract Documents shall then be followed. Acceptance of the Final Payment by the CONTRACTOR shall constitute acknowledgment by the CONTRACTOR that all payments due for modifications required under Field Orders have been incorporated into the Final Payment.

13.3 Additional Work performed by the CONTRACTOR without authorization of a written Change Order will not entitle it to an increase in the Contract Price or an extension of the Contract Time.

13.4 It is the CONTRACTOR's responsibility to notify its Surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable Bonds shall be adjusted accordingly. The CONTRACTOR shall furnish proof of such adjustment to the COUNTY.

13.5 The COUNTY may, at any time, without notice to the Surety, by Field Order or by properly executed Change Order, make any change in the Work within the general scope of the Contract Documents, including but not limited to changes:

- A. in the Drawings and designs, and Specifications;
- B. in the method or manner of performance of the Work;
- C. directing acceleration in the performance of the Work.

13.6 Except as herein provided, no order, statement, or conduct of the COUNTY shall be treated as a Change Order or Field Order or entitle the CONTRACTOR to an equitable adjustment hereunder.

13.7 No claim by the CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Agreement.

13.8 The value of any Work covered by a Field Order, Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways at the sole discretion of the COUNTY:

- A. where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved;
- B. by negotiated lump sum; or
- C. cost plus. If this option is selected, the COUNTY reserves the right to request any and all documentation from the CONTRACTOR in support of its foregoing Actual Costs, and the CONTRACTOR agrees promptly to supply such information.

13.9 For changes in the Work performed by the CONTRACTOR's own forces, the CONTRACTOR shall be entitled to a percentage 10% (ten percent) mark-up for Actual Costs as defined in Section 1.

13.10 For changes in the Work performed by subcontractors: (A) the subcontractor shall be entitled to mark-up the cost of the change(s) by 10% (ten percent); and (B) the CONTRACTOR shall be entitled to mark-up the subcontractor's total by 5% (five percent). The foregoing shall be the maximum amount allowable for subcontractor's and the CONTRACTOR's Actual Costs as defined in Section 1.

## **ARTICLE 14**

### **MATERIALS, EQUIPMENT AND WORKMANSHIP; SUBSTITUTIONS**

14.1 Only new, unused items of recent manufacture, of designated quality, free from defects, will be accepted. Rejected items shall be removed immediately from the Work and replaced with items of specified quality. Failure by the COUNTY to order removal of rejected materials and equipment shall not relieve the CONTRACTOR from responsibility for quality of the materials supplied or from any other obligation under the Contract Documents.

14.2 No Work defective in construction or quality, or deficient in meeting any requirement of the Contract Drawings and Specifications, will be acceptable regardless of the COUNTY's failure to discover or to point out defects or deficiencies during construction; nor will the presence of field representatives at the Work or the satisfaction of the Work meeting applicable code requirements relieve the CONTRACTOR from responsibility for the quality and securing progress of the Work as required by the Contract Documents.

14.3 Prior to proposing any substitute item, the CONTRACTOR shall satisfy itself that the item proposed is, in fact, equal or better to that specified, that such item will fit into the space allocated, that such item affords comparable ease of operation, maintenance and service, that the appearance, longevity and suitability for the climate are comparable, and that by reason of cost savings, reduced construction time, or similar demonstrable benefit, the substitution of such item will be in the COUNTY's interest, and will in no way have a detrimental effect upon the Project completion date and schedule.

- A. The burden of proof of equality of a proposed substitution for a specified item shall be upon the CONTRACTOR. The CONTRACTOR shall support its request with sufficient test data and other means to permit the COUNTY to make a fair and equitable decision on the merits of the proposal. The CONTRACTOR shall submit drawings, samples, data and certificates and additional information as may be required by the COUNTY for proposed substitute items as required by the Contract Documents.
- B. Any item by a manufacturer other than those specified or of brand name or model number or of generic species other than those specified will be considered a substitution. The COUNTY will be the sole judge of whether or not the substitution is equal in quality, utility, and economy to that specified.

- C. The CONTRACTOR shall allow an additional 15 (fifteen) days for the COUNTY's review of requested substitutions. All requests for substitutions with submittal data must be made at least 50 (fifty) days prior to the time the CONTRACTOR must order, purchase or release for manufacture or fabrication. Approval of a substitution shall not relieve the CONTRACTOR from responsibility for compliance with all requirements of the Agreement. The CONTRACTOR shall coordinate the change with all trades and bear the expense for any changes in other parts of the Work caused by any substitutions.
- D. If the COUNTY rejects the CONTRACTOR's requested substitute item on the first submittal, the CONTRACTOR may make only one additional request for substitution in the same category. Upon the second request, the CONTRACTOR shall be invoiced the expenses of the COUNTY allocable to the review of such submittal data. The foregoing amounts shall be deducted, as applicable, from the next succeeding partial payment to the CONTRACTOR, or from the final payment.

## **ARTICLE 15 COMPLIANCE**

15.1 All work, labor, materials and equipment provided under this Agreement shall be performed in strict compliance with any and all applicable building and fire, life and safety codes and strictly in accordance with plans and specifications. The CONTRACTOR must satisfy itself that the Plans, Drawings and Specifications in fact comply with all applicable codes. The CONTRACTOR shall notify the COUNTY prior to commencement of the Work of any requirement of the plans and specifications not in strict compliance with such codes. There will be no extra payment for compliance to existing codes or any item of interpretation regarding enforcement of existing codes. The CONTRACTOR is representing by acceptance of this Agreement that it has thoroughly researched all applicable codes and regulations affecting the Project.

15.2 If, during the term of this Agreement, there are any changed or new laws, ordinances or regulations not known or foreseeable at the time of signing this Agreement which become effective and which affect the cost or time of performance of the Agreement, the CONTRACTOR shall immediately notify the COUNTY in writing and submit detailed documentation of such effect in terms of both time and cost of performing the Agreement. Upon concurrence by the COUNTY as to the effect of such changes, an adjustment in the Contract Price and/or time of performance will be made. If any discrepancy or inconsistency should be discovered between the Contract Documents and any law, ordinance, regulation, order or decree, the CONTRACTOR shall immediately report the same in writing to the COUNTY who will issue such instructions as may be necessary. However, it shall not be grounds for a Change Order that the CONTRACTOR was unaware of or failed to investigate the rules, codes, regulations, statutes, and all ordinances of all applicable governmental agencies having jurisdiction over the Project or the Work.

15.3 The CONTRACTOR shall give all notices and at all times comply with all applicable laws, codes, ordinances, rules and regulations in effect during the time of performance of the Work.

15.4 The CONTRACTOR shall deliver a product which will meet or exceed the Design package standards, provide a complete and functional facility including but not limited to all necessary interfaces between this facility and adjacent existing facilities, and/or anticipated future facilities. All built-in equipment, systems, controls, devices and finishes necessary for the efficient use and maintenance of the facility and its related site work (if applicable), except as otherwise noted and/or clarified herein, shall be included in the Work.



**ARTICLE 16  
NON-DISCRIMINATION**

The CONTRACTOR covenants and agrees that the CONTRACTOR shall not discriminate against any employee or applicant for employment to be employed in the performance of the Agreement with the respect to hiring, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment because of age, sex, physical handicaps (except where based on a bona fide occupational qualification) marital status, race, color, religion, national origin or ancestry.

**ARTICLE 17  
DEFECTIVE WORK**

17.1 The COUNTY shall have authority to disapprove or reject the Work which is "defective" (which term is hereinafter used to describe the Work that is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to final acceptance). Such parties shall also have authority to require special inspection or testing of the Work as such parties may individually or severally deem necessary, whether or not the Work is fabricated, installed or completed.

17.2 Upon presentation of a Defective the Work Notice to the CONTRACTOR or the CONTRACTOR's the Project Superintendent, the CONTRACTOR shall meet within 24 (twenty-four) hours with the COUNTY to discuss and develop a plan of remedial action and time-line to correct the defective the Work. The CONTRACTOR shall have no more than three (3) working days to begin corrective action and repairs in accordance with the agreed upon schedule; provided, however, all repairs to natural gas, telephone, radio, computer security, water, waste water, electric air conditioning services and all emergency services shall be commenced within twelve (12) hours of notification, or by 7:00 a.m. whichever is earlier, and the CONTRACTOR shall complete the repairs in an expeditious manner befitting the nature of the deficiency. If the CONTRACTOR refuses to comply with the 24 (twenty four) hour meeting requirement, or the agreed upon correction schedule, the COUNTY has the right to do any of the following: (A) correct any the Work so performed by the CONTRACTOR and deduct the expenses for doing so from the final payment due the CONTRACTOR; or (B) hold back final payment due the CONTRACTOR until such time as the Work is completed to the satisfaction of the COUNTY and in compliance with the Contract Documents. The COUNTY shall have the sole discretion to determine if the Work is satisfactory and in compliance with Contract Documents. The foregoing remedies are not exclusive and the COUNTY reserves the right to pursue any and all other remedies it deems applicable.

**ARTICLE 18  
BONDS AND INSURANCE**

18.1 Payment and Performance Bonds. The CONTRACTOR shall, upon execution and return of this Agreement to the COUNTY, furnish a Public Payment Bond and a Performance Bond, pursuant to §255.05, Florida Statutes, in at least an amount equal to the Contract Price, for any Agreement over \$200,000 (two hundred thousand dollars), covering the faithful performance of this Agreement and all the CONTRACTOR's faithful performance and payment of all the CONTRACTOR's obligations under the Contract Documents. The Bonds shall be recorded at the Martin County Clerk of the Circuit Court's Office at the CONTRACTOR's expense. The Surety must be included in the most recent United States Department of the Treasury List of Acceptable Sureties, authorized to issue surety bonds in Florida, and which maintains a surety rating of "A-" or better. A complete copy of the fully executed Payment Bond shall be posted in a conspicuous place at the Project site. If the Surety on any Bond furnished by the

CONTRACTOR is declared bankrupt, becomes insolvent, its authorization to do business in the State of Florida is terminated, it ceases to be listed on the United States Department of Treasury List of Acceptable Sureties, or its surety rating ceases to be an “A-” or better, the CONTRACTOR shall within 5 (five) days thereafter substitute another Payment Bond, Performance Bond, and Surety, each of which shall be in accordance with the Contract Documents and acceptable to the COUNTY . An action to enforce any claim against a payment bond must be brought within one year from the last furnishing of labor, services, or materials, or as otherwise stated in §95.11 (5)(e), Florida Statutes. An action to enforce any claim against a performance bond must be brought within five years in accordance with §95.11(2)(b), Florida Statutes, and applicable case law.

## 18.2 Insurance

- A. Certificate of Insurance. 1 (One) certified true copy of the policy(s) must be furnished by the CONTRACTOR to the COUNTY prior to commencement of any demolition, Site Work, Site preparation or construction Work. The Certificate(s) of Insurance must indicate Martin County Board of County Commissioners as Additional Insured on all policies except the Workers Compensation. The statement “Additional Insured” is to be listed in the Description Block of the Insurance Certificate along with the Project name. The indication that Martin County Board of County Commissioners is a Certificate Holder is not sufficient for this issue. The Additional Insured endorsement must be attached to the Certificate of Insurance and shall include coverage for Completed Operations under the General Liability policy.
- B. General Insurance Requirements. The CONTRACTOR and, where designated, each of its subcontractors and sub-subcontractors shall obtain and maintain during the full duration of the Work required under this Agreement, and through any period of limitation allowed by law for actions for personal injury, bodily injury, disease, death, property damages and other losses or damages required to be insured hereunder, the following insurance coverages, in the type, amounts, terms and in conformance with the following minimum requirements.
- (i) All policies and endorsements shall be issued on Insurance Service Office (ISO) forms or on forms providing broader and no less restrictive coverage. Notwithstanding the foregoing, the form and content of all policies and endorsements must be acceptable to the COUNTY. All insurance carriers must carry an A.M. Best Rating of A:IX or better and coverage should apply on a Primary and Noncontributory basis. At the discretion of the COUNTY, other coverage types and /or specific endorsements may be required depending upon the type and scope of work to be performed. All insurance must be acceptable by and approved by the COUNTY as to form and types of coverage.
- (ii) The policy(s) shall provide for 30 (thirty) days prior written notice to the COUNTY, by registered or certified mail, if cancellation or any change that will reduce the coverages required herein.
- (iii)The policy(s) shall be written for the Contract Times, commencing with the initial demolition, Site Work and/or Site preparation, and ending at the Final Completion and shall contain an endorsement providing for extension of the policy(s) for up to 2 (two) years. The Products and Completed Operations portions of the General Liability shall extend for a period of 10 (ten) years after the Final Acceptance of the Project by the COUNTY and shall include an “Additional Insured” endorsement.
- (iv)All liability polices required herein shall be written on an occurrence basis

(v) The policies shall name the COUNTY, its commissioners and staff as additional insured (including Completed Operations coverage under the General Liability) as their interest may appear under this Agreement.

(vi) All insurers shall agree to waive all rights of subrogation against the COUNTY and each individual member of the Board of County Commissioners, Constitutional Officers, or staff.

(vii) It is the responsibility of the CONTRACTOR to ensure any independent contractors and subcontractors utilized on the project also comply with these insurance requirements.

C. Premiums. The the CONTRACTOR shall be solely responsible for payment of all premiums for insurance required under this Agreement and shall be solely responsible for the payment of all deductibles to which such policies are subject.

D. Specific Insurance Limits

(i) Workers' Compensation. The CONTRACTOR shall carry Workers' Compensation insurance on behalf of all employees who are required to provide a service under this Agreement, as required by Chapter 440, Florida Statutes, and Employers Liability of limits no less than:

\$ 500,000	each accident
\$ 500,000	disease - policy limit
\$ 500,000	each employee

Should the scope of work performed by the CONTRACTOR qualify its employees for benefits under Federal the Worker's Compensation Statute (i.e. Longshoreman & Harbor the Workers Act or Merchant Marine Act), proof of appropriate Federal Act coverage must be provided.

(ii) Commercial General Liability, with limits of not less than:

\$ 1,000,000	each occurrence
\$ 1,000,000	personal/advertising injury
\$ 2,000,000	products/completed operations (per project aggregate)
\$ 2,000,000	general aggregate (per project aggregate)
\$ 100,000	fire damage legal (any 1 fire)
\$ 10,000	medical expense (any 1 person)

Coverage to include include bodily injury, property damage liability, personal and advertising injury, products and completed operations, fire damage legal liability and medical expense coverage. Contractual Liability is to be included to cover the hold harmless agreement set forth in the Agreement. Coverage is to extend to independent contractors and fellow employees. XCU coverage is to be included. Coverage is to include a cross liability or severability of interest provision as provided under the standard ISO form separation of insureds clause. There should be no "damage to your work" exclusion for work performed by subcontractors. Policy is to include coverage for pollution release at project location in which the insured is performing non-environmental operations. There shall be no exclusion for mold, silica or respirable dust or bodily injury or property damage arising out of heat, smoke, fumes or ash from a hostile fire. If the project involves environmental exposures, Environmental Impairment Liability coverage shall be maintained.

(iii) Automobile Liability - \$1,000,000 (one million dollars) Combined Single Limit coverage for all owned, hired, leased and non-owned vehicles.

(iv) Umbrella Liability - to include the Employers Liability, general liability and automobile in underlying policy schedule, with limits of not less than \$1,000,000 (one million dollars).

(v) Hazardous Material - if the Work being performed involves hazardous materials, the need to procure appropriate insurance coverage will be addressed in a modification to the Agreement. However, if hazardous materials are identified while carrying out this Agreement, no further the Work is to be performed in the area of the hazardous material until the COUNTY has been consulted as to the need to procure and maintain such coverage.

- E. Waiver of Subrogation. The CONTRACTOR hereby waives any and all rights of Subrogation against the COUNTY, its officers, employees and agents for each required policy. When required by the insurer, or should a policy condition not permit an insured to enter into a pre-loss agreement to waive subrogation without an endorsement, then the CONTRACTOR shall agree to notify the insurer and request the policy be endorsed with a Waiver of Transfer of rights of Recovery Against Others, or its equivalent.

## **ARTICLE 19 PERFORMANCE GUARANTEE AND WARRANTY**

19.1 All materials and equipment incorporated into any Work shall be warrantied and guaranteed as new quality and of the highest grade of quality for their intended use. All Work shall be performed in good workmanship and shall be in accordance with all Contract Documents and industry standards. The Work shall be functionally sound, technically proficient, developed with structural integrity, and shall be in compliance with all governing laws, regulations, and applicable codes. The CONTRACTOR warrants all Work against defects for a period of 1 (one) year (unless longer guarantees or warranties are provided for elsewhere in the Agreement or at law, in which case the longer periods of time shall prevail) from the date of Substantial Completion, regardless of whether the Work was performed by the CONTRACTOR or any of its subcontractors.

19.2 If defects are identified during the warranty period, the CONTRACTOR shall repair or replace the defect and cure such defect within 48 (forty-eight) hours of receipt of written notice. The CONTRACTOR warrants such repaired or replaced Work for a period of 1 (one) year from the completion of the warranty work or the warranty period specified, whichever is longer. Should the CONTRACTOR fail to timely cure such defects, the COUNTY may proceed to perform the work at the CONTRACTOR's expense and may back charge the CONTRACTOR for all costs associated with the work.

19.3 The CONTRACTOR agrees to require that all of its subcontractors, suppliers, and materialmen provide warranties in their agreements at least sufficient to satisfy the CONTRACTOR's obligations in this Agreement and the CONTRACTOR shall assign all such warranties to the COUNTY as a condition precedent to the receipt of Final Payment. The CONTRACTOR agrees to defend and indemnify the COUNTY against all fees and costs should the CONTRACTOR fail to obtain the warranty protections required herein.

19.4 For all equipment that has a manufacturer's warranty, the CONTRACTOR shall assign such warranty to the COUNTY. The manufacturer's warranty period shall be concurrent with the CONTRACTOR's warranty to the COUNTY. In the event that the equipment manufacturer or supplier is unwilling to provide such a warranty, the CONTRACTOR shall obtain a 2 (two) year equipment warranty commencing at the time of acceptance of the equipment by the COUNTY.

**ARTICLE 20**  
**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

20.1 Documents and Samples at the Site. From and after commencement of the Construction of the Work, the CONTRACTOR shall maintain at the site one record copy of the Construction Documents and any and all amendments thereto, in good order and marked, to record changes to the Contract Documents as approved during the construction of the Project. In addition, the CONTRACTOR shall maintain at the site approved shop drawings, product data, samples, and similar required submittals. These shall be provided to the COUNTY upon completion of the Work.

20.2 Shop Drawings, Product Data and Samples.

- A. Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate, for those portions of the Work for which submittals are required, the way the CONTRACTOR proposes to conform the construction to the Contract Documents.
- B. The CONTRACTOR shall review and take appropriate action upon Shop Drawings, Product Data, Samples, and similar submittals. The COUNTY shall review Shop Drawings, Product Data, Samples, and similar submittals for compliance with the Design Documents and shall provide comments, if any, within 15 (fifteen) days of receiving such documents.
- C. The CONTRACTOR shall not be relieved of responsibility for the deviations from requirements of the Contract Documents by the COUNTY's approval of Shop Drawings, Product Data, Samples, or similar submittals unless the CONTRACTOR has specifically informed the COUNTY of such deviation at the time of the submittal and the COUNTY has given written approval to the specific deviation. The CONTRACTOR shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals to the COUNTY for approval thereof.

**ARTICLE 21**  
**SAFETY**

21.1 The CONTRACTOR shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The CONTRACTOR shall take all precautions and follow all procedures for the safety of, and shall provide all protection to prevent injury to, all persons involved in any way in the Work and all other persons, including, without limitation, the employees, agents, guests, visitors, invitees, and licensees of the COUNTY and users who may be affected thereby.

21.2 All the Work, whether performed by the CONTRACTOR, its subcontractors or sub-subcontractors, or anyone directly or indirectly employed by any of them, and all equipment, appliance, machinery, materials, tools and like items incorporated or used in the Work, shall be in compliance with, and conform to:

- A. all applicable laws, ordinances, rules, regulations and orders of any public, quasi-public, or other authority relating to the safety of persons and their protection against injury, specifically including, but in no event limited to, the Federal Occupational Safety and Health Act of 1970 and the Trench Safety Act, as amended, and all state, Martin County and, where the Project is located in a municipality, municipal, rules and regulations now or hereinafter in effect; and

B. all codes, rules, regulations and requirements of the COUNTY and its insurance carriers relating thereto. In the event of conflicting requirements, the more stringent shall govern.

21.3 Should the CONTRACTOR fail to provide a safe area for the performance of the Work or any portion thereof, the COUNTY shall have the right, but not the obligation, to suspend the Work in the unsafe area. All costs of any nature resulting from the suspension, by whomever incurred, shall be borne by the CONTRACTOR.

21.4 The CONTRACTOR shall provide, or cause to be provided, to each worker on the Work site, the proper safety equipment for the duties being performed by that worker and will not permit any worker on the Work site who fails or refuses to use the same. The COUNTY shall have the right, but not the obligation, to order the CONTRACTOR to send a worker home for the day or to discharge a worker for his or her failure to comply with safe practices, with which order the CONTRACTOR shall promptly comply.

21.5 In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the COUNTY, is obligated to act, at its discretion, to prevent threatened damage, injury, or loss. If the CONTRACTOR believes that additional Work done by it in an emergency which arose from causes beyond its control entitles it to an increase in the Contract Price or an extension of the Contract Time, it may make a claim therefore as provided in the Contract Documents.

## **ARTICLE 22 PROTECTION OF WORK AND PROPERTY**

22.1 The CONTRACTOR: (A) shall, throughout the performance of the Agreement, maintain adequate and continuous protection of all completed Work and temporary facilities against loss or damage from whatever cause; (B) shall protect the property of the COUNTY and third parties from loss or damage from whatever cause arising out of the performance of the Agreement; and (C) shall comply with the requirements of the COUNTY and its insurance carriers and with all applicable laws, codes, rules and regulations with respect to the prevention of loss or damage to the property. The COUNTY, its insurance carriers or representatives, may, but shall not be required to, make periodic patrols of the Work site as a part of its normal safety, loss control, and security programs. In such event, however, the CONTRACTOR shall not be relieved of its aforesaid responsibilities and the COUNTY shall not assume, nor shall it be deemed to have assumed, any responsibility otherwise imposed upon the CONTRACTOR by this Agreement.

22.2 Before the CONTRACTOR disposes of any existing improvements or equipment which are to be removed as a portion of the Work and for which disposition is not specifically provided for elsewhere in the Contract Documents, the CONTRACTOR shall contact the COUNTY and determine if the removal items are to be salvaged. Items to be salvaged by the COUNTY shall be neatly stockpiled or stored in a neat and acceptable manner at the construction site easily accessible to the COUNTY. Equipment and materials which will not be salvaged by the COUNTY shall become the property of the CONTRACTOR to be removed from the site and disposed of in an acceptable manner. To the extent the CONTRACTOR intends to temporarily store materials at a site near or adjacent to the Project site prior to ultimate removal or disposal, the CONTRACTOR must first obtain written authorization from the COUNTY, as well as, the property owner.

22.3 Preservation of Trees. Those trees which are designated on the Drawings for preservation shall be carefully protected from damage. The CONTRACTOR shall erect and maintain such protections such as barricades, guards, and enclosures as is necessary for the protection of the trees during all

construction operations. The CONTRACTOR shall replace any and all trees damaged during construction activities (other than trees specified to be removed) at no expense to the COUNTY.

22.4 Preservation of Private Property. The CONTRACTOR shall exercise extreme care to avoid unnecessary disturbance of private property as applicable. Trees, shrubbery, gardens, lawn and other landscaping that must be removed shall be replaced and replanted to restore the construction easement to the condition existing prior to construction. All soil preparation procedures and replanting operations shall be under the supervision of a nurseryman experienced in such operations. Any vegetation requiring relocation, temporary or otherwise, which is damaged or destroyed, shall be replaced at no cost to the COUNTY. The CONTRACTOR shall replace any and all such vegetation damaged during construction activities (other than vegetation specified to be removed) at no expense to the COUNTY.

22.5 Until final acceptance of the Work by the COUNTY pursuant to this Agreement, the CONTRACTOR shall have full and complete charge and care of and, except as otherwise provided in this subparagraph, shall bear all risk of loss of, and injury or damage to, the Work or any portion thereof (specifically including the COUNTY-furnished supplies, equipment or other items to be utilized in connection with, or incorporated in, the Work) from any cause whatsoever.

22.6 Existing manholes, fire alarms, etc., shall not be obstructed by the CONTRACTOR, unless called for in the Contract Documents. The CONTRACTOR is to make no connections to or operate valves on water mains or otherwise interfere with the operation of the water system, without first giving written approval from the appropriate governmental entity.

### **ARTICLE 23 TESTS AND INSPECTIONS**

23.1 If any Work (including the work of others) that is to be inspected, tested, or approved is covered without written concurrence of the COUNTY, it must be uncovered for observation if requested by the COUNTY. Such uncovering shall be at the CONTRACTOR's expense.

23.2 The CONTRACTOR shall be liable for any additional testing or inspections necessitated by defective work performed or materials supplied by the CONTRACTOR or by any of its subcontractors or vendors of any tier.

### **ARTICLE 24 UTILITY COORDINATION**

24.1 The CONTRACTOR shall be responsible for making all necessary arrangements with governmental departments, utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, cable television, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the Work in order that such items may be properly shored, supported, and protected, or the CONTRACTOR shall be solely responsible for coordinating their relocation. The CONTRACTOR: shall (A) give all proper notices; (B) comply with requirements of such parties in the performance of its the Work; (C) permit entrance of such parties on the Work site in order that they may perform their necessary the Work; and (D) pay all charges and fees made by such parties for this the Work. The CONTRACTOR's attention is called to the fact that there may be delays on the Project due to the Work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.

24.2 At all points where the Work constructed by the CONTRACTOR connects to existing utilities and services, the actual the Work of making the necessary connection to the existing service or utility shall be arranged for by the CONTRACTOR at no expense to the COUNTY (unless specifically indicated otherwise). Services and utilities included within (but not limited to) this responsibility are roads, ditches, electrical, sewer, mechanical utilities, water, fencing, etc. Connections shall be made at a time that will result in the least possible interference with existing services.

24.3 FPL calls attention to the fact that there may be energized, high voltage electric lines, both overhead and underground, located in the area of this Project. The CONTRACTOR must visually survey the area and take the necessary steps to identify all overhead and underground facilities prior to commencing construction to determine whether the construction of any proposed improvements will bring any person, tool, machinery, equipment, or object closer to FPL's power lines than the OSHA-prescribed limits. If the CONTRACTOR identifies such, it shall re-design the Project to allow for safe construction given the pre-existing power line location, or make arrangements with FPL to, either deenergize and ground its facilities, or relocate them. The CONTRACTOR must do this before allowing any construction near power lines. If it is necessary for the CONTRACTOR and/or subcontractor to operate or handle cranes, digging apparatus, draglines, mobile equipment, or any other equipment, tools or materials in such a manner that they might come closer to underground or overhead power lines than is permitted by local, state or federal regulations, the CONTRACTOR or subcontractor must notify FPL in writing of such planned operation prior to the commencement thereof and make all necessary arrangements with FPL in order to carry out the work in a safe manner. Any work in the vicinity of the electric lines should be suspended until these arrangements are finalized and implemented. The CONTRACTOR shall be required to complete a "Notification of FPL Facilities" form prior to the commencement of the Work.

## **ARTICLE 25 HAZARDOUS MATERIALS**

The CONTRACTOR shall obtain all required Federal, State, and local permits and licenses and shall be responsible for the safe and proper handling, transporting, storage, and use of any explosive or hazardous materials brought onto or encountered within the Project, and at its expense, make good any damage caused by its handling, transporting, storage, and use. The CONTRACTOR will notify the COUNTY immediately if explosive or hazardous materials are encountered on the Project site. Transporting explosive or hazardous materials onto the site will require prior written approval from the COUNTY. The CONTRACTOR shall maintain and post as necessary Material Hazard Data Sheets for all applicable Hazardous Materials used in the course of its work. In the event that hazardous material is improperly handled or stored by the CONTRACTOR, its subcontractors, or any employee or agent of any of the aforementioned, which results in contamination of the site, the CONTRACTOR shall immediately notify the COUNTY and the appropriate governmental authority and shall take whatever action is necessary or desirable to remediate the contamination at the CONTRACTOR's sole cost and expense.

## **ARTICLE 26 AUDIT**

The CONTRACTOR agrees that the COUNTY, or any of its duly authorized representatives, shall have access to and the right to examine any and all books, documents, papers, and records of the CONTRACTOR, and may at its option conduct an audit of the CONTRACTOR's financial books and records concerning this the Project. The CONTRACTOR agrees that payment(s) made under this Agreement shall be subject to reduction for amounts charged thereto, which are found on the basis of audit examination, to constitute non-allowable costs under this Agreement. The CONTRACTOR shall



promptly refund by check payable to the COUNTY the amount of such reduction of payments. All required records shall be maintained until the latter of the completion of the audit and all questions arising therefore are resolved, or six (6) years after completion of the Work and issuance of the Final Payment.

## **ARTICLE 27 PUBLIC RECORDS**

27.1 The CONTRACTOR shall comply with the provisions of Chapter 119, Fla. Stat. (Public Records Law), in connection with this Agreement and shall provide access to public records in accordance with §119.0701, Fla. Stat. and more specifically Contractor shall:

27.1.1 Keep and maintain public records required by the County to perform the Agreement.

27.1.2. Upon request from the County's custodian of public records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Fla. Stat. or as otherwise provided by law.

27.1.3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement if the CONTRACTOR does not transfer the records to the County.

27.1.4. Upon completion of the Agreement, transfer, at no cost, to the County all public records in possession of the CONTRACTOR or keep and maintain public records required by the County to perform the Agreement. If the CONTRACTOR transfers all public records to the County upon completion of the Agreement, the CONTRACTOR shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the CONTRACTOR keeps and maintains public records upon completion of the Agreement, the CONTRACTOR shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology systems of the County.

**27.2 IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (772) 419-6959, public\_records@martin.fl.us, 2401 SE MONTEREY ROAD, STUART, FL 34996.**

27.3 Failure to comply with the requirements of this Article shall be deemed a default as defined under the terms of this Agreement and constitute grounds for termination.

## **ARTICLE 28 ASSIGNMENT**

28.1 The COUNTY and the CONTRACTOR each binds itself, its officers, directors, qualifying agents, partners, successors, assigns, and legal representatives to the other party hereto and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants, agreements, and obligations contained in the Agreement.

28.2 The CONTRACTOR shall not assign, transfer, convey, or otherwise dispose of the Agreement or its right, title, or interest in or to the same or any part thereof, or allow legal action to be brought in its name for the benefit of others, without previous written consent of the COUNTY and Surety.

28.3 If for any reason the COUNTY terminates its Agreement with the CONTRACTOR, the CONTRACTOR hereby assigns this Agreement to the COUNTY. The CONTRACTOR shall include in each of its subcontracts language that requires its subcontractors to agree to such assignment and to perform their responsibilities and to fully complete the work required by this Agreement directly for the COUNTY.

### **ARTICLE 29 ATTORNEY'S FEES AND COURT COSTS**

29.1 In the event the CONTRACTOR defaults in the performance of any of the terms, covenants, and conditions of this Agreement, the CONTRACTOR agrees to pay all damages and costs incurred by the COUNTY in the enforcement of this Agreement, including reasonable attorney's fees, expert fees, court costs, and all expenses, including but not limited to any costs from any state court or federal court proceedings, whether in a trial court or in an appellate court.

29.2 Except as otherwise provided in this Agreement, the parties expressly agree that each party will bear its own attorney's fees and court costs incurred in connection with this Agreement.

### **ARTICLE 30 NOTICES**

Whenever either party desires to give notice to the other, such notice must be in writing in at least one of the following methods:

- (a) Certified United States Mail, postage prepaid, return receipt requested; or
- (b) Overnight courier, such as by FedEx or UPS, with a request for receipt acknowledgment; or
- (c) Hand-delivery to a person authorized to accept delivery of notice with a request for a receipt acknowledgment; or
- (d) Email if and only if agreed to in advance by COUNTY and CONTRACTOR in writing specifying the email addresses, and if so agreed, the email shall a request receipt acknowledgement.

The place for giving notice shall remain the same as set forth herein until changed in writing in the manner provided in this section. For the present, the parties designate the following:

FOR COUNTY:

Martin County BOCC  
Attn: Purchasing Division  
2401 SE Monterey Rd.  
Stuart, FL 34996

WITH A COPY TO:

County Attorney  
Martin County  
2401 SE Monterey Rd.  
Stuart, FL 34996

FOR CONTRACTOR:

CONTRACTOR shall be required to notify the County, in writing, whenever there is a change in the address of CONTRACTOR (to the place) for which notice is to be sent (giving notice), as required in this section. In the event CONTRACTOR fails to maintain a current address on record with the County as required herein, County shall be deemed to have notified CONTRACTOR by using the last known address on record and County shall not have any responsibility or obligation to investigate the validity of the address that CONTRACTOR has provided. As a result, CONTRACTOR agrees to hold County harmless and defend same for any action or occurrence or non-occurrence as a result of CONTRACTOR not receiving notice due to CONTRACTOR's failure to update its address for notification.

All notices sent in accordance with this section shall be deemed to be effective upon receipt or refusal of same unless otherwise expressly provided in this Agreement.

### **ARTICLE 31 RESOLUTION OF CLAIMS AND DISPUTES**

31.1 As a condition precedent to the filing of any legal proceedings, the parties shall endeavor to resolve claim disputes or other matters in question by mediation. Mediation shall be initiated by any party by serving a written request for same on the other party. The party shall, by mutual agreement, select a mediator within 15 (fifteen) days of the date of the request for mediation. If the parties cannot agree on the selection of a mediator then the COUNTY shall select the mediator, who, if selected solely by the COUNTY, shall be a mediator certified by the Supreme Court of Florida. The mediator's fee shall be paid in equal shares by each party to the mediator. If a party fails to comply with this section, including, but not limited to, filing a lawsuit without mediating before filing the lawsuit, the party in violation shall be liable for the reasonable attorneys' fees and costs of the other party in enforcing this provision, and such amounts shall be awarded by the Court.

31.2 Law, Jurisdiction, Venue, Waiver of Jury Trial. This agreement shall be interpreted and construed in accordance with and governed by the laws of the State of Florida. The exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Nineteenth Judicial Circuit in and for Martin County, Florida. If any claim arising from, related to or in connection with this Agreement must be litigated in federal court, the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. BY ENTERING INTO THIS AGREEMENT, THE PARTIES HERETO EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO AN ADVISORY JURY. If a party fails to withdraw a request for jury trial or for an advisory jury in a lawsuit arising out of this agreement after written notice by the other party of a violation of this section, the party making the request for jury trial or advisory jury shall be liable for the reasonable attorneys'

fees and court costs of the other party in contesting the request for jury trial or advisory jury, and such amounts shall be awarded by the Court in adjudicating the motion.

31.3 Certified claims. If CONTRACTOR submits a claim seeking an increase in the Contract Price in the amount of ten percent (10%) or more of the Contract Price, an increase in the Contract Time for substantial or final completion by more than thirty (30) days, or both, upon the request of the COUNTY in its sole discretion, CONTRACTOR shall, within thirty (30) days, submit to COUNTY a “certified claim,” that is, a claim made in writing under oath by a person duly authorized by the CONTRACTOR, and shall contain a statement that:

- (i) The claim is made in good faith;
- (ii) The claim's supporting data are accurate and complete to the best of the person's knowledge and belief;
- (iii) The amount of the claim accurately reflects the amount that the claimant believes is due from the COUNTY; and
- (iv) The certifying person is duly authorized by the claimant to certify the claim.

**FAILURE TO PROVIDE THE REQUESTED CERTIFICATION WITHIN THE PRESCRIBED PERIOD OF THIRTY (30) DAYS SHALL CONSTITUTE A FORFEITURE OF THE ENTIRE CLAIM.**

31.4 False, fraudulent, or inflated claim. If a court finds a certified claim is false, fraudulent, or inflated, whether in whole or in part, CONTRACTOR shall:

- (i) Be liable to the COUNTY for an amount equal to three (3) times the amount of the claim that is false, fraudulent, or inflated;
- (ii) Immediately, fully, and irrevocably forfeit the entire amount of the claim;
- (iii) Be liable to the COUNTY for all costs and fees (including, without limitation, reasonable attorneys’ fees, court costs, expert fees, and consulting fees) incurred by the COUNTY to review, defend, and evaluate the claim; and
- (iv) Be subject to debarment from COUNTY contracting for a period not to exceed five (5) years.

31.5 Innocent claimant, notice. Notwithstanding the foregoing, CONTRACTOR is an innocent claimant and not liable for a false, fraudulent, or inflated claim if CONTRACTOR submitted a certified claim to the COUNTY reasonably believing that such claim was free of any material misstatements, or any exaggerated, inflated, or unsubstantiated assertions or damages and had no reasonable basis to doubt the truth, veracity, or accuracy of such claim at the time it was submitted, and within fifteen (15) days of discovering the falsity of the claim, took immediate steps to modify, correct, or withdraw such claim and provided the COUNTY with immediate written notice thereof.

## **ARTICLE 32 MISCELLANEOUS**

32.1 Taxes. The COUNTY is exempt from payment of Florida State Sales and Use Taxes. The CONTRACTOR shall not be exempt from paying sales tax to its suppliers for materials used to fulfill

contractual obligations with the COUNTY, nor is the CONTRACTOR authorized to use the COUNTY's Tax Exemption Number in securing such materials. The CONTRACTOR shall be responsible for payment of all federal, state, and local taxes and fees applicable to the Work and same shall be included in the Contract Price.

32.2 Pledge of Credit. The CONTRACTOR shall not pledge the COUNTY's credit or make it a guarantor of payment or surety for any Agreement, debt, obligation, judgment, lien or any form of indebtedness. The CONTRACTOR further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of the Agreement.

32.3 Entirety of Agreement. All prior and contemporaneous negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained herein are merged into this Agreement. No modification, amendment, or alteration of this Agreement may be made unless made in writing pursuant to the terms of this Agreement.

32.4 Severability. If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable, then the remaining provisions survive and are fully binding and enforceable.

32.5 Time. If any deadline required by this Agreement ends on a Saturday, Sunday, or legal holiday, the deadline is extended to the next day that is not a Saturday, Sunday, or legal holiday.

### **ARTICLE 33 LOCAL, STATE AND FEDERAL OBLIGATIONS**

33.1 No Discrimination. During the performance of this Agreement, the CONTRACTOR agrees as follows:

33.1.1 The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

33.1.2 The CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

33.1.3 The CONTRACTOR will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions

discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the CONTRACTOR's legal duty to furnish information.

33.1.4 The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the CONTRACTOR's commitments under this Section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

33.1.5 The CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

33.1.6 The CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

33.1.7 In the event of the CONTRACTOR's noncompliance with the nondiscrimination clauses of this Agreement or with any of the said rules, regulations, or orders, this Agreement may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

33.1.8 The CONTRACTOR will include the provisions of paragraphs 33.1 and the provisions of paragraphs 33.1.1 through 33.1.8 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

33.2 Compliance with Law. The CONTRACTOR and its employees shall promptly observe, comply with, and execute the provisions of any and all present and future federal, state, and local laws, rules, regulations, requirements, ordinances, orders, codes, mandatory guidelines, and mandatory directions, which may pertain or apply to the Services that may be rendered pursuant to this Agreement, or to the wages paid by the CONTRACTOR to its employees. The CONTRACTOR shall also require, by contract, that all Subconsultants shall comply with the provisions of this Section.

33.3 Compliance with New Regulations. The CONTRACTOR agrees that at such time as the local, state, or federal agencies modify their grant procedures in order for the COUNTY or the

CONTRACTOR to qualify for local, state, or federal funding for the Services rendered by the CONTRACTOR, then the CONTRACTOR shall consent to and make such modifications or amendments in a timely manner. If the CONTRACTOR is unable to comply with applicable local, state, or federal laws and regulations governing the grant of such funds for Services to be rendered herein, then the COUNTY shall have the right, by written notice to the CONTRACTOR, to terminate this Agreement without liability, as outlined in Article 11, above. Furthermore, if the CONTRACTOR's compliance with such laws, regulations, rules, or procedures causes a material change to a term or condition of this Agreement, then the COUNTY agrees, upon sufficient proof of material changes as may be presented to it by the CONTRACTOR, to amend this Agreement.

### 33.4 Compliance with the Contract Work Hours and Safety Standards Act.

33.4.1 Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

33.4.2 Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 33.4.1 the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States, for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 33.4.1, in the sum of \$26 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 33.4.1.

33.4.3 Withholding for unpaid wages and liquidated damages. The COUNTY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Federal contract with the CONTRACTOR, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the CONTRACTOR, such sums as may be determined to be necessary to satisfy any liabilities of the CONTRACTOR or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 33.4.2.

33.4.4 Subcontracts. The CONTRACTOR or subcontractor shall insert in any subcontracts the clauses set forth in paragraph 33.4 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraph 33.4.

### 33.5 Compliance with the Clean Air Act (42 U.S.C. §§ 7401-7671q.) as amended.

33.5.1 The CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

33.5.2 The CONTRACTOR agrees to report each violation to the COUNTY and understands and agrees that the COUNTY will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency (FEMA), and the appropriate Environmental Protection

Agency Regional Office.

33.5.3 The CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

33.6 Compliance with the Federal Water Pollution Control Act as amended.

33.6.1 The CONTRACTOR agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

33.6.2 The CONTRACTOR agrees to report each violation to the COUNTY and understands and agrees that the COUNTY will, in turn, report each violation as required to assure notification to FEMA, and the appropriate Environmental Protection Agency Regional Office.

33.6.3 The CONTRACTOR agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

33.7 Suspension and Debarment

33.7.1 This Agreement is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the CONTRACTOR's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

33.7.2 The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

33.7.3 This certification is a material representation of fact relied upon by COUNTY. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the COUNTY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

33.7.4 The CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C (while this offer is valid) and throughout the period of any contract that may arise. The CONTRACTOR further agrees to include a provision requiring such compliance in its lower tier covered transactions.

33.8 Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 as amended.

33.8.1 The CONTRACTOR shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.



33.8.2 Required Certification. If applicable, the CONTRACTOR has signed and submitted to the COUNTY the required certification.

### 33.9 Procurement of Recovered Materials.

33.9.1 In the performance of this Agreement, the CONTRACTOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

- A. Competitively within a timeframe providing for compliance with the Agreement performance schedule;
- B. Meeting Agreement performance requirements; or
- C. At a reasonable price.

33.9.2 Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site:

<https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>

33.9.3 The CONTRACTOR also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.”

### 33.10 Access to Records. The following access to records requirements apply to this Agreement:

33.10.1 The CONTRACTOR agrees to provide the COUNTY, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the CONTRACTOR which are directly pertinent to this Agreement for the purposes of making audits, examinations, excerpts, and transcriptions.

33.10.2 The CONTRACTOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

33.10.3 The CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under this Agreement.

33.10.4 In compliance with the Disaster Recovery Act of 2018, the COUNTY and the CONTRACTOR acknowledge and agree that no language in this Agreement is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

33.11 Use of DHS Seal, Logo and Flags. The CONTRACTOR shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

33.12 Compliance with Federal Law, Regulations, and Executive Orders. This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of this Agreement. The CONTRACTOR will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

33.13 No Obligation by Federal Government. The Federal Government is not a party to this Agreement and is not subject to any obligations or liabilities to the non-Federal entity, the CONTRACTOR, or any other party pertaining to any matter resulting from this Agreement.

33.14 Program Fraud and False or Fraudulent Statements or Related Acts. The CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR's actions pertaining to this Agreement.

33.15 E-Verify. In compliance with Section 448.095, Fla. Stat., the CONTRACTOR and its subcontractors shall register with and use the E-Verify system to verify work authorization status of all employees hired after January 1, 2021.

33.15.1 If the CONTRACTOR enters into a contract with a subcontractor, the subcontractor must provide the CONTRACTOR with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The CONTRACTOR shall maintain a copy of the subcontractor's affidavit as part of and pursuant to the records retention requirements of this Agreement.

33.15.2 The COUNTY, the CONTRACTOR, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Section 448.09(1), Fla. Stat. or the provisions of paragraph 33.15 shall terminate the contract with the person or entity.

33.15.3 The COUNTY, upon good faith belief that a subcontractor knowingly violated the provisions of paragraph 33.15, but the CONTRACTOR otherwise complied, shall promptly notify the CONTRACTOR and order the CONTRACTOR to immediately terminate the contract with the subcontractor.

33.15.4 A contract terminated under the provisions of paragraph 33.15 is not a breach of contract and may not be considered such.

33.15.5 Subcontracts. The CONTRACTOR or subcontractor shall insert in any subcontracts the clauses set forth in paragraph 33.15 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraph 33.15.

33.16 Scrutinized Companies. The CONTRACTOR certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, does not have business operations in Cuba or Syria, and is not participating in a boycott of Israel. The CONTRACTOR acknowledges that falsely providing this certification, being placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List, engaging in business operations in Cuba or Syria or in a boycott of Israel will result in termination of this Agreement.

33.17 Compliance with the Davis-Bacon Act.

33.17.1 All transactions regarding this Agreement shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The CONTRACTOR shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.

33.17.2 CONTRACTOR is required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

33.17.3 Additionally, CONTRACTOR is required to pay wages not less than once a week.

33.18 Truth Negotiation Certificate.

33.18.1 Execution of this Agreement by the CONTRACTOR shall act as the execution of a truth negotiation certificate certifying that the wage rates and costs used to determine the compensation provided for in this Agreement are accurate, complete and current as of the date of the Agreement and no higher than those charged the CONTRACTOR's most favored customer for the same or substantially similar service.

33.18.2 The wage rates and costs shall be adjusted to exclude any significant sums should the COUNTY determine that the wage rates and costs were increased due to inaccurate, incomplete or noncurrent wage rates or due to inaccurate representations of fees paid to outside consultants. The COUNTY shall exercise its rights under this "Certificate" within one (1) year following final payment. The COUNTY has the authority and right to audit CONTRACTOR's records under this provision. The COUNTY does not hereby waive any other right it may have pursuant to Florida Statutes §287.055, as it may be from time to time amended.

IN WITNESS WHEREOF, the COUNTY and the CONTRACTOR have executed this Agreement as of the last date written below.

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01010  
SUMMARY OF WORK**

**1 - GENERAL**

1.1 SUMMARY OF WORK

- A. The Scope of Work for the **TUCKAHOE MANSION SEAWALL REPLACEMENT PROJECT** is described by the Contract Drawings, Contract Specifications, and the remaining Contract Documents. Specific elements of the Scope of Work are generally summarized below but this Summary of Work is not intended to be a complete description of the Work.

The Tuckahoe Mansion Seawall Replacement project is the construction of a new seawall section to replace the undermined existing protective seawall section behind the Tuckahoe Mansion located at Indian Riverside Park.

The complete project scope for the Tuckahoe Mansion Seawall Replacement includes the removal and replacement of the existing boardwalk, construction of a new seawall section adjacent to the existing seawall section that has failed, stabilization of the bank and shoreline, and other incidental work as shown and specified in the Contract Documents.

1. Project Location: Indian Riverside Park, Jensen Beach, Martin County, Florida.
2. Owner: Martin County Board of County Commissioners (COUNTY)

- B. Contract Documents were prepared for the Project by:

CAPTEC Engineering, Inc.  
301 NW Flagler Avenue  
Stuart, Florida  
(772) 692-4344

AND

MARTIN COUNTY PUBLIC WORKS DEPARTMENT  
2401 SE Monterey Road, 2<sup>nd</sup> Floor  
Stuart, Florida 34996  
Tel: (772) 288-5927  
Project Manager: Dave Moore

- C. The Work includes, but is not limited to that work shown or described on the bid/contract drawings and specifications including but not limited to the following:

1. Mobiliation/Demobilization
2. Site clearing and vegetation removal
3. NPDES Erosion and sedimentation control measures (Permit & Maintenance)
4. Testing
5. Bank and Shore Rip-Rap
6. Embankment
7. Misc. Concrete Walkway
8. Sheetpile

9. Concrete Cap
10. Concrete Wall
11. Helical Anchors
12. Excavation and associated earthwork
13. Drainage piping, including penetrations
14. Removal and Replacement of Existing Boardwalk and Railings
15. Construction surveying and layout
16. Bahia Sod and Landscaping
17. Tree Relocation/Preservation and Tree Replanting
18. Record Drawings/As-Builts
19. All other work shown and/or specified in the Contract Documents

## 1.2 PHASING

- A. The Project will be constructed in a one (1) Phase.

## 1.3 MISCELLANEOUS PROVISIONS

- A. Business Access – The CONTRACTOR shall maintain, at all times, safe and passable access to Park business abutting or around the construction. The CONTRACTOR shall coordinate his operations with abutting property owners and shall communicate with Parks Operations staff, on a daily basis if necessary, to ensure that disruptions are minimized.
- B. The Project Work may be affected by on-site private electrical, telephone, gas, and CATV utility work that may need to be performed by FPL, AT&T, TECO Gas, and Comcast Cable. The CONTRACTOR will coordinate with the utility companies to sequence the Project Work with any needed work by utility companies.
- C. There are/may be existing Survey Section Corners and other Survey Monuments located within the construction project limits. Prior to the start of construction, the CONTRACTOR will meet with the Martin COUNTY Public Works Project Manager and the COUNTY Surveyor to coordinate the protection or re-establishment of Survey monuments.
- D. The area adjacent to the seawall along the shoreline at Indian Riverside Park is a known Native American Shell Mound. Martin County will engage the services of an archeologist prior to and during construction to monitor the work and the site for impacts to historic and archeological resources. The Contractor agrees to coordinate and communicate with the County's Archeological Consultant. In the event that the Contractor encounters archeological resources during construction, the Contractor will comply with the directions provided by the County for the protection and preservation of these resources. Changes and delays associated with this issue will be reviewed, evaluated and processed in accordance with the Contract.

## 1.4 SUBSTITUTION REQUESTS

- A. The CONTRACTOR shall submit substitution requests as outlined in the Agreement between COUNTY and CONTRACTOR, and submit two (2) copies each on form bound into Project Manual. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
  1. Identify manufacturer by name and address, trade name, model number or catalog number.
  2. List product description, performance and test data, applicable reference standards, availability of maintenance service and source of replacement materials.

3. Give itemized comparison of qualities of proposed substitution with specified product, changes required in other elements of the Work due to substitution and effect on Progress Schedule.
  4. Give name and address of similar projects on which product was used and date of installation.
  5. Provide cost data comparing proposed substitution with specified product and state the amount of net change to Contract Sum.
  6. Provide all information related to a proposed substitution at least 14 business days prior to expecting a written response from the COUNTY.
- B. Do not order or install substitute products without written acceptance from the COUNTY. Do not imply or indicate substitutions on shop drawings or product data submittals without a separate formal request.
- C. The COUNTY will determine acceptability of substitution. The burden of proof of acceptability of a proposed substitution is upon the submitter; information submitted must convince the reviewers that characteristics of the proposed substitution are equal to or better than those of the specified product.
- D. Request for substitution constitutes a representation that the CONTRACTOR:
1. Has investigated the proposed product and determined that it is equal to or superior in all respects to the specified product.
  2. Will provide same or greater warranties for proposed product as for the specified product.
  3. Will coordinate installation of substitution accepted into the Work and make other changes and adjustments as may be required to make the Work complete in all respects.
  4. Waives all claims for additional costs due to substitution which may later become apparent.

## **2 – GENERAL INSTRUCTIONS**

### 2.1 GENERAL REQUIREMENTS

- A. The CONTRACTOR shall provide all services and necessary items of expense, including but not limited to labor, material, trucking, transportation, equipment, hoisting, scaffolding, power, supervision, layout, and all other services and items of expense required for the complete performance of all Work in accordance with the Contract Documents as follows:
- a. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) SPECIFICATIONS  
 Except as otherwise stated in the Contract Documents, all work will be performed in accordance with the following publications and are hereby incorporated into the Contract Documents:

Florida Department of Transportation, FY2020-21 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs)  
<http://www.fdot.gov/design/standardplans>

Florida Department of Transportation, January 2020 Standard Specifications for Road and Bridge Construction

<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

Section 9-2.1.1 and Section 9-2.1.2 pertaining to Fuels and Bituminous Materials Adjustments in Division I of the FDOT Standard Specifications For Road and Bridge Construction, January 2020 edition, are deleted and are not applicable for this Contract.

The specifications contained in Division II and III of the FY2020-21 Standard Plans for Road and Bridge Construction, and the FDOT Standard Specifications for Road and Bridge Construction, January 2020 edition, shall also apply to this Contract with the following exceptions: Sections 200-9, 200-10.2, 200-10.3, 234-10, 285-7, & 285-8 referencing thickness adjustments are deleted and are not applicable to this Contract.

b. MARTIN COUNTY SPECIFICATIONS

Except as otherwise stated in the Contract Documents, all work will be performed in accordance with the following publications and are hereby incorporated into the Contract Documents:

Martin County Standard Details for Road & Site Construction and Public Facilities (latest edition)

<https://www.martin.fl.us/martin-county-services/revised-road-and-site-construction-standards>

In the event of a conflict between the Agreement between Owner and Contractor for Horizontal Construction Division 1 Specifications (Sections 01010 through 01771), the Martin County Standard Details for Road & Site Construction and Public Facilities (latest edition), and the FDOT Standard Specifications for Road and Bridge Construction, the requirements of the Agreement Between Owner and CONTRACTOR For Horizontal Construction and Division 1 Specifications (Sections 01010 through 01771) and Martin County Standard Details for Road & Site Construction and Public Facilities (latest edition) shall govern.

- c. Pay legally required sales, consumer, and use taxes.
- d. Secure and pay for, as necessary for proper execution and completion of the Work:
  - 1. All permits (burning, excavation, ROW Utilization, etc.).
  - 2. Government fees.
  - 3. Licenses and applications.
  - 4. Electrical permits.
  - 5. Irrigation construction permits as required by the Florida Building Code and/or other government agency.
- e. Give required notices.
- f. Comply with laws, codes, ordinances, rules, regulations, orders, and other legal requirements of public or quasi-public authorities which bear on the performance of the work.

- g. Enforce strict discipline and good order among employees. Do not employ for work unfit persons and persons not skilled in assigned tasks.
- h. The CONTRACTOR is responsible at all times for the proper conduct of personnel and proper conduct of all subCONTRACTOR personnel.
- i. The CONTRACTOR shall ensure that all personnel are properly dressed with OSHA approved clothing and safety gear, including but not limited to hard hats, work shoes, shirts and long pants, as appropriate for the performance of the Work.
- j. The CONTRACTOR shall be responsible for compliance with all applicable OSHA Safety requirements and regulations, as applicable for the performance of the Work.

## 2.2 COORDINATION

- A. Refer to Specification Section 01310 – Project Management and Coordination for additional Project Coordination requirements.
- B. The CONTRACTOR shall maintain a competent superintendent at the site at all times while work is in progress to act as the CONTRACTOR’S agent. The superintendent shall be capable of properly interpreting the Contract Documents and is thoroughly experienced in the type of work being performed. The superintendent shall have full authority to receive instructions from the COUNTY and to execute the orders or directions of the COUNTY, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. Superintendence shall be provided regardless of the amount of work sublet. The superintendent shall speak and understand English, and the CONTRACTOR shall maintain at least one other responsible person who speaks and understands English, on the project during all working hours.
- C. The CONTRACTOR shall coordinate with the COUNTY’S soils and material testing consultants. The CONTRACTOR is responsible for scheduling and coordinating all soil and material testing required in the performance the Work. Unless otherwise specified in the Contract Documents, the number and frequency of soils and material testing shall be in accordance with the FDOT Guidelines for Sampling and Testing. The COUNTY will pay for costs associated with the initial soils and material testing and the CONTRACTOR will be liable for costs associated with re-testing as a result of initial test failure due to deficiencies in the CONTRACTOR’S work efforts.
- D. The CONTRACTOR shall coordinate with the COUNTY’S Construction and Inspection (CEI) consultants and/or COUNTY Inspectors. The CONTRACTOR and CEI consultant or COUNTY Inspectors are responsible for scheduling and coordinating CEI Inspections required in the performance the Work.
- E. The CONTRACTOR shall coordinate its Work with the COUNTY, with the Work of the COUNTY’S separate CONTRACTORS, and other authorized parties as noted herein. The CONTRACTOR shall sequence its Work, as required by the COUNTY, with the Work of the COUNTY’S separate CONTRACTORS at no additional cost to the COUNTY.
- F. The CONTRACTOR shall be liable for all expenses incurred for stand-by time charged by the testing firm as a result of cancelled or delayed testing or inspections. These charges will be deducted from the CONTRACTOR’S final payment.



- G. CONTRACTOR shall coordinate with adjacent property owners.

2.3 STANDARD SPECIFICATIONS

- A. All materials and workmanship shall meet the requirements of the COUNTY Code of Ordinances, the Martin County Standard Details for Road & Site Construction and Public Facilities (latest edition), the Florida Department of Environmental Protection (FDEP) requirements, the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, the Florida Department of Transportation Design Standards, and in accordance with the Contract Documents for the Tuckahoe Mansion Seawall Replacement Project.
- B. These Division 1 Technical Specifications are supplemental to the above Specifications and Standards.
- C. This project is being contracted for the COUNTY. Any reference to the "State" or "Department" in the Specifications (as legal COUNTY) shall be replaced by the "COUNTY".

2.4 SURVEYING AND LAYOUT

- A. Refer to Specification Section 01700 – Execution Requirements, and Specification Section 01771 Surveying and Field COUNTYing for Construction Layout, Field COUNTYing and Surveying requirements.

2.5 TESTING AND INSPECTION

- A. Refer to Specification 01400 – Quality Control for specifications governing soils and material testing and inspection.

2.6 SURFACE WATER MANAGEMENT AND ENVIRONMENTAL CONTROLS

- A. The CONTRACTOR shall provide and maintain all necessary erosion and sedimentation control as required for the performance of the Work. The CONTRACTOR will be required to comply with the environmental and erosion controls requirements in the Storm Water Pollution Prevention Control Plan (SWPPP) prepared for the project. The CONTRACTOR will employ a Qualified Inspector to perform inspections of the SWPPP controls as required by the SWPPP Plan.

Erosion and Sediment Controls: The CONTRACTOR shall provide erosion and sedimentation control measures as required to accommodate the means and methods for construction. The erosion and sedimentation control shall be based on the Storm Water Pollution Prevention Plan (SWPPP), the plans and details and proposed construction sequencing. The CONTRACTOR shall, as “operator of the facility” obtain an NPDES permit through the Florida Department of Environmental Protection for the Project. The implementation of the SWPPP is considered incidental to the cost of Erosion / Sediment Control. The CONTRACTOR is responsible for any fees associated with the NPDES permitting process. The CONTRACTOR shall further; provide, install, maintain, monitor, and remove the required erosion and sediment control measures on and around the project site as depicted on the construction drawings and as needed to prevent pollution of water, detrimental effects to public or private property or damage to the work of the project. CONTRACTOR shall Construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the plans. or as may be directed by the COUNTY. The CONTRACTOR shall use temporary erosion and water pollution control features that consist of, but are not limited to, temporary

grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, sediment checks, berms, baled hay or straw, floating turbidity barrier, staked turbidity barrier and silt fence.

Temporary Silt Fence: The CONTRACTOR shall furnish, install, maintain, and remove temporary silt fences in accordance with the manufacturer's directions, these Specifications, the details as shown on the plans, and the FDOT Design Standards Index No. 102.

Floating Turbidity Barriers and Staked Turbidity Barriers: The CONTRACTOR shall furnish, install, maintain, and remove temporary turbidity barrier in accordance with the manufacturer's directions, these Specifications, the details as shown on the plans, and the FDOT Design Standards.

Temporary and Permanent Stabilization: In accordance with the State of Florida Department of Environmental Protection (FDEP) NPDES Generic Permit, the CONTRACTOR shall initiate temporary or final stabilization measures within seven (7) calendar days after construction activities have temporarily or permanently ceased for any portion of the site.

## 2.7 PERMITS AND PERMIT FEES

- A. All Permits required for any part of the CONTRACTOR'S Work (except those Permits obtained directly by the COUNTY, as further enumerated below) and Means and Methods of construction shall be procured and paid for by the CONTRACTOR. The cost for the required permits (except those permits obtained directly by the COUNTY) are included in the Contract Sum. Any and all permits required by the CONTRACTOR's means and methods - burning, dewatering, NPDES, dig/excavation, etc., and any additional permits (even COUNTY issued or obtained Permits) due to negligence or repairs due to actions by the CONTRACTOR – are the responsibility of the Contractor.
- B. The COUNTY is responsible for the permit fees of all COUNTY issued permits (Development Review, ROW Use Permit, Building Permits, Electrical Permits, etc.) except for those permits required by the CONTRACTOR's means and methods or negligence/errors outside the original scope of work provided in the bid documents.
- C. The COUNTY is responsible for the permit fees of all general governing external agency resource permitting (SFWMD ERP, FDEP ERP, ACOE Nationwide, Building permits outside County jurisdiction, etc.) except for those permits requested to be modified by the CONTRACTOR's means and methods or negligence/errors outside the original scope of work provided in the bid documents.
- D. In the event that the COUNTY requires the CONTRACTOR to obtain and pay fees for any of the Permits noted above, the COUNTY shall disclose the permit fee amounts so that the CONTRACTOR can invoice for the fees.
- E. The following Permits have been obtained directly by the COUNTY: FDEP General Permit 43-199775-002-EG-003-EE & 43-0199775-004-EE and ACOE Nationwide Permit: SAJ-2014-03008 (NW-CF).

## 2.8 JOB SITE CLEANLINESS

- A. Maintain clean and safe work areas throughout the entire duration of the Project. Clean up trash and debris on a daily basis. Legally dispose of trash, debris and rubbish off the Project site.

- B. Refer to Specification Section 01500 – Temporary Facilities and Controls for additional Construction Cleaning requirements.
- C. CONTRACTOR shall maintain portable restroom facilities on-site and operational at all times. Adequate facilities shall be supplied for all works and shall be placed in a vicinity of all working crews. At the request of the COUNTY, additional restrooms shall be added at no additional cost to the COUNTY.
- D. Payment for job site cleanliness is incidental to the project.

2.9 EXISTING ROADWAYS AND UTILITIES

- A. The CONTRACTOR shall create no open cuts or other obstacles on the roadways or walkways without the explicit approval of the COUNTY. Authorized cuts must be bridged to permit vehicular and pedestrian traffic to continue without delay or hindrance. Any Work that must be performed which may result in delays to public traffic or re-routing of traffic must be coordinated and approved by the COUNTY.

The CONTRACTOR shall be responsible for calling for Utility Locates before any excavation work is started. The CONTRACTOR shall be responsible for keeping Utility Locates updated during the duration of construction as needed to accommodate the CONTRACTOR’S Work. A copy of all Dig Permits will be submitted to the COUNTY.

The CONTRACTOR shall notify each utility company involved at least ten (10) business days prior to the start of construction to arrange for positive underground location, relocation, or support of its utility where that utility may be in conflict with or endangered by the proposed construction. Relocation of water and sewer mains and services or other utilities for the convenience of the CONTRACTOR shall be paid by the CONTRACTOR. All costs of permanent dry utility relocations to avoid conflict shall be the responsibility of the CONTRACTOR and the utility company involved. No additional payment will be made to the CONTRACTOR for utility relocation coordination for any utility relocation.

All overhead, surface or underground structures and utilities encountered are to be carefully protected from injury or displacement. All damage to such structures is to be completely repaired within a reasonable time; needless delay will not be tolerated. The COUNTY reserves the right to remedy such damage by ordering outside parties to make such repairs at the expense of the CONTRACTOR.

All such repairs made by the CONTRACTOR are to be made to the satisfaction of the utility owner. All damaged utilities must be replaced or prevented from leaking. All repairs are to be inspected by the utility owner prior to backfilling.

The CONTRACTOR should be aware of the SUNSHINE STATE ONE CALL CENTER which has a free locating service for CONTRACTORS and excavators. The CONTRACTOR shall obtain and maintain “utility locates” in accordance with all requirements and laws associated with location of existing utilities prior to starting construction.

The utilities and municipalities that are present members of SUNSHINE STATE ONE are as follows:

- AT&T
- Florida Power and Light
- Comcast Cable TV
- South Martin Regional Utility (SMRU)

- Martin County Traffic COUNTYing

Maintenance of Existing Utility Services: General: The CONTRACTOR shall fully cooperate at all times with the COUNTY in order to maintain utility service with the least amount of interference and interruption possible. Public health and safety considerations shall exceed all others; the CONTRACTOR'S work shall, at all times, be subject to revision if necessary for public health and safety conditions. The creation of a public nuisance will not be permitted.

The COUNTY reserves the right to require the CONTRACTOR to work twenty-four (24) hours per day in all cases where interference with existing water or sewer service may result in health hazards, offensive conditions or serious inconveniences to persons served by the system.

- B. Whenever possible, the CONTRACTOR shall arrange Work so that there will be no service interruptions of any existing systems. Whenever service interruptions are necessary, the CONTRACTOR shall secure the advance approval of the COUNTY and jurisdictional agencies as to the time and date such interruptions will be permitted.

#### 2.10 TEMPORARY TRAFFIC CONTROL (TTC) / MAINTENANCE OF TRAFFIC (MOT)

- A. General: The CONTRACTOR shall be responsible for the proper maintenance, control and detour of traffic in the area of construction during the construction. All traffic control and maintenance procedures shall be in accordance with the requirements of Section 102 of the Standard Specifications, the FDOT Standard Plans for Road Construction, the Drawings, and these Technical Provisions, and the latest edition of Manual of Uniform Traffic Control Devices (MUTCD). It shall be the CONTRACTOR'S responsibility as Bidder, prior to submitting his bid, to determine the amount of work required so that his proposal reflects all costs to be incurred including clearing and grubbing, necessary fill, suitable rock base and asphaltic concrete for detour. No claims for additional payment will be considered for costs incurred in the proper maintenance, control, detour and protection of traffic and no extensions in Contract time will be granted due to this TTC/MOT PAY ITEM.

TWO LANES OF TRAFFIC SHALL BE KEPT OPEN AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE COUNTY. During daylight hours, CONTRACTOR may provide one lane of traffic with approved flagmen and MOT signage.

Temporary Traffic Control (Maintenance of Traffic) Personnel including Worksite Traffic Supervisors, flaggers, and other personnel responsible for work zone related transportation management and traffic control must obtain training and certification in accordance with FDOT's Temporary Traffic Control (Maintenance of Traffic) Training Handbook. Only personnel certified in Advanced Temporary Traffic Control (TTC)/Maintenance of Traffic (MOT) shall set-up, move, and take down TTC/MOT devices. The CONTRACTOR must submit copies of all TTC/MOT certifications for jobsite personnel to the COUNTY prior to start of construction.

Traffic shall be maintained at all times where practical and as more particularly specified hereinafter. No traffic shall be detoured without prior knowledge and approval of the Martin County Public Works Department or other respective traffic control agency having jurisdiction. The CONTRACTOR shall submit the TTC/MOT plan for a detour to agencies a minimum of 2 weeks in advance of a proposed detour of traffic is proposed.

The CONTRACTOR shall keep all law enforcement, fire protection and ambulance agencies informed, in advance, of construction schedules, and shall notify such agencies, two full business days in advance in the event of detour of any roadway.

All traffic control signs and devices, barricades, flashers, flambeaus and similar devices shall be furnished and maintained by the CONTRACTOR.

The CONTRACTOR shall provide the services of uniformed, off-duty police officers to supervise traffic control and maintain safety along the routes of the work or at any other area where the operation causes traffic congestion such that police supervision is required to protect the public safety and the work.

Excavated or other material stored adjacent to or partially upon a roadway pavement shall be adequately marked for traffic and pedestrian safety at all times. Necessary access to adjacent property shall be provided at all times. The CONTRACTOR shall not block access to driveways except where same are to be removed and replaced. The CONTRACTOR shall give twenty-four (24) hours advance notice of driveway removal and replacement operations to affected residents.

In the event the CONTRACTOR must detour, he shall submit a plan (or field sketch) for approval depicting a method of providing one way operation or runaround detour route to the respective traffic agency having jurisdiction a minimal of fifteen (15) days prior to any street closing.

B. Business Access Management Plan

The TTC/MOT Plan shall include a Business Access Management Plan for access to properties and businesses during construction operations. The access management plan shall include access provisions during roadway lane and/or driveway closures. All properties and businesses shall be required to have access at all times during construction. The access management plan shall include specific property connection displacements, if any, with anticipated displacement dates. The CONTRACTOR is required to coordinate with each property and business owner and attend a monthly merchant meeting to coordinate the TTC Plan and Access Management Plan. The Access Management Plan shall be approved by the COUNTY prior to execution of the Access Management Plan.

The Access Management Plan will consist of a written procedure along with exhibits showing typical construction details of phased driveway closures and/or utility outage arrangements. The written procedure and/or exhibits will show and explain how access will be maintained for all properties and businesses.

As part of the Business Access Management Plan, the Contractor will furnish, install, relocate (as needed) and remove Business Name Signs for all the businesses along the corridor. Business Name Signs shall comply with the requirements and details in FDOT Standard Plans Index 102-600 and Index 700-102.

C. The CONTRACTOR shall provide TTC/MOT Plans prepared by a qualified person who holds an active State of Florida Advanced TTC/MOT Certification. TTC/MOT Plans provided by the CONTRACTOR shall be approved by the COUNTY prior to the start of construction.

Temporary Traffic Control/Maintenance of Traffic Plan

The CONTRACTOR shall present his Temporary Traffic Control/Maintenance of Traffic (TTC/MOT) Plan prior to issuance of Notice to Proceed. The TTC/MOT Plan shall be in written form. The TTC/MOT plan shall include a minimum of four (4) full size sets of plan sheets which indicate the type and location of all signs, lights, barricades, striping, and barriers to be used for the safe passage of pedestrians and vehicular traffic through the project and for the protection of the workman. The plan will indicate conditions and setups for each phase of the CONTRACTOR'S activities. Asphalt tracking (adjacent to the project) will require the replacement of permanent striping off-site (thermoplastic or paint) to be included within this bid item.

In no case may the CONTRACTOR begin work until the TTC/MOT Plan has been approved in writing by the COUNTY. The CONTRACTOR needs to anticipate in their schedule that the OWNER needs to advertise, in the local newspaper, lane / roadway closures. . Modifications must also be approved in writing. Except in an emergency, no changes to the approved plan will be allowed until approval to change such plan has been received.

The cost of all work included in the TTC/MOT Plan is included in the pay item for Temporary Traffic Control/Maintenance of Traffic except where additional requirements that are clearly beyond those provided in the contract are apparent; then these will be paid as extra work. CONTRACTOR shall obtain written approval as specified in the Contract for any and all additional TTC/MOT work prior to performance of the additional work.

The CONTRACTOR shall be responsible for: performing daily inspections (including weekends and holidays with some inspections at nighttime) of the installations on the project and the replacement of all equipment and devices not conforming with the approved standards during that inspection. The project personnel will be advised of the schedule of these inspections and be given the opportunity to join in the inspection as is deemed necessary.

- D. The CONTRACTOR shall provide all TTC/MOT items as required for the performance of the Work. All barricades, signage and other TTC/MOT items shall be in accordance with the applicable FDOT Index Numbers (600 Series). The Manual on Uniform Traffic Control Devices for Streets and Highways shall be followed in the design, application, installation, maintenance, and removal of traffic control devices, warning devices, and barriers necessary to protect the public and workmen from hazards within the Project limits.
- E. The CONTRACTOR will provide flagmen for traffic control, whenever traffic conditions warrant such control or as required by the COUNTY. The cost of flagmen shall be included in the Contract Amount for TTC/MOT.

## 2.11 VIDEO TAPE OF EXISTING CONDITIONS

- A. The CONTRACTOR is required to videotape the project area prior to construction commencement and again upon project completion. CONTRACTOR shall provide a copy of the pre-construction videotape of the Project site to COUNTY for approval once complete and prior to issuance of Notice to Proceed. The videos shall be provided on a DVD/CD/Flash Drive.

The purpose of the audio-visual recording is to document the condition of the Project site prior to construction with attention focused on the existence of any faults, fractures, or

defects. Therefore, the recording shall be produced by a skilled videographer that is regularly engaged in the production of pre-construction recordings. The video recording shall be produced with sharp picture and accurate colors and shall be free of vibrations, distortion, or other significant picture imperfections; it shall be recorded during daylight hours and when the Project site is free of debris or obstructions. The pan rate, rate of travel, camera height, and zoom rate shall be maintained steady and clear at all times. The audio commentary shall be produced with proper volume and clarity and shall be free of distortion; it shall be simultaneously recorded with the video to assist the COUNTY with the orientation, location, identification, and description of the recorded features that are included in or adjacent to the Project site, which include, but are not limited to: (A) each side of the roadways; (B) sidewalks, bicycle paths, and other modes of transportation facilities; (C) buildings, walls, retaining walls, and seawalls; (D) elements of the stormwater management system, including ponds, culvert ends, and visible drainage structures; and (E) landscaping/trees, visible components of the irrigation system, and fencing.

#### 2.12 OWNERSHIP OF EXISTING MATERIALS

- A. All materials removed or excavated from the job site shall remain the property of the COUNTY until released by the COUNTY, at which time it shall become the property of the CONTRACTOR who shall legally dispose of it in a manner satisfactory to the COUNTY. Upon direction of the COUNTY, all suitable or unsuitable excavation, vegetation, debris, concrete or other materials shall be disposed of in areas provided by the CONTRACTOR, and approved by the COUNTY.

#### 2.13 RESPONSIBILITY FOR MATERIALS

- A. The CONTRACTOR shall be held responsible for any materials, equipment and work to the full amount of all payments made thereon, and he will be required to make good at his own cost any injury or damage which said material, equipment or work may sustain from any unforeseen obstructions or difficulties which may be encountered, or from any source or cause whatsoever, or from any action of the elements, before final acceptance thereof. No payment will be allowed for materials stored on-site prior to installation.

#### 2.14 DEMOLITION

- A. CONTRACTOR shall maintain the project site in a safe, clean, and neat condition. All demolition material shall be removed from the site within 72 hours of demolition or placed within the fenced locked storage area. No undesirable accumulation of debris or materials shall be allowed. All excess material (pipe/catch basin/mitered end section/headwall/manhole) left on-site will be removed and properly disposed of by the CONTRACTOR. This work will be included under clearing and grubbing.

#### 2.15 ORDER AND DIRECTION OF WORK

- A. The work to be done under this Contract shall be under the general inspection of the COUNTY. The sequence of construction shall be subject to the approval of the COUNTY. At his discretion, the COUNTY may, from time to time, direct the order in which and points at which the work shall be prosecuted; and may exercise such control over the conduct of the work at any time or place that shall be required, in his opinion, to safeguard the interest of the COUNTY and/or the public health and safety. No work shall be carried on or constructed except by specific consent of the COUNTY, unless in the presence of an inspector will not be estimated or paid for except when such work is authorized to be done in such a manner by the COUNTY. Work done without such authority may be ordered removed and replaced at the CONTRACTOR'S expense.

2.16 TREE PROTECTION

- A. CONTRACTOR is to provide Tree Protection in accordance with the Contract Drawings and the Martin County Code requirements. This item is incidental to the cost of project construction. Specifically, all palm trees (sabal, coconut, etc.) located within the area of disturbance are to be protected in place. If it is not possible for a particular palm tree to be protected in, then this tree is to be removed and placed in a protected area, maintained and watered, and replanted back once construction activities allow. The CONTRACTOR shall coordinate with COUNTY prior to removal of any palm trees within the work area.

2.17 MOBILIZATION

- A. The CONTRACTOR shall perform preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, and sanitary and other facilities. Include the costs of bonds and any required insurance and any other pre-construction expense necessary for the start of the work, including the cost of construction materials and services purchased between the Notice to Proceed and the first Pay Request. The pay item for Mobilization shall also include de-mobilization and site clean up upon project completion.

2.18 SOD

- A. The CONTRACTOR is solely responsible for final acceptability of all sodded areas. All associated costs are included in the unit price of the sod. For issues not discussed in these specifications the CONTRACTOR is referred to Sections 575, 981, 982 and 983 of the FDOT Standard Specification for Road and Bridge Construction.
- B. Type
  - a. Sod shall be locally grown Bahia type unless otherwise specified to conform to surrounding existing turf and shall be healthy, with well-matted roots, be free of weeds and be supplier certified to be free of Tropical Soda Apple (*solanum viarum*).
- C. Dimensions
  - a. Sod pieces shall be 1.33 ft x 2 ft and a minimum of 1 ¼ inches thick. ¾ inch of the sod thickness shall be roots and topsoil.
- D. Placement.
  - a. Sod shall be laid with the long side parallel to contours (perpendicular to the slope with the ends of the pieces butted together. Placement of sod shall proceed in this manner up the slope and end butts shall be staggered with adjoining rows.
  - b. The combined number of overlaps and 1 inch or greater gaps between pieces shall not exceed 5 per 100 square feet.
  - c. The combined number of 2 inch or greater overlaps and 2 inch or greater gaps between pieces shall not exceed 1 per 100 square feet.
  - d. For final acceptance no more than 10% of the sodded area may consist of dead spots of greater than ½ foot square and no more than 5% of the sodded area shall consist of dead spots of greater than 1 foot square.
- E. Watering
  - a. Sod shall be watered with ½ inch of water immediately upon placement. In the following three weeks sod shall be watered with the greater of ½ inch of water 2 – 3 times weekly or the amount of water required to maintain moist conditions in the soil to



a depth of 6 inches beneath the sod. After 3 weeks the sod shall be watered with the greater of 1/4 inch of water 2 – 3 times weekly or the amount of water required to maintain moist conditions in the soil to a depth of 4 inches beneath the sod.

- b. In the event that the specified watering results in the moisture condition drier than those specified above, the CONTRACTOR may place straw mulch which is free of any noxious weed and in particular Tropical Soda Apple in an open uniform layer of 1 – 2 inches thickness to assist in moisture retention.

#### 2.19 GRASSING OPERATIONS

- A. All unpaved disturbed areas shall be treated with vegetation. Retention ponds and other retention/detention areas shall be sodded from 2' below the control elevation to the top of bank and beyond the top of bank at all disturbed ground around the pond. Sod shall be Bahia sod.
- B. The Base Bid includes the installation of Bahia sod at all disturbed areas within the right of way and project limits.

#### 2.20 UTILITIES

- A. Utility Adjustments - This item shall include all necessary coordination, materials and construction, including valve adjustments, to relocate the existing utilities as depicted within the plans. It may be required to maintain service to the mains during the relocation.

#### 2.21 SIDEWALKS

- A. Fiber-reinforced concrete for curbs and sidewalks shall have a minimum compressive strength of 3,000 psi at 28 days with a water to cement ration not more than 0.53 (lb/lb), per Martin County Standard Details R-41 and R-42.
- B. Compact subgrade to 98% of the maximum density as determined by AASHTO T-99.

#### 2.22 PAVEMENT MARKINGS

- A. The CONTRACTOR shall install thermoplastic pavement markings as per the contract documents (edge stripes, centerline stripes, crosswalks, pavement arrows and messages and stop bars). In addition, CONTRACTOR shall install reflective pavement markings (RPM's) in accordance with the contract documents and Section 706 of the Florida Department of Transportation Specifications for Road and Bridge Construction. Painted markings shall be placed as soon as allowed after pavement has been completed, in accordance with the FDOT Standard Specifications. The cost of temporary painted pavement markings is included in the unit cost for thermoplastic pavement markings.

#### 2.23 EXISTING IRRIGATION SYSTEMS

- A. The CONTRACTOR shall review all areas to be disturbed by construction, prior to beginning construction and provide abutting property owners a seven (7) days notice to relocate landscape and irrigation. The CONTRACTOR shall repair irrigation damaged systems by his work. Prior to construction, the COUNTY, CONTRACTOR and property owners will review the existing irrigation systems. The CONTRACTOR will only be allowed to work within the limits of construction, the COUNTY Easements or Rights-of-way. Any disturbance to vegetation or irrigation outside of the Limits of Easements or Rights-of-way will be at the CONTRACTOR'S expense.

#### 2.24 RIP RAP (BANK & SHORE / CONSTRUCTION MAT)

- A. The work specified shall consist of the construction of riprap, rubble to be used as a construction mat for heavy machinery access to the seawall within the Indian River Lagoon as depicted in the plans. Concrete block is not acceptable for use. The work effort shall be

in accordance with Section 530 of the FDOT Standard Specifications. The cost of this item shall include filter fabric in accordance with Section 514 and Section 985 of the FDOT Standard Specifications. The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the COUNTY. Price and payment will be full compensation for all work specified in this Section, including all materials and hauling. Include the cost of dressing and shaping the existing fills (or subgrade) for placing riprap in the Contract unit price for riprap. Construction shall be per the detail included in the plan documents, and shall include cost of bedding stone and filter fabric. Payment shall be made under RIP RAP per ton.

2.25 RIP RAP (RELOCATE FROM CONSTRUCTION MAT)

- A. The work specified shall consist of the relocation of riprap, rubble used as the Construction Mat to be used drainage slope protection and seawall protection as depicted in the plans after the proposed seawall has been installed. Concrete block is not acceptable for use. The work effort shall be in accordance with Section 530 of the FDOT Standard Specifications. The cost of this item shall include filter fabric in accordance with Section 514 and Section 985 of the FDOT Standard Specifications. The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the COUNTY. Price and payment will be full compensation for all work specified in this Section, including all materials and hauling. Include the cost of dressing and shaping the existing fills (or subgrade) for placing riprap in the Contract unit price for riprap. Construction shall be per the detail included in the plan documents, and shall include cost of bedding stone and filter fabric. Payment shall be made under RIP RAP per ton.

2.26 #57 STONE / FRENCH DRAIN

- A. The work specified shall consist of the construction of a French drain located between the proposed seawall and existing seawall to be installed after seawall construction complete. The cost of this item shall include filter fabric in accordance with Section 514 and Section 985 of the FDOT Standard Specifications. The quantities to be paid under this paragraph shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price for the specific item with no additional cost to be incurred by the COUNTY. Price and payment will be full compensation for all work specified in this Section, including all materials and hauling. Include the cost of dressing and shaping the existing fills (or subgrade) for placing #57 stone in the Contract unit price for #57 stone (French Drain). Construction shall be per the detail included in the plan documents, and shall include cost of #57 stone and filter fabric. Payment shall be made under #57 stone (French Drain) per ton.

2.27 8" CONCRETE WALL (CLASS II)

- A. The work specified under this section shall include the installation of an 8" Reinforced Concrete Wall on top of the sheet pile cap to allow for desired grading. All reinforced concrete wall components shall meet the requirements of FDOT Section 346. All reinforcing steel shall meet the requirements of FDOT Section 931. Provide selected backfill or coarse aggregate backfill within retaining wall and contraction joints as referenced on structural plans S-1. Payment shall be made under 8" Concrete Wall (Class II) measured in cubic yards.

## 2.28 HELICAL ANCHORS

- A. The work specified under this section shall include the excavation, installation, and backfilling of proposed helical anchors to be installed on the existing and proposed seawalls (See construction plans and Structural Plans). Helical anchors to be installed on the existing seawall as structural support during construction shall be a minimum embedment of 14' while helical anchors on the proposed seawall to be a minimum embedment of 16'. All helical anchors to use HP288 shaft with a 10/12/14 helical plate arrangement with 3/8" thick grade 50 steel installed at 3H :1V designed for a 20 KIP capacity with 20 KIP allowable stress. Payment shall be made under Helical Anchors 14' Min. Embedment (Existing Wall Support) & Helical Anchors 16' Min. Embedment (Proposed Wall Support) measured by each support.

## 2.29 SHEET PILING / CAP

- A. Proposed Sheet Piling is PZ-22 Hot Rolled Steel Sheet Pile. All sheet piling shall be manufactured entirely from steel that meets or exceeds the characteristics listed in this specification. All sheet piling shall be wholly and completely manufactured in an ISO certified production facility.
- B. Alternate products or manufacturers may be used, provided they have products in service for applications similar in scope and function to this project that meet or exceed all the performance requirements of this specification.
- C. Alternate manufacturers shall provide no less than five (5) references for projects similar in scope and function and which have been in service for no less than one (1) year, which shall include the following:
- D. Detailed project description & location  
Completion Date  
Name and address of owner
- E. Alternate manufacturers must submit all documentation (references, spec sheets, ISO certificates, etc.) and one (1) physical sample for each product requested for approval no less than ten (10) days prior to bid.
- F. Installation shall be performed by the manufacturer's recommendations. The contractor should coordinate with the supplier to ensure proper installation.
- G. The Sheet Pile Cap shall be reinforced concrete cast in place. The alignment of the sheet pile and cap shall be installed true to the lines and grades given. Ensure that the horizontal tolerances of the sheet pile CAP shall not exceed more than 1 inch when measured with a 50' string line. CONTRACTOR will not be compensated for installation or removal of sheet piling or CAP that does not comply with this specification.

## 2.30 MISC. CONCRETE WALKWAY

- A. Misc. Concrete Walkway shall be measured in cubic yards of actual concrete walkway constructed. The work specified under this section shall include the removal and replacement of existing concrete walkway sections as needed to accommodate the boardwalk replacement. Work shall include, but not be limited to, saw cutting, excavation, hauling and disposal of debris, formwork, grade leveling and compaction, reinforcement, concrete testing, and any other items required for a complete and functional walkway. Payment for this item shall be made under the corresponding bid item found in the Schedule of Contract Values, measured by cubic yards.

2.31 REMOVE AND REPLACE EXISTING BOARDWALK AND RAILINGS (PILINGS TO REMAIN)

A. The work specified under this section shall include the complete removal and replacement of the existing boardwalk structure, decking, and railings (pilings to remain). The removal of the existing boardwalk structure and railings shall include, but is not limited to, the removal and proper disposal of all existing boardwalk structural elements (not including pilings), decking, railing, hardware, and other associated materials necessary to construct the new boardwalk and railings in its place. The replacement of the existing boardwalk structure and railings shall include, but is not limited to the construction of all proposed boardwalk structural elements (beams, joists, stringers, etc.), boardwalk surface decking, boardwalk railing, required fasteners and hardware, and all other materials necessary to construct the new boardwalk structure and railings. All sub-deck structural lumber shall be CCA pressure treated Grade #2 lumber. All boardwalk decking and railing, unless otherwise noted on plans, shall be solid wood IPE select and better hardwood S4S with eased edges. All hardware and/or fasteners, unless otherwise noted, shall be marine grade 316 stainless steel. In addition to the main structural elements of the boardwalk, there is an existing run of safety lighting which is affixed to the existing boardwalk railing. It is inclusive of this item to remove this existing lighting and include new safety lighting as part of the new boardwalk construction. Payment for this item shall be made as lump sum under the corresponding bid item found in the Schedule of Contract Values.

2.32 TREE RELOCATION/PRESERVATION AND TREE REPLANTING

A. The work specified under this section shall include the relocation/preservation and replanting of all palm trees located within the area of disturbance where tree protection is not possible. The work associated with tree relocation/preservation and tree replanting shall include, but is not limited to, the proper tree/root preparation for removal, removal and transporting of tree, planting (staking, guying, etc.), and proper preservation and maintenance (watering) of tree to ensure sustainability. The COUNTY will provide the CONTRACTOR with an area to place these trees. Prior to project completion, these palm trees shall be replanted in their original locations. Payment for this item shall be made under the corresponding bid item found in the Schedule of Contract Values, measured by each palm tree relocated and replanted.

2.33 PIPE CULVERTS

A. The work specified under this section shall be in accordance with section 430 of the FDOT Standard Specifications and shall include all materials, labor, and equipment needed to prosecute the work required by this specification and will be paid for at the contract unit bid price or the specific item with no additional cost to be incurred by the TOWN. Payment shall be made under the corresponding bid item found in the Schedule of Contract Values, per linear foot.

2.34 UTILITY RELOCATION/COORDINATION

A. The CONTRACTOR is responsible for all the coordination associated with utility relocations.

2.35 GENERAL CLARIFICATIONS

A. The existing grade elevations and utility locations as depicted on the Contract Drawings are not to be construed as absolute. Should the CONTRACTOR notice any discrepancies between the drawings and the existing conditions, the CONTRACTOR shall advise the COUNTY, in writing, of the discrepancies observed, prior to starting the construction activities affecting the discrepancies.

- B. Maintenance and dust abatement of all areas of Work provide by the CONTRACTOR shall be done in a manner acceptable to the COUNTY.
- C. The CONTRACTOR shall be responsible for safely barricading open excavations which may present hazards.
- D. All existing conditions off the immediate Project site which are disturbed due to the CONTRACTOR'S activities shall be repaired to pre-construction condition.
- E. The CONTRACTOR'S attention is directed to the fact that there are existing underground utilities located within and adjacent to the limits of construction. The CONTRACTOR shall be required to coordinate its operations with these existing facilities and shall provide all means necessary to protect these facilities during construction.
- F. The CONTRACTOR shall be responsible for securing all tools, equipment and material at the job site.

2.36 WORK HOURS

- A. Normal work hours shall be limited to 7 AM to 7 PM, Monday through Friday. Any work performed outside those hours shall be approved by the COUNTY.
- B. All night work shall be requested in writing a minimum of 48 hours in advance. A minimum of 10-foot candles of temporary lighting shall be provided in all areas where night work is being performed. No night work shall be performed without the approval of the COUNTY.
- C. All work proposed on Saturdays or Sundays shall be requested in writing a minimum of 48 hours in advance.
- D. The CONTRCATOR shall be responsible for all COUNTY personnel fees and/or COUNTY Quality Assurance/Quality Control consultant fees associated with overtime work or work outside normal business hours. Such work includes requested work at night, on Saturdays, and/or on Sundays. The COUNTY shall provide the fees upon the CONTRCATOR's written request prior to commence of work. The fees shall be reduced from the Contract Price via Change Order.

END OF SECTION 01010

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01310  
PROJECT MANAGEMENT & COORDINATION**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
1. General Project coordination procedures.
  2. Coordination Drawings.
  3. Project meetings.

The costs for Project Management and Coordination, including general coordination, administrative procedures, submittals, schedules and scheduling, and all other Project Management tasks and activities are incidental to the other unit price project costs and shall not be paid for separately.

**1.2 COORDINATION**

- A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, which depend on each other for proper installation, connection, and operation.
1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
- B. If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
1. Preparation of Contractor's Construction Schedule.
  2. Preparation of the Schedule of Values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals including submittal log.
  5. Delivery and processing of Request for Information (RFI), including RFI log.
  6. Preparation of daily reports
  7. Progress meetings.

8. Pre-installation conferences.
9. Project closeout activities.

### 1.3 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
1. Indicate relationship of components shown on separate Shop Drawings.
  2. Indicate required installation sequences.

### 1.4 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and COUNTY of scheduled meeting dates and times 1 week in advance.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and COUNTY, within three (3) days of the meeting.
- B. Pre-construction Conference: Schedule a pre-construction conference before starting construction, at a time convenient to Owner and COUNTY, but no later than fifteen (15) days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Attendees: Authorized representatives of Owner, COUNTY, and their consultants; Contractor and its superintendent; major subcontractors; manufacturers; suppliers; utility companies, permitting agency representatives, and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Phasing.
    - c. Critical work sequencing.
    - d. Designation of responsible personnel.
    - e. Procedures for processing Field Orders and Change Orders.
    - f. Procedures for processing of Requests for Proposal (RFP).
    - g. Procedures for processing of Change Order Request (COR).
    - h. Procedures for processing of Request for Information (RFI).
    - i. Procedures for processing Applications for Payment.
    - j. Distribution of the Contract Documents.
    - k. Submittal procedures.
    - l. Progress Meetings schedule.
    - m. Communication process.
    - n. Preparation of Record Documents.
    - o. Use of the premises.

- p. Responsibility for temporary facilities and controls.
  - q. Parking availability.
  - r. Office, work, and storage areas.
  - s. Equipment deliveries and priorities.
  - t. First aid.
  - u. Security.
  - v. Progress cleaning.
  - w. Working hours.
- C. Pre-installation Conferences: Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction.
- D. Progress Meetings: Conduct progress meetings as required with a minimum of regular two week intervals. Coordinate dates of meetings with preparation of payment requests.
1. Attendees: In addition to representatives of Owner and COUNTY, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Review present and future needs of each entity present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals (review of submittal log).
      - 4) Status of Requests for Information (review of RFI log).
      - 5) Status of Requests for Proposal (review of RFP log).
      - 6) Deliveries.
      - 7) Off-site fabrication.
      - 8) Access.
      - 9) Site utilization.
      - 10) Temporary facilities and controls.
      - 11) Work hours.
      - 12) Hazards and risks.
      - 13) Progress cleaning.
      - 14) Quality and work standards.
      - 15) Change Orders.
      - 16) Documentation of information for payment requests.
      - 17) Environmental goals and procedures.



3. Reporting: Distribute minutes within five (5) days of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meetings.

END OF SECTION 01310

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01320  
CONSTRUCTION PROGRESS DOCUMENTATION**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
1. Contractor's Construction Schedule.
  2. Submittals Schedule.
  3. Daily construction reports.
  4. Field condition reports.

The costs for Project Management and Construction Progress Documentation, including general coordination, administrative procedures, submittals, schedules and scheduling, and all other Project Management tasks and activities are incidental to the other unit price project costs and shall not be paid for separately.

**1.2 DEFINITIONS**

- A. Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- B. Retain definitions in first paragraph and subparagraph below for most projects. Designating ownership of float can save arguments later. See Evaluations.
- C. Float: The measure of leeway in starting and completing an activity.
1. Float time belongs to Owner.
- D. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- E. Major Area: A construction phase, component area, or a similar significant construction element.

**1.3 SUBMITTALS**

- A. The Contractor shall prepare and submit a computer-based CPM Schedule for the project. The CPM schedule software shall be recognized computer schedule software such as Primavera P6, Primavera SureTrak or Microsoft Project.
- B. Submittals Schedule: Submit three (3) copies of schedule. Arrange the following information in a tabular format:
1. Scheduled date for first submittal.

2. Specification Section number and title.
  3. Submittal category (action or informational).
  4. Name of subcontractor.
  5. Description of the Work covered.
  6. Scheduled date for COUNTY's final release or approval.
- C. Contractor's Construction Schedule: Submit two (2) printed copies of initial schedule, one electronic copy, and one a blue- or black-line print, large enough to show entire schedule for entire construction period.
- D. CPM Reports: Concurrent with CPM schedule, submit two (2) printed copies of each of the following computer-generated reports. Format for each activity in reports shall contain activity number, activity description, original duration, remaining duration, early start date, early finish date, late start date, late finish date, and total float.
1. Activity Report: List of all activities sorted by activity number and then early start date, or actual start date if known.
  2. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then early start date, or actual start date if known.
  3. Total Float Report: List of all activities sorted in ascending order of total float.
- E. Daily Construction Reports: Submit one copy at weekly intervals.
- F. Field Condition Reports: Submit two (2) copies at time of discovery of differing conditions.
- G. Material Safety Data Sheets: Submit two (2) copies including V.O.C. concentrations as necessary.

#### 1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
1. Secure time commitments for performing critical elements of the Work from parties involved.
  2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

### PART 2 - PRODUCTS

#### 2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Project Schedule.

2. Submit concurrently with the first complete submittal of the Project Schedule.

## 2.2 PROJECT SCHEDULE

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each separate work area as a separate numbered activity for each principal element of the Work. Comply with the following: Revise first subparagraph below to suit Project. Long activity durations provide less detail and, therefore, less information with which to manage a project. As an alternative to specifying activity duration, indicate minimum and maximum number of activities, which will result in a similar effect.
1. Activity Duration: Define activities so no activity is longer than **30** calendar days, unless specifically allowed by COUNTY.
  2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
  3. Submittal Review Time: Include review and resubmittal activities in the schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
  4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for County's administrative procedures necessary for certification of Substantial Completion.
- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected. Delete subparagraphs below not applicable.
1. Phasing: Arrange list of activities on schedule by phase.
  2. Work under More Than One Contract: Include a separate activity for each contract.
  3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
  4. Work Restrictions: Show the effect on the schedule of the following:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Use of premises restrictions.
    - e. Provisions for future construction.
    - f. Seasonal variations.
    - g. Environmental control.
  5. Work Stages: Indicate important stages of construction for each major portion of the Work.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Interim Milestone Activities, Substantial Completion, and Final Completion.

- E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragments to demonstrate the effect of the proposed change on the overall project schedule.

## 2.3 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording events at Project site, including the following:
  - 1. List of subcontractors, and related manpower counts.
  - 2. High and low temperatures and general weather conditions.
  - 3. Accidents.
  - 4. List of Work Activities Started, Completed, and/or worked on.
  - 5. Stoppages, delays, shortages, and losses.
  - 6. Meter readings and similar recordings.
  - 7. Orders and requests of authorities having jurisdiction.
  - 8. Services connected and disconnected.
  - 9. Equipment or system tests and startups.
  - 10. Inspections/results.
  - 11. Deliveries of significant materials or equipment.
- B. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

## PART 3 - EXECUTION

### 3.1 PROJECT SCHEDULE

- A. Project Schedule Updating: At **monthly** intervals with each progress payment, update schedule to reflect actual construction progress and activities.
  - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the progress payment request.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to County, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
  - 1. Post copies in Project meeting rooms and temporary field offices.
  - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01320

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01400  
QUALITY REQUIREMENTS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.

The cost of the CONTRACTOR'S time, effort, and facilities to assist in testing and inspection services for Quality Control and Quality Assurance are incidental to the other unit price project costs and shall not be paid for separately.

- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve CONTRACTOR of responsibility for compliance with the Contract Document requirements.

- 1. Specified tests, inspections, and related actions do not limit CONTRACTOR'S quality-control procedures that facilitate compliance with the Contract Document requirements.
- 2. Requirements for CONTRACTOR to provide quality-control services required by Owner, or authorities having jurisdiction are not limited by provisions of this Section.

- C. Except as otherwise provided, sampling, disinfecting and testing of all materials, and the laboratory methods and testing equipment required under these specifications shall be in accordance with the latest standards of the Florida Department of Transportation (FDOT), the American Society for Testing Materials or the latest standards or methods of the American Association of State Highway Transportation Officials (AASHTO), the Florida Department of Environmental Protection (FDEP), Martin COUNTY Utilities (MCU), the City of Stuart Utility Department, and American Water Works Association (AWWA). The quantities of required tests and the testing frequency shall be in accordance with the FDOT Sampling, Testing and Reporting Guidelines and the FDOT Standard Specification for Roadway and Bridge Construction, and the requirements of MCU and/or the City of Stuart Utility Department.

**1.2 DEFINITIONS**

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by COUNTY.
- C. Mockups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects

and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples.

- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

### 1.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of CONTRACTOR by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
  - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to the COUNTY.

### 1.4 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to CONTRACTOR to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.
- C. Reports: Prepare and submit certified written reports that include the following:
  - 1. Date of issue.
  - 2. Project title and number.
  - 3. Name, address, and telephone number of testing agency.
  - 4. Dates and locations of samples and tests or inspections.
  - 5. Names of individuals making tests and inspections.
  - 6. Description of the Work and test and inspection method.
  - 7. Identification of product and Specification Section.
  - 8. Complete test or inspection data.
  - 9. Test and inspection results and an interpretation of test results.
  - 10. Ambient conditions at time of sample taking and testing and inspecting.
  - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
  - 12. Name and signature of laboratory inspector.
  - 13. Recommendations on retesting and re-inspecting.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.



## 1.5 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- C. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance. Install, where required by manufacturer in order to obtain the specified warranty, must employ workers trained and approved by manufacturer, or authorized representative of manufacturer.
- D. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities that are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
  - 1. Requirement for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade-union jurisdictional settlements and similar conventions.
- G. Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.
- H. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
  - 1. Build mockups in location and of size indicated or, if not indicated, as directed by COUNTY.
  - 2. Notify the COUNTY seven days in advance of dates and times when mockups will be constructed.
  - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
  - 4. Obtain COUNTY'S approval of mockups before starting work, fabrication, or construction.
  - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
  - 6. Demolish and remove mockups when directed, unless otherwise indicated.

## 1.6 QUALITY CONTROL

- A. Owner Responsibilities: Owner will engage a qualified testing agency to perform Quality Control Testing at the project site. Owner will also engage a qualified Construction Engineering and Inspection Engineer (CEI) or will provide COUNTY CEI staff to perform inspections and administration of the Work.
1. Owner will furnish CONTRACTOR with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
  2. Owner's testing agency testing shall be limited to the on-site field testing and laboratory testing of field samples obtained from the Work, as noted herein. Owner's testing agency testing will include testing of soils (except soil testing for landscaping, if applicable), stabilized subgrade, base course materials, asphalt materials, and concrete. Off-site QC/QA testing by for products and materials, except for the materials noted above, shall be provided by the CONTRACTOR at the CONTRACTOR'S expense.
  3. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to CONTRACTOR, and the Contract Sum will be adjusted by Change Order.
  4. The CONTRACTOR shall be responsible for all costs to set up and perform pressure tests, disinfection, disinfection tests and all other tests and procedures for water main adjustments and construction. The COUNTY will provide inspection by the CEI Engineer and/or Engineer of Record, as applicable.
- B. CONTRACTOR Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
1. Where services are indicated as CONTRACTOR'S responsibility, engage a qualified testing agency to perform these quality-control services.
    - a. CONTRACTOR shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
  2. Notify testing agencies at least **24** hours in advance of time when Work that requires testing or inspecting will be performed. The CONTRACTOR shall be solely responsible for coordinating and scheduling the activities of the testing agencies to conform with the CONTRACTOR'S work schedule.
  3. The CONTRACTOR and the CEI firm will be jointly responsible for coordinating and scheduling inspections of the Work to conform with the CONTRACTOR'S Work schedule.
  4. Where quality-control services are indicated as CONTRACTOR'S responsibility, submit a certified written report, in duplicate, of each quality-control service.
  5. Testing and inspecting requested by CONTRACTOR and not required by the Contract Documents are CONTRACTOR'S responsibility.
  6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Special Tests and Inspections: CONTRACTOR will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of CONTRACTOR.

1. Testing agency will notify the COUNTY and CONTRACTOR promptly of irregularities and deficiencies observed in the Work during performance of its services.
  2. Testing agency will submit a certified written report of each test, inspection, and similar quality-control service to COUNTY with copy to CONTRACTOR and to authorities having jurisdiction.
  3. Testing agency will submit a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
  4. Testing agency will interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
  5. Testing agency will retest and reinspect corrected work.
- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- E. Retesting/Reinspecting: Regardless of whether original tests or inspections were CONTRACTOR'S responsibility, provide quality-control services, including retesting and re-inspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with COUNTY and CONTRACTOR in performance of duties. Provide qualified personnel to perform required tests and inspections.
1. Notify COUNTY and CONTRACTOR promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
  3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through CONTRACTOR.
  4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
  5. Do not perform any duties of CONTRACTOR.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
1. Access to the Work.
  2. Incidental labor and facilities necessary to facilitate tests and inspections.
  3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
  4. Facilities for storage and field-curing of test samples.
  5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
  6. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

## PART 2 - EXECUTION

### 2.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are CONTRACTOR'S responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01400

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01500  
TEMPORARY FACILITIES AND CONTROLS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. This Section includes general procedural requirements governing Temporary Facilities and Controls including, but not limited to, the following:
  - 1. Temporary utilities.
  - 2. Support facilities.
  - 3. Security and protection facilities.
  - 4. Construction cleaning.

**1.2 USE CHARGES**

- A. General: Cost or use charges for temporary facilities and utilities are not chargeable to Owner or Engineer and shall be included in the Contract Sum through the date of substantial completion. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Engineer, testing and inspecting agencies, and personnel of authorities having jurisdiction.

**1.3 QUALITY ASSURANCE**

- A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

**1.4 PROJECT CONDITIONS**

- A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service, as applicable. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work: Keep temporary services and facilities clean and neat. Relocate temporary services and facilities as required by progress of the Work.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by the County. Provide materials suitable for use intended.
- B. Temporary Pavement: Comply with FDOT requirements, MOT Plans and the Contract Documents.
- C. Temporary Chain-Link Fencing: Minimum 2-inch (50-mm) 9-gage, galvanized steel, chain-link fabric fencing; minimum 6 feet (1.8m) high with galvanized steel pipe post; minimum 2-3/8-inch (60-mm) OD line post and 2-7/8-inch (73-mm) OD corner and pull posts, with 1-5/8-inch (42-mm) OD top rails, and bottom tension wire.
- D. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less.
- E. Paint: Comply with requirements of FDOT Standard Specification for Road and Bridge Construction
- F. Water: Potable.

### 2.2 EQUIPMENT

- A. Field Offices: Prefabricated, mobile units, or job-built construction with lockable entrances, operable windows, and serviceable finishes; heated and air conditioned; on foundations adequate for normal loading. **A Contractor Field office is not required for the project** but may be provided for the convenience of the Contractor at no cost to the County. The Contractor shall be responsible for obtaining all building permits and all costs and fees associated with the Contractor's field office.
- B. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
  - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
- D. Drinking-Water Fixtures: Containerized, tap-dispenser, bottled-water, drinking-water units, including paper cup supply.
- E. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- F. Power Distribution System Circuits: Provide temporary wiring complying with electrical code requirements. Remove all temporary wiring upon completion of the work. If applicable, provide

area power distribution boxes located so that trades can access power with 100' long extension cords. The Contractor is responsible for all temporary electric power costs.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required. A Contractor Field office is not required for the project but may be provided for the convenience of the Contractor at no cost to the County.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Engage appropriate local utility company to install temporary service or connect to existing service. Where utility company provides only part of the service, provide the remainder with matching, compatible materials and equipment. Comply with utility company requirements
  - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
  - 2. Provide adequate capacity at each stage of construction. Before temporary utility is available, provide trucked-in services.
  - 3. Obtain easements to bring temporary utilities to Project site where Owner's easements cannot be used for that purpose.
- B. Sewers and Drainage (Temporary Field Office): If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available provide containers to remove and dispose of effluent off-site in a lawful manner.
- C. Water Service (Temporary Field Office): Install water service and distribution piping in sizes and pressures adequate for construction. Sterilize temporary water piping before use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
  - 1. Toilets: Use of Owner's existing toilet facilities will not be permitted.
  - 2. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy.
- E. Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload-protected disconnecting means, automatic ground-fault interrupters, and main distribution switchgear.
  - 1. Install electric power service underground, unless overhead service must be used.

- F. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
- H. Telephone Service: Provide temporary telephone/fax and internet service throughout construction period for common-use facilities used by all personnel engaged in construction activities. Install separate telephone line for each field office and first-aid station.

### 3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
  - 1. Locate field offices, storage sheds, sanitary facilities, and other temporary construction and support facilities for easy access.
  - 2. Provide incombustible construction for offices, shops, and sheds located within construction area. Comply with NFPA 241.
  - 3. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate to support loads and to withstand exposure to traffic during construction period. Extend temporary roads and paved areas, within construction limits indicated, as necessary for construction operations.
  - 1. Coordinate elevations of temporary roads and paved areas with permanent roads and paved areas.
  - 2. Prepare subgrade and install subbase and base for temporary roads and paved areas according to FDOT Specifications.
- C. Dewatering Facilities and Drains: Comply with requirements in applicable Divisions and Sections of the FDOT Standard Specification for Road and Bridge Construction for temporary drainage and dewatering facilities. Maintain Project site, excavations, and construction free of water. The County has obtained a SFWMD Water Use/Dewatering Permit for the project. The Contractor shall obtain all required Dewatering Permit Modifications needed for the work from the SFWMD or other agency. All costs and fees, including all engineering costs for Modifications to the SFWMD Water Use/Dewatering Permit to accommodate the Contractor's means and methods are the responsibility of the Contractor. The Contractor shall submit a Dewatering Plan to the County for approval prior to the start of dewatering work. The Dewatering Plan shall show the location of excavations, pump types and sizes, wellpoint layouts, the location of pump discharge points, etc. The Dewatering Plan shall include a narrative section that describes the measures to be used in conjunction with the dewatering operation to manage erosion and turbidity that could result from the dewatering operation. The dewatering is incidental to the construction of each bid item that requires dewatering for proper installation. All dewatering discharge water must be maintained on site in accordance with the requirements of the SFWMD Construction Dewatering Permit.



- D. Project Identification and Temporary Signs: Prepare Project identification and other signs in sizes indicated. Install signs where indicated to inform public and persons seeking entrance to Project. Do not permit installation of unauthorized signs.
  - 1. Prepare temporary signs to provide directional information to construction personnel and visitors.
- E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste.
  - 1. If a vendor is utilized for the handling of waste, Contractor shall provide proof that such materials are collected and conveyed by an entity holding a Martin County franchise.
- F. Common-Use Field Office: None Required.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects. Avoid using tools and equipment that produce harmful noise. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms near Project site.
- B. Site Enclosure Fence – Not Used
- C. Temporary Enclosures – Not Used
- D. Temporary Partitions – Not Used
- E. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with OSHA requirements and the requirements of the local Fire Department Fire Marshall.

### 3.5 CONSTRUCTION CLEANING

- A. Daily clean and maintain the work, site and adjacent properties to be free of rubbish, debris, and accumulations of waste materials resulting from construction operations. Legally dispose of waste materials, rubbish, and debris off-site.
- B. Do not allow rubbish, debris, and waste materials to accumulate and cause hazardous and unsightly conditions. Provide on-site dumpster containers for collection and removal.
- C. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris.
- D. Sprinkle dusty debris with water.

- E. Provide all demolition, removal and disposal off the project site, of existing asphalt and/or concrete paving, storm drainage piping and structures, utility piping, and any other miscellaneous items as noted in the Contract Drawings or as required for the performance of the Work. All debris resulting from demolition of existing improvements and conditions shall be legally disposed of off the project site at the Contractor's cost.

### 3.6 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.
  - 1. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  - 1. Materials and facilities that constitute temporary facilities are the property of Contractor. Owner reserves right to take possession of Project identification signs.
  - 2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements in Division 1 Section "Closeout Procedures."

END OF SECTION 01500

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01700  
EXECUTION REQUIREMENTS**

1.1 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
1. Construction layout.
  2. Field engineering and surveying.
  3. Record Drawings/As-Built Drawings.
  4. Starting and adjusting.
  5. Protection of installed construction.
  6. Correction of the Work.

Refer to Specification Section 01771 for additional requirements associated with Surveying and Field Engineering.

1.2 SUBMITTALS

- A. Certificates: Prior to submitting the Final Payment Invoice, submit certificate signed by the Contractor's Authorized Representative certifying that: "The Project has been constructed in accordance with the Contract Documents and the applicable permitting agency criteria".
- B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- C. Certified Surveys: Submit three (3) copies of certified As-Built/Record Construction Surveys signed and sealed by a Licensed Professional Surveyor & Mapper.

1.3 QUALITY ASSURANCE

- A. Surveyor Qualifications: A Professional Surveyor and Mapper who is qualified to practice in the jurisdiction where the Project is located and who is experienced in providing land surveying services of the kind indicated.

1.4 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of water, sewer, communication and electrical systems and other construction affecting the Work.
1. Before construction, verify the location and points of connection of utility services.

- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
  - 1. Furnish location data for work related to the Project that must be performed by public utilities serving Project site. The Contractor is responsible for obtaining and updating utility locates for existing utility systems on and abutting the project site. The Contractor is responsible for contacting CALL SUNSHINE at 800-432-4770 for utility locates in accordance with Florida Laws.
- C. Acceptance of Conditions: Examine areas and conditions for compliance with requirements for installation tolerances and other conditions affecting performance and record the observations.
  - 1. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

## 1.5 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Owner not less than five (5) days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Owner's written permission.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately upon discovery of the need for clarification of the Contract Documents, submit a request for information to Owner. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

## 1.6 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to layout the Work, verify layout information shown on Drawings, in relation to the right of way survey and existing benchmarks. If discrepancies are discovered, notify COUNTY and Owner promptly.

- B. For roadway projects, the Owner will provide engineering surveys and will establish and maintain a minimum of two (2) reference points and a minimum of two (2) benchmarks for the first 1000 feet, and an additional benchmark every 1000 feet beyond the first 1000 feet, along the roadway route for use by the Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work and shall protect and preserve the reference points and benchmarks.
- C. General: Engage a Professional Surveyor and Mapper to layout the Work using accepted surveying practices.
  - 1. Establish benchmarks and control points to set lines and levels at each phase of construction and elsewhere as needed to locate each element of Project.
  - 2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  - 3. Check the location, level and plumb, of every major element as the Work progresses.
  - 4. Notify COUNTY when deviations from required lines and levels exceed allowable tolerances.
  - 5. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- D. Improvements: Locate and lay out improvements, including subgrade, base course, pavements, drainage piping and structures, grading, fill and topsoil placement, utility slopes, and invert elevations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments used. Make the log available for reference by COUNTY.

#### 1.7 FIELD ENGINEERING

- A. Refer to Specification Section 01771 Surveying and Field Engineering for additional requirements.

#### 1.8 RECORD DRAWING/AS-BUILT DRAWINGS

- A. Refer to Specification Section 01771 Surveying and Field Engineering for additional requirements.
- B. For Roadway Projects, the as-built information shall include, as a minimum, the following:
  - 1. All changes, additions or deletions to the original design documents.
  - 2. Centerline/baseline ties to section line(s) including ties at PC & PT.
  - 3. Stations/elevations/offsets at PC's, PT's, PI's, low points, high points, horizontal angle points.
  - 4. Stations/elevations/offsets at edge of pavement (EOP), top of curb, and back of sidewalk, at locations shown on the plans.
  - 5. At non-curb inlets show station/elevation/offset at the top center of the grate, and pipe invert elevations and material.

6. At curb inlets show station/elevation/offset at EOP, pipe invert elevations and material.
  7. At special and slotted structures show the elevation(s), dimensions, the invert of the weir, the bleeders/orifices, pipe inverts and material.
  8. At outfalls show the station/elevation/offset/invert/diameter and material of pipe, and the diameter, material, and invert of connecting pipes between all structures.
  9. Show diameter, material, and length of pipe between all structures and outfalls.
  10. For irrigation sleeves show the station/offset/elevation for all end caps, and the invert elevation of the end caps.
  11. At lakes obtain cross sections at 50 foot intervals or as otherwise directed by the COUNTY (top of bank, top of slope, etc.).
  12. At bridges show the station/elevation/offset of the low member.
  13. For “Begin” and “End” bridge indicate the station/elevation/offset at the respective points.
  14. Horizontal Coordinates shall be provided in the Florida State Plane (NAD 83, as adjusted), Florida East Zone Coordinate System.
  15. All elevations shall be provided in reference to the North American Vertical Datum of 1988 (NAVD88)
- C. The As-Built information noted above shall be collected under the direction of a licensed Professional Surveyor and Mapper, and the collected data shall be referenced on the AutoCad design file for the project. The Contractor shall submit the electronic file on a CD labeled with the project information, and three (3) sets of signed and sealed plans, boldly marked in large print (on each sheet) – “RECORD DRAWINGS”.

GIS Standards for Electronic File Submission The CONTRACTOR shall comply with the OWNER’S most current “GIS Standards for Electronic File Submission” as approved by Martin County’s Information Technology Services which provides a guideline of minimum standards and technical specifications for GIS and CAD data that are delivered to OWNER. A copy of such Standards is available from Martin County’s Information Technology Services Department.

- D. The Contractor shall provide a letter certifying that the project was constructed in accordance with the Contract Documents.
- E. The Contract includes a pay item for As-built/Record Drawings. The cost of the location survey, As-Built/Record survey, compilation/reproduction of electronic files, plans/mylars, and other information necessary to satisfy the As-Built/Record Drawing requirements is incidental to the As-built/Record Drawings - Pay Item.

#### 1.9 STARTING AND ADJUSTING

- A. Start all equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

1.10 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

1.11 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged Work.
  - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

END OF SECTION 01700

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 01771  
SURVEYING AND FIELD ENGINEERING**

**I. SCOPE OF WORK**

**A. Provide surveying and field engineering services for the Project:**

1. Professional surveying and mapping work required for execution of the contract, including verification of existing survey data, construction layout, and production of the As-Built/Record Survey.
2. Civil, structural or other professional engineering services required by the Contract Documents or as required in order to execute the CONTRACTOR'S construction methods.

**B. Surveying Services**

CONTRACTOR shall retain the services of a Professional Surveyor and Mapper, who is licensed in the State of Florida and approved by the COUNTY SURVEYOR, to provide professional surveying and mapping services to maintain survey control, layout and stake the Work and perform the As-Built Record/Survey during construction.

**C. Field Engineering Services**

1. Design for construction drawings (such as design of shoring, protection of existing structures and bracing for formwork) shall be designed, signed and sealed by a professional engineer licensed in the State of Florida.
2. When requested by the CONSTRUCTION MANAGER or as specified in the Contract Documents, inspections or tests shall be performed under the supervision of a licensed professional engineer. The licensed professional engineer shall sign and seal these inspections or tests.

**II. IMPLEMENTATION**

**A. Qualifications of Professional Surveyor and Mapper or Engineer**

1. The Florida Licensed Professional Engineer(s) or Florida Licensed Professional Surveyor and Mapper(s), who are proposed by the CONTRACTOR to provide services for the Project, are subject to the approval of the COUNTY ENGINEER and the COUNTY SURVEYOR. Prior to any services being performed, the CONTRACTOR shall submit the name and address of any proposed registered professional and a written acknowledgement from the Professional Surveyor and Mapper stating that he has the hardware, software and adequate scope of services in his agreement with the CONTRACTOR to fully comply with the requirements of this specification. These submittals shall be provided to the CONSTRUCTION MANAGER prior to Notice to Proceed. It is recommended that the Professional Surveyor and Mapper attend the Preconstruction meeting. It is mandatory that any Professional Surveyor and Mapper who has not previously performed work for the County in the past attend the Preconstruction meeting.



2. The Florida Licensed Professional Engineer shall be qualified in the discipline required for the specific services required for the project.

B. Project Surveying Requirements

1. Locate, reference and preserve all existing geodetic, GPS, horizontal and vertical control points and property corners shown on the Drawings prior to starting any construction Work. If the Professional Surveyor and Mapper performing the Work discover any discrepancies that will affect the Project, the CONTRACTOR must immediately report these findings to the CONSTRUCTION MANAGER and the COUNTY SURVEYOR. All survey work shall meet the requirements as defined in Florida Administrative Code, Chapter 5J-17. Reference and preserve all survey points during construction. If survey points are disturbed, it is the responsibility of the CONTRACTOR'S Professional Surveyor and Mapper to reset the points per applicable requirements at the CONTRACTOR'S expense. Copies of the Professional Surveyor and Mapper's field notes and/or electronic files for point replacement shall be provided to the COUNTY SURVEYOR through the CONSTRUCTION MANAGER.
  - a. The Professional Surveyor and Mapper shall locate all improvements for the Project As-Built/Record Survey using State Plane Coordinates, the horizontal datum, vertical datum and the benchmarks referenced on the Drawings. The COUNTY will provide electronic files of the Drawings to be used by the Professional Surveyor and Mapper complying with these specifications.
  - b. The construction layout shall be established from the baseline and reference points shown or listed on the Drawings. The accuracy of any method of staking shall be the responsibility of the CONTRACTOR. All construction layout staking shall be done such as to provide for easy verification of the work by the COUNTY. Maintain stakes and/or markings on the ground identifying the stations for the construction baseline at a minimum 100-foot intervals or as required by the CONSTRUCTION MANAGER during construction.
2. Use survey control points to layout such work tasks as the following:
  - a. Clearing, grubbing, work limits, right-of-way lines and easements.
  - b. Foundations, column locations and all work associated with structures.
  - c. Locations for pipelines and all associated structures and appurtenances.
  - d. Road work:
    - i. Stakes for grading, fill, curbs, radii, sidewalks and all other work requiring specific horizontal and/or vertical alignment.
    - ii. Gravity utility pipe slope and invert elevations to assure precise location
  - e. Locations and elevations required for any other Project work.

- f. A Professional Surveyor and Mapper shall reference and replace any Project control points, geodetic control, boundary corners, benchmarks, section corners, and GIS/GPS monuments that may be lost or destroyed, at no additional cost to the COUNTY. Establish replacement points based on the original survey control or as directed by the COUNTY SURVEYOR. Copies of all reference field notes and/or electronic files for point replacement must be submitted to the COUNTY SURVEYOR through the CONSTRUCTION MANAGER.

### 3. As-Built/Record Survey Requirements

- a. The CONTRACTOR shall require the Professional Surveyor and Mapper to locate all improvements for the Project As-Built/Record Survey using station-offsets from baseline, State Plane Coordinates and the vertical datum referenced on the Drawings. The CONTRACTOR shall obtain an electronic copy of the Drawings from the COUNTY for use as a base for the As-Built/Record Survey. The As Built/Record Survey shall clearly show the designed and constructed locations and elevation information for ease of comparison. This shall be accomplished by adding the As-Built/Record information on a separate CAD level or layer, while keeping all the design call-outs and construction requirements visible. Separate layers within the as-built layers/levels shall be provided for data of drainage, stormwater, paving, water, sewer and relocated utilities. The As-Built/Record information shall be labeled as such and be shown with a bolder text weight in order to be easily identifiable. The As-Built/Record Survey shall include all storm and sanitary sewers, structures, clean-outs, potable and reclaimed water mains, meters, valves, force mains, gas mains, irrigation lines (2-inch and larger), process piping, electric and communication duct banks, traffic and pedestrian signals, pull boxes, cabinets, transformers, structures, drainage conveyance systems, swales, retention ponds, cross-section details, fences, pavement, curbs, sidewalks, driveways, relocated utilities, appurtenances and buildings. All pipe size, type and lengths shall be provided in comparison to design plan. All planned improvements referenced by station and offset on the Plans, shall also be referenced on the As-Built/Record Survey in the same manner. All constructed improvements that have location and/or elevation or detail information called-out on the Plans, shall have the same information identified on the As-Built/Record Survey. If a structure information table or detail was provided on the Plans, than the As-Built/Record information shall be shown on the table or detail. Design call-outs shall have a thin strike line through the design call-out and **all** As-Built/Record information must be labeled (or abbreviated "AB") and be shown in a bolder text that is completely legible. Pavement and drainage flowline elevation shots shall be taken at minimum 25' intervals and grade breaks. As-Built/Record Survey shots shall be taken at the same locations as shown on the Plans for ease of comparison. Any variations from required material sizes or types shall also be noted.
- b. The CONTRACTOR shall submit a minimum of three (3) signed and sealed sets of the final As-Built/Record Survey incorporating all Work performed under the Contract Documents ("**Final As-Built/Record Survey**") with the Application for Final Payment, as well as identically matching electronic

files in PDF format and the same CAD file format as the original design (AutoCAD). Electronic file submittals that have more than one file or a file for each plan sheet shall have an index and/or logical filename containing a description of the file's contents. The final conformed Drawings shall be used as the basis for the As-Built/Record Survey. The sets shall be in design plan format containing a complete set of all of the original plan sheets. The Professional Surveyor and Mapper shall only sign, date, and seal those sheets containing As-Built/Record Survey information. Failure to provide accurate survey information in the proper format requested may result in the COUNTY determining the As-Built/Record Survey is incomplete.

- c. At Final Completion of the Project, the CONTRACTOR shall submit field mark-up drawings showing all other constructed improvements not included in the As-Built/Record Survey as required above. This includes improvements such as, but not limited to, conflicts, irrigation lines smaller than 2-inch, sprinkler heads, miscellaneous wiring, site furnishings and traffic control loops, and only applies to variations from what is shown on the Drawings. These mark-up drawings shall be compiled on a clean set of the original Drawings.
- d. If unidentified utilities (not shown on the Drawings) are encountered during the installation of the Work, their horizontal and vertical location shall be included in the As-Built/Record Survey. Provide the name and type of utility, the size and material type of pipe, conduit or structure and if known, the status (active or inactive) of the utility.
- e. The CONTRACTOR shall submit documentation to verify the accuracy of field surveying work at the request of the CONSTRUCTION MANAGER or COUNTY SURVEYOR.
- f. The CONTRACTOR shall submit certificate(s), signed by a licensed Professional Surveyor and Mapper, certifying that elevations and locations of improvements are in conformance with the Contract Documents, or, if not in conformance, certify as to variances from the Contract Documents.

END OF SECTION 01771

**TUCKAHOE MANSION SEAWALL REPLACEMENT  
SECTION 02110  
STORM WATER POLLUTION PREVENTION PLAN**

The Storm Water Pollution Prevention Plan (SWPPP) contains references to the FDOT Standard Specifications for Road and Bridge Construction, the design standards, and other sheets of these construction plans. The complete SWPPP Plan includes several items: this narrative description, the documents references in this narrative, the contractor's approved erosion control plan required by FDOT Specification Section 104, and reports of inspections made during construction.

1.0 Site Description

1.0.A. Nature of Construction Activity:

The work includes the construction of a 5' wide bike lane/paved shoulder on both sides of Mapp Road and the milling and resurfacing of the road from the CR 714 to SR 714.

The limits of the project are 0.6 miles on Mapp Road from CR 714/Martin Highway to SR 714/Martin Downs Boulevard.

1.0.B. Sequence of Major Soil Disturbing Activities

Sediment and Erosion control Plan – The contractor shall provide a detailed sequence of construction for all construction activities. The contractor shall follow the sequence of major activities described below, unless the contractor proposes a different sequence that is equal or better at controlling erosion and trapping sediment and is approved by the COUNTY.

For each construction phase, install perimeter controls after clearing and grubbing necessary for installation of controls but before beginning other work for the construction phase. Remove perimeter controls only after all upstream areas are stabilized.

Silt fence and floating turbidity barrier is to be placed only within the right-of-way, silt fence placement, staking and trenching shall be coordinated to minimize impact to native vegetation and trees to remain. Contractor to provide service of certified arborist in areas where potential damage to root systems of mature trees may occur.

1. Clearing and grubbing, earthwork and excavation of added bike lane areas. Remove existing unneeded or unsuitable soils and properly dispose of the materials.
2. Earthwork and base course installation associated with the construction of the bike lanes.
3. Milling existing asphalt. Remove asphalt millings and properly dispose of the materials.
4. Stabilize and sod the unpaved project area as called for in the plans.

1.0.C. Area Estimated

Total Site Area: 7.11 AC

Total Area to Be Disturbed: 0.78 AC

1.0.D. Runoff Data

Runoff Coefficients:

Before: 0.36

During: Varies from 0.36 to 0.44

After: 0.44

Soils Data: Site inspection and the USDA Soil Survey of Martin County indicated that the soils underlying the site are suitable fine sands with shell and rock fragments. All work will be performed on the existing roadway embankment and no additional filling or added roadway embankment construction will be performed.

Outfall Information:

All Drainage patterns are to be maintained

Surface Waters: N/A

Discharge Points to Surface Waters: Existing Mapp Road Roadway Swales

#### 1.0.E. Site Map:

The Construction plans are being used as the site maps. The location of the required information is described below.

- Drainage patterns: Runoff will drain to existing roadway swales before during and after construction.
- The approximate slopes: the slopes of the site can be seen on the plans and typical sections.
- Areas of soil disturbance: The areas to be disturbed are indicated on the plan sheets, and the typical section sheets. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.
- Areas not to be disturbed: The areas not to be disturbed are indicated on the plan sheets and the typical section sheets.
- Location of temporary controls: Type III Silt fence shall be installed 3' to 4' outside the edge of the new bike lanes limits on each side of the road. The limits of the added bike lanes are shown on the plan sheets. A list of the temporary erosion and sediment control items are provided in the summary of quantities sheets.
- Location of permanent controls: not applicable.

Areas to be stabilized: Install one 16" wide strip of sod adjacent to the new edge of pavement at added bike lanes. Hydro-seed other disturbed areas as required.

-

#### 1.0.F. Receiving waters:

See item 1.D. for the outfall locations and receiving water names. There are no wetland areas on the project site.

#### 2.0 Controls:

##### 2.0.A. Erosion and Sediment Controls:

In the sediment and erosion control plan, the contractor shall describe the proposed stabilization and structural practices based on the contractor's proposed temporary traffic control (TTC) plan. The following recommended guidelines are based on the temporary traffic control plan outline in the construction plans. Where the following the temporary traffic control plan outlined in the construction plans. The contractor may choose to accept the following guidelines or modify them

in the sediment and erosion control plan, subject to approval by the COUNTY. As work progresses the contractor shall modify the plan to adapt to seasonal variations, changes in construction activity, and the need for better practices.

For each construction phase, install perimeter controls after clearing and grubbing necessary for the installation of controls but before beginning other work for the construction phase. Remove perimeter controls only after all upstream areas are stabilized.

Contractor shall take all necessary precautions to prevent milled material from entering the drainage system. The contractor is responsible for keeping inlets clear of paving material, silt, lime-rock and debris during the construction at no additional cost.

#### 2.A.1 Stabilization Practices:

In the sediment and erosion control plan, the contractor shall describe the stabilization practices proposed to control erosion. The contractor shall initiate all stabilization measures as soon as practical, but in no case more than 7 days, in portions of the site where construction activities have temporarily or permanently closed. The stabilization practices shall include at least the following, unless otherwise approved by COUNTY:

Temporary:

-Artificial coverings in accordance with specifications section 104.

-Turf and sod in accordance with specifications section 104.

Permanent:

-Asphalt or concrete surface

- Sod in accordance with specification section 575.

#### 2.A.2 Structural Practices

In the sediment and erosion control plan, the contractor shall describe the proposed structural practices to control or trap sediment and otherwise prevent the discharge of pollutants from exposed areas of the site. Sediment controls shall be in place before disturbing soil upstream of the control. The structural practices shall include at least the following, unless otherwise approved by the COUNTY:

Temporary:

- Sediment barriers in accordance with design standard 102 and specification section 104.
- Inlet protection in accordance with design standard 102 (if needed).

Permanent:

- Sod

#### 2.0.B. Storm Water Management

Runoff will be directed to the proposed open swale and closed conduit storm drainage system. The storm water will flow through the infrastructure and discharge into the various outfalls as described in section 1.D.

## 2.0.C Other Controls

### 2.C.1 Waste Disposal:

In the sediment and erosion control plan, the contractor shall describe the proposed methods to prevent the discharge of solid materials, including building materials, to waters of the United States. The proposed methods shall include at least one of the following, unless otherwise approved by the COUNTY:

- Providing litter control and collection within the project during construction activities.
- Disposing of all fertilizer or other chemical containers according to EPA's standard practices as detailed by the manufacturer.
- Disposing of solid materials including building and construction materials off the project site but not in surface waters, or wetlands.

### 2.C.2 Off-Site Vehicle Tracking & Dust Control:

In the sediment and erosion control plan, the contractor shall describe the proposed methods for minimizing offsite vehicle tracking of sediment and generating dust. The proposed methods shall include at least one of the following, unless otherwise approved by the COUNTY:

- Covering loaded haul trucks with tarpaulins.
- Removing excess dirt from roads daily.
- Stabilized construction entrances according to design standard 106.
- Using roadway sweepers during dust generating activities such as excavation and milling operations.

### 2.C.3 State and Local Regulation for Waste Disposal, Sanitary Sewer or Septic Tank Regulations

In the section 104 erosion control plan, the contractor shall describe the proposed procedures to comply with applicable state and local regulations for waste disposal, and sanitary sewer or septic systems.

### 2.C.4 Fertilizers and Pesticides:

In the sediment and erosion control plan, the contractor shall describe the procedures for applying fertilizers and pesticides. The proposed procedures shall comply with applicable subsections of section 570 of the specifications.

### 2.C.5 Toxic Substances:

In the sediment and erosion control plan, the contractor shall provide a list of toxic substances that are likely to be used on the job and provide a plan addressing the generation, application, migration, storage and disposal of these substances.

### 2.D.4 Approved state and local plans and permits:

- This project is currently under review.

## 3.0 Maintenance:

In the sediment and erosion control plan, the contractor shall provide a plan for maintaining all erosion and sediment controls throughout construction. The maintenance plan shall at a minimum comply with the following:

- Silt fence: Maintain per section 104. The contractor should anticipate replacing silt fence on 12 month intervals or as necessary
- Sediment barriers: remove sediment as per manufacturer's recommendations or when water ponds in unacceptable amounts or areas.

#### 4.0 Inspections:

Qualified personnel shall inspect the following items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.50 inches or greater. To Comply, the contractor shall install and maintain rain gauges and record the daily rainfall, where sites have been permanently stabilized, inspections shall be conducted at least once every month. The contractor shall also inspect that controls installed in the field agree with the latest storm water pollution prevention plan.

- Points of discharge to waters of the United States.
- Points of discharge to municipal separate storm drain systems
- Disturbed areas of the site that have not been finally stabilized.
- Areas used for storage of materials that are exposed to precipitation.
- Structural controls.
- Stormwater management systems.
- Locations where vehicles enter or exit the site.

The contractor shall initiate repairs within 24 hours of inspections that indicate items are not in good working order.

If inspections indicate that the installed stabilization and structural practices are not sufficient to minimize erosion, retain sediment, and prevent discharging pollutants, the contractor shall provide additional measures, as approved by the COUNTY.

#### 5.0 Non-Stormwater Discharges

In the section 104 erosion control plan, the contractor shall identify all anticipated non-storm water discharges (except flows from firefighting activities). The contractor shall describe the proposed measures to prevent pollution of these non-storm water discharges. If the contractor encounters contaminated soil or groundwater, contact the Martin County Water Quality Division.

END OF SECTION 02110



**SUBSURFACE SOIL EXPLORATION AND  
GEOTECHNICAL ENGINEERING EVALUATION  
THE MANSION AT TUCKAHOE - INDIAN RIVERSIDE PARK  
SEAWALL REPLACEMENT PROJECT  
MARTIN COUNTY, FLORIDA**

AACE FILE NO. 18-255



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## **TABLE OF CONTENTS**

**SUBSURFACE SOIL EXPLORATION AND  
GEOTECHNICAL ENGINEERING EVALUATION  
THE MANSION AT TUCKAHOE - INDIAN RIVERSIDE PARK  
SEAWALL REPLACEMENT PROJECT  
MARTIN COUNTY, FLORIDA**

AACE FILE NO. 18-255

	<b>PAGE #</b>
<b>1.0</b> <b><u>INTRODUCTION</u></b> .....	<b>1</b>
<b>2.0</b> <b><u>SITE INFORMATION AND PROJECT UNDERSTANDING</u></b> .....	<b>1</b>
<b><i>2.1 Site Location and Description</i></b> .....	<b>1</b>
<b><i>2.2 Review of USDA Soil Survey</i></b> .....	<b>1</b>
<b><i>2.3 Project Understanding</i></b> .....	<b>2</b>
<b>3.0</b> <b><u>FIELD EXPLORATION PROGRAM</u></b> .....	<b>4</b>
<i>Table 1 - Soil Boring Information</i> .....	<b>4</b>
<b>4.0</b> <b><u>OBSERVED SUBSURFACE SOIL AND GROUNDWATER CONDITIONS</u></b> .....	<b>4</b>
<b>5.0</b> <b><u>LABORATORY TESTING PROGRAM</u></b> .....	<b>5</b>
<b>6.0</b> <b><u>GEOTECHNICAL ENGINEERING EVALUATION</u></b> .....	<b>5</b>
<i>Table 2 - Soil Parameters</i> .....	<b>5</b>
<i>Table 3 - Allowable Helical Pile Capacities</i> .....	<b>6</b>
<b>7.0</b> <b><u>CLOSURE</u></b> .....	<b>7</b>
• Figure No. 1 Site Vicinity Maps	
• Figure No. 2 Boring Location Plan	
• Sheet No. 1 Soil Boring Profiles	
• Appendix I - USDA Soil Survey Information	
• Appendix II - Site Photographs	
• Appendix III - General Notes (Soil Boring, Sampling and Testing Methods)	
• Appendix IV - AACE Project Limitations and Conditions	



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Attention: Ms. Teri L. Andre, P.E.

**SUBSURFACE SOIL EXPLORATION AND  
GEOTECHNICAL ENGINEERING EVALUATION  
THE MANSION AT TUCKAHOE - INDIAN RIVERSIDE PARK  
SEAWALL REPLACEMENT PROJECT  
MARTIN COUNTY, FLORIDA**

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**1.0 INTRODUCTION**

In accordance with your request and authorization, Andersen Andre Consulting Engineers, Inc. (AACE) has completed a subsurface exploration and geotechnical engineering analyses for the above referenced project. The purpose of performing this exploration was to explore shallow soil types and groundwater levels as they relate to the proposed seawall replacement, and restrictions which these soil and groundwater conditions may place on the project. Our work included Standard Penetration Test (SPT) borings, laboratory testing, and engineering analyses. This report documents our explorations and tests, presents our findings, and summarizes our conclusions and recommendations.

**2.0 SITE INFORMATION AND PROJECT UNDERSTANDING**

***2.1 Site Location and Description***

The Mansion at Tuckahoe (i.e. the site) is a historic one- and two-story building located within the Indian Riverside Park in Jensen Beach, Martin County, Florida (within Section 16, Township 38 South, Range 41 East). The building is located atop a sandy bluff with elevations ranging from 26.0-27.0 feet near the building (NAVD88 datum used throughout this project) and sloping down to the Intracoastal Waterway (ICW).

The location of the subject site is graphically depicted on the Site Vicinity Map (2018 aerial photograph) as well as on a reproduction of the 1983 USGS Quadrangle Map of "St. Lucie Inlet, Florida", both presented as our Figure No. 1.

***2.2 Review of USDA Soil Survey***

According to the USDA NRCS Web Soil Survey, the predominant surficial soil type in the area where the site is located is the *Paola and St. Lucie Sands, 8 to 20 percent slopes (USDA Map Unit 77)*. This composite soil type is noted to consist of eolian or sandy marine deposits found within ridges and knolls on historic marine terraces, with sands present to depths in excess of 80 inches and with a depth-to-water table greater than 80 inches. The approximate location of the subject site is shown superimposed on an aerial photograph (obtained from the USDA Web Soil Survey) on Figure No. 1. Further, the USDA Web Soil Survey summary report is included in Appendix I.

### **2.3 Project Understanding**

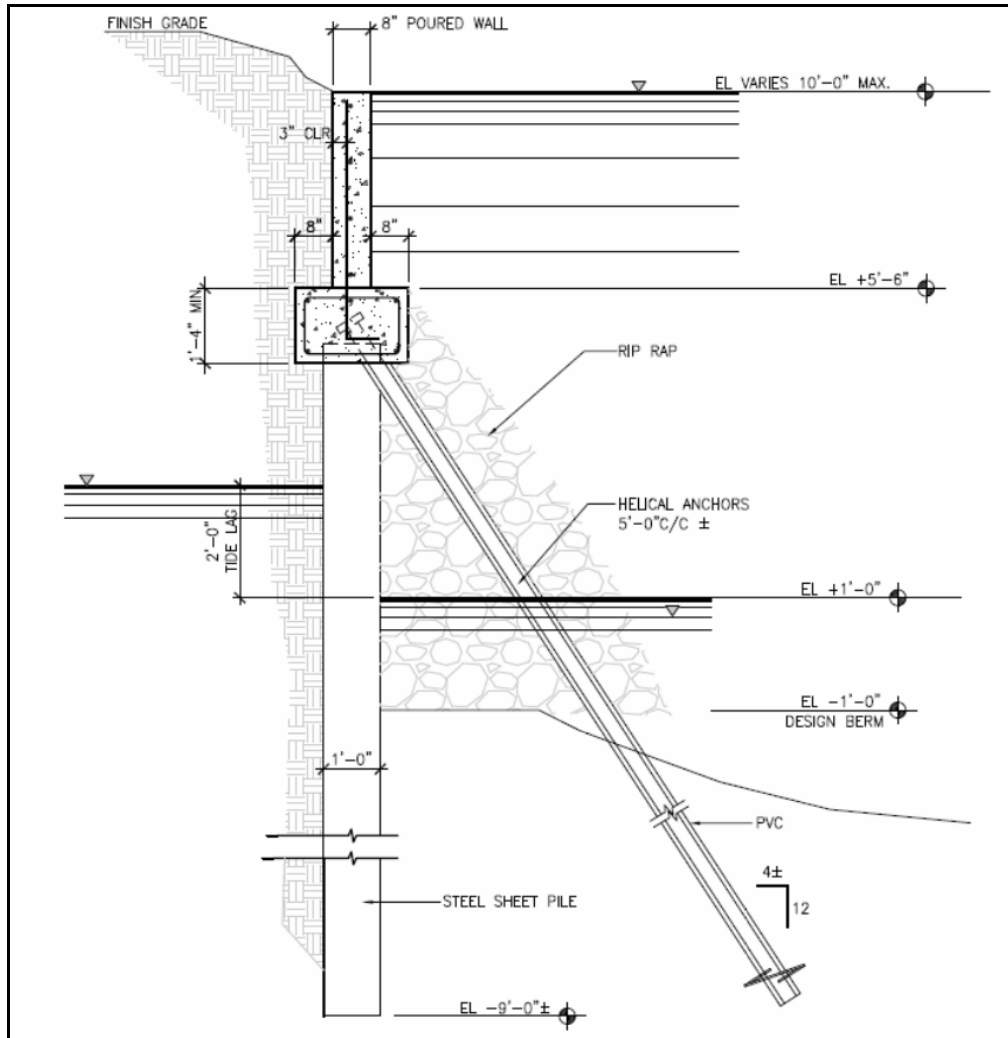
Based on our conversations, site visits, team meetings, etc. we understand that Martin County is intending to replace approximately 300 feet of an existing, aging and failing seawall which fronts the historic building along the ICW. As part of our engineering evaluation, we have reviewed the provided "Summary and Inspection Report, Mansion at Tuckahoe Embankment Stabilization" prepared by MCR Professional Engineering (dated February 25, 2018). Further, a topographic survey prepared by Betsy Lindsay, Inc. (dated December 12, 2018, revised February 15, 2019) was provided for our use.

The existing concrete seawall is approximately 5-6 feet high and equipped with seaward concrete, soil-supported buttresses. The seawall has cracked and failed in several locations, and the seaward buttress foundations are partially undermined in many instances. The failures of the seawall have resulted in an eroded upland slope profile, further exacerbating the steep slope conditions leading up to the Mansion building. A typical view of the existing seawall condition is shown below, and additional representative site photographs taken during our site visits are presented in Appendix II.



Hence, based on the conditions of the existing seawall and concerns about the stability of the Mansion slope and foundation soils, Martin County is proposing to replace the seawall. During our involvement with the project, several designs were evaluated by AACE and the design team. These included vibrated sheet piles (steel and FRP) in both, cantilevered conditions and with lateral supports from either driven, concrete batter piles and/or helical tie-back anchors. A cantilevered seawall option was deemed unsuitable due to the desired height of the new wall combined with the existing sloped conditions. Additionally, buried deadman tie-back options were discarded early on in the design process due to concerns about excavating into the existing, steep slopes with the possibility of causing slope stability issues which potentially could adversely affect the Mansion. Archaeological and historical concerns relative to the existing bluff ultimately prevented the use of upland seawall components, such as helical tie-back anchors.

At this point in time, we understand that the following seawall design has been selected by Martin County:



Schematic of proposed seawall prepared by TRC Worldwide Engineering (dated April 12, 2019)

As such, the proposed seawall will consist of relatively short, jetted and vibrated steel sheet piles with a concrete cap at EL 5.5 feet and batter helical piles installed 5-ft on center seaward of the wall. To reach the desired top-of-wall elevations, ranging from EL 10.0 feet to somewhat lower near the southern portion of the wall, a poured, reinforced concrete wall will be constructed atop the seawall pile cap. Upon completion, select backfill will be placed and compacted against both, the sheet pile wall and the poured concrete wall, restoring the slope leading up to the Mansion building.

We understand that the structural design of the selected seawall option is on-going, however, we expect that the wall will be equipped with drainage measures (e.g. a parallel drain system, weep holes, etc.) to minimize hydrostatic pressure build-up on the upland side of the wall.

### **3.0 FIELD EXPLORATION PROGRAM**

To explore subsurface conditions at the site, two (2) Standard Penetration Test (SPT) borings (ASTM D1586) were completed at the approximate locations shown on Figure No. 2:

**Table 1 - Soil Boring Information**

<b>Boring ID</b>	<b>Date Completed</b>	<b>General Location (Lat/Long)</b>	<b>Boring Depth (ft-bls)</b>	<b>Estimated Ground Elevation (ft-NAVD)<sup>(1)</sup></b>	<b>Estimated Boring Termination Elevation (ft-NAVD)</b>
TB-1	12/27/18	North End of Wall (27.22845/-80.21289)	50	11.0	-39.0
TB-2	01/22/19	South End of Wall <sup>(2)</sup> (27.22772/-80.21277)	60	26.0	-34.0

Notes: (1) Ground elevations estimated from topographic survey by Betsy Lindsay, Inc.  
 (2) Due to steep slope conditions and other physical site constraints, boring TB-2 was performed approximately 120 feet west of the south end of the subject seawall.

Overall, our site visits and field exploration program were completed in the period December 2018 through February 2019. The field work locations shown on Figure No. 2 were determined in the field by our field crew using aerial photographs, existing site features, and a hand-held GPS instrument. The locations should be considered accurate only to the degree implied by the method of measurement used. We preliminarily anticipate that the actual locations are within 15 feet of those shown on Figure No. 2.

Summaries of AACE's field procedures are presented in Appendix III and the individual boring profiles are presented on the attached on Sheet No. 1. Samples obtained during performance of the borings were visually classified in the field, and representative portions of the samples were transported to our laboratory in sealed sample jars for further classification. The soil samples recovered from our explorations will be kept in our laboratory for 60 days, then discarded unless you specifically request otherwise.

### **4.0 OBSERVED SUBSURFACE SOIL AND GROUNDWATER CONDITIONS**

Detailed subsurface conditions are illustrated on the soil boring profiles presented on the attached Sheet No. 1. The stratification of the boring profiles represents our interpretation of the field boring logs and the results of laboratory examinations of the recovered samples. The stratification lines represent the approximate boundary between soil types. The actual transitions may be more gradual than implied.

As shown by the soil boring profiles on Sheet No. 1, the soils on the site at the locations and the depths explored consist generally of a few inches of topsoil (fine sands with roots/organics, not shown on boring profiles) followed by loose to medium dense fine sands (SP, with varying shell content) to depths of about 40 feet below grade (approximately EL -30 feet), followed by dense to very dense fine sands (SP, with varying shell content and cementation) and weakly cemented sands and shell fragments (coquina) reaching the termination depths of our borings (see Table 1).

The groundwater table was encountered in boring TB-1 at a depth of about 8.5 feet below grade, as shown on Sheet No. 1. The groundwater table was not encountered in boring TB-2 due to the method of drilling in the upper 20 feet. Fluctuations in groundwater levels should be anticipated throughout the year primarily due to seasonal variations in rainfall, tidal fluctuations, and other factors that may vary from the time the borings were conducted.

The above soil profile is outlined in general terms only. Please refer to the attached Sheet No. 1 for individual soil profile details.

### 5.0 LABORATORY TESTING PROGRAM

Our drillers observed the soil recovered from the SPT sampler, placed the recovered soil samples in moisture proof containers, and maintained a log for each boring. The recovered soil samples, along with the field boring logs, were transported to our Port St. Lucie soils laboratory where they were visually examined by AACE’s project engineer to determine their engineering classification. The visual classification of the samples was performed in accordance with the Unified Soil Classification System, USCS. The results of our classifications and laboratory analyses are presented on the soil boring profiles on Sheet No. 1.

### 6.0 GEOTECHNICAL ENGINEERING EVALUATION

Based on the findings of our site exploration, our evaluation of subsurface conditions, and judgment based on our experience with similar projects, we conclude that the soils underlying this site are generally satisfactory to support the proposed seawall design, using jetted/vibrated steel sheet piles and batter helical piles combined in a reinforced concrete cap.

Following are conservative estimates of pertinent engineering properties of the retained and existing soils.

**Table 2 - Soil Parameters**

Approximate Elevation (ft-NAVD)	Soil Type	Unit Weight, $\gamma^{(1)}$ (pcf)		Angle of Internal Friction, $\phi$ (degrees)	Cohesion (psf)	Wall Friction Angle, $\delta^{(2)}$ (degrees)
		Moist	Sat.			
10 to 0 (mudline)	Compacted granular fill (SP/GP)	110	118	33	0	22
0 (mudline) to -25	Loose to medium dense fine sands (SP)	105	112	30	0	20

Notes: (1)  $\gamma_{\text{boyant}} = \gamma_{\text{sat}} - \gamma_{\text{water}}$   
 (2) Assumes vertical backface of wall, and wall directly against granular backfill.

The Rankine coefficients of lateral pressures can be obtained from the following equations:

Active pressure:  $K_a = \tan^2 (45 - \phi/2)$   
 Passive pressure:  $K_p = \tan^2 (45 + \phi/2)$   
 where  $\phi$  is the friction angle of the soil (Table 2).

We recommend that appropriate safety factors be used in the sheet pile design. Further, the sloping condition of the upland soils to be retained by the combined steel sheet pile and poured concrete wall should be considered in the design; preliminarily these soils are considered to have a 2H:1V or steeper slope. Finally, as discussed in the previous, consideration should be given to the potential for upland hydrostatic pressures to be acting on the wall in the case of a storm event. We remain available for additional consultations with regards to the design of the seawall.

Note that soils within a distance equal to the height of the seawall should be compacted with hand guided, small impact or vibratory compactors. The use of heavy compaction equipment within this distance may induce additional lateral stresses on the wall, which are not accounted for in the above-presented earth pressure coefficients.

It is recommended that vibrations produced during the construction operations (including sheet pile installation) are monitored and controlled so that they do not adversely affect the adjacent park features, specifically the Mansion building. Should there be concern about vibration levels produced by the site preparation operations, a seismograph with a suitable indicator range may be arranged on the site while this work is undertaken. We remain available for performing these services and for further consultation in this regard.

The proposed helical piles will provide lateral support for the seawall and are currently proposed to be installed at a 4H:12V batter and protected with a PVC sleeve and riprap rubble. Below we have summarized allowable round shaft helical pile capacities (in kips) for embedment depths of 25 to 35 feet below the ICW mudline (assuming that the piles will be embedded from near EL 0.0).

**Table 3 - Allowable Helical Pile Capacities**

Pile Embedment Depth [ft]	Shaft Diameter/Wall thickness <sup>(1)</sup> [in]	No. of Helices	Helix Dia. [in]	Allowable Pile Compression Capacities [kips] <sup>(2)</sup>	Min. Required Installation Torque [ft-lbs]
25	3.5 / 0.3	3	10, 12, 14	16	3500
30	3.5 / 0.3	3	10, 12, 14	22	5500
35	3.5 / 0.3	3	10, 12, 14	27	6500

Notes: (1) Equivalent to Chance RS 3500.300

(2) Provided allowable helical pile capacities include a Factor of Safety of 2 (permanent structures)

The provided capacities were developed using the helical pile design software HeliCAP (developed for Hubbell's Chance Helical Pile Foundation Systems) as well as information from the Chance Technical Manual for Helical Pile Foundation Systems. The minimum center to center spacing of the piles should be at least 4 times the diameter of the largest helix (i.e. approximately 5 feet).

The pile capacities should be verified in the field by monitoring the torque applied to each individual helical pile during the installation procedure. The Helical Pile Contractor should provide evidence of a recently calibrated digital torque indicator device (using a shear pin torque limited device or a mechanical torque indicator is not recommended).

The helical pile torque-to-capacity correlation can be used to confirm that the observed installation torque values are appropriate for the design. The empirical relationship between installation torque (ft-lb) and ultimate pile capacity is as follows:

$$Q_{ult} = K_t \times T$$

where  $Q_{ult}$  is the ultimate pile capacity (kips),  $K_t$  is an empirical torque factor ( $ft^{-1}$ ) and T is the installation torque (ft-lb). The torque factor varies with soil types and pile shaft sizes and ICCES AC358 (Acceptance Criteria for Helical Pile Systems and Devices) recognizes a number of helical pile shaft sizes and default  $K_t$  factors for systems in compliance with the criteria included in ICCES AC358. For the pile shaft diameter proposed above (3.5 inches), a torque factor of  $7 ft^{-1}$  is applicable.

The Helical Pier System proposed above may not be the most cost-effective combination, and numerous other helical pile configurations are available. No attempt was made to optimize the design. Based on our experience, additional pile extensions should be readily available during the installation to accommodate localized changes in the soil stratigraphy. We remain available for additional consultations with respect to the optimum helical pile solution. The helical pile installation should be monitored by AACE representatives.



### 7.0 CLOSURE

The geotechnical evaluation submitted herein is based on the data obtained from the soil boring profiles presented on Sheet No. 1 and our understanding of the project as previously described. Limitations and conditions to this report are presented in Appendix IV.


This report has been prepared in accordance with generally accepted soil and foundation engineering practices for the exclusive use CAPTEC Engineering, Inc. and Martin County Board of County Commissioners. No other warranty, expressed or implied, is made.

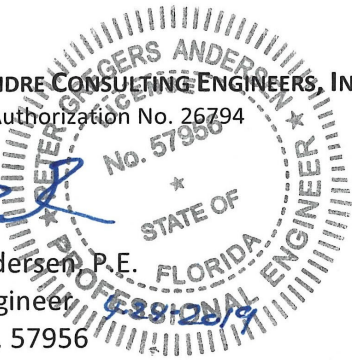
We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please contact us.


Sincerely,

**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**

Certificate of Authorization No. 26794

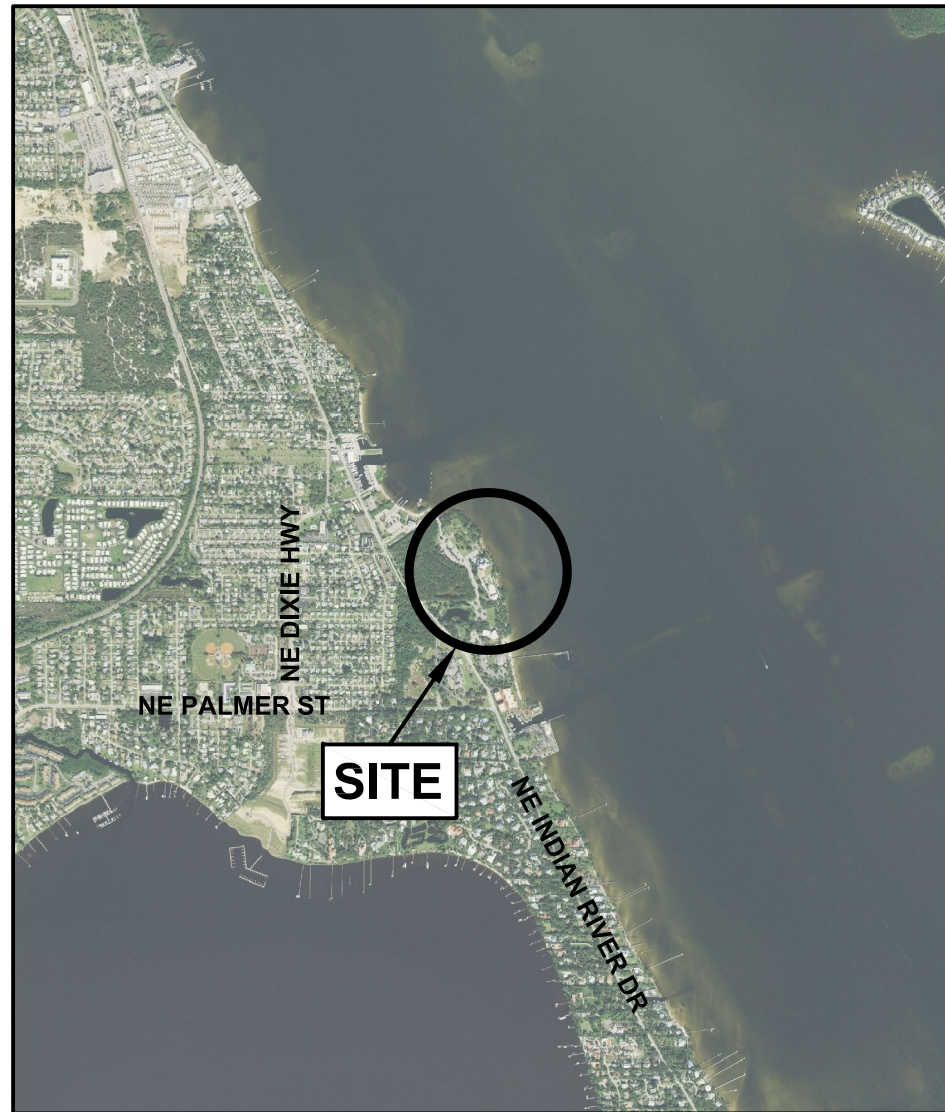
  
Peter G. Andersen, P.E.  
Principal Engineer  
Fla. Reg. No. 57956



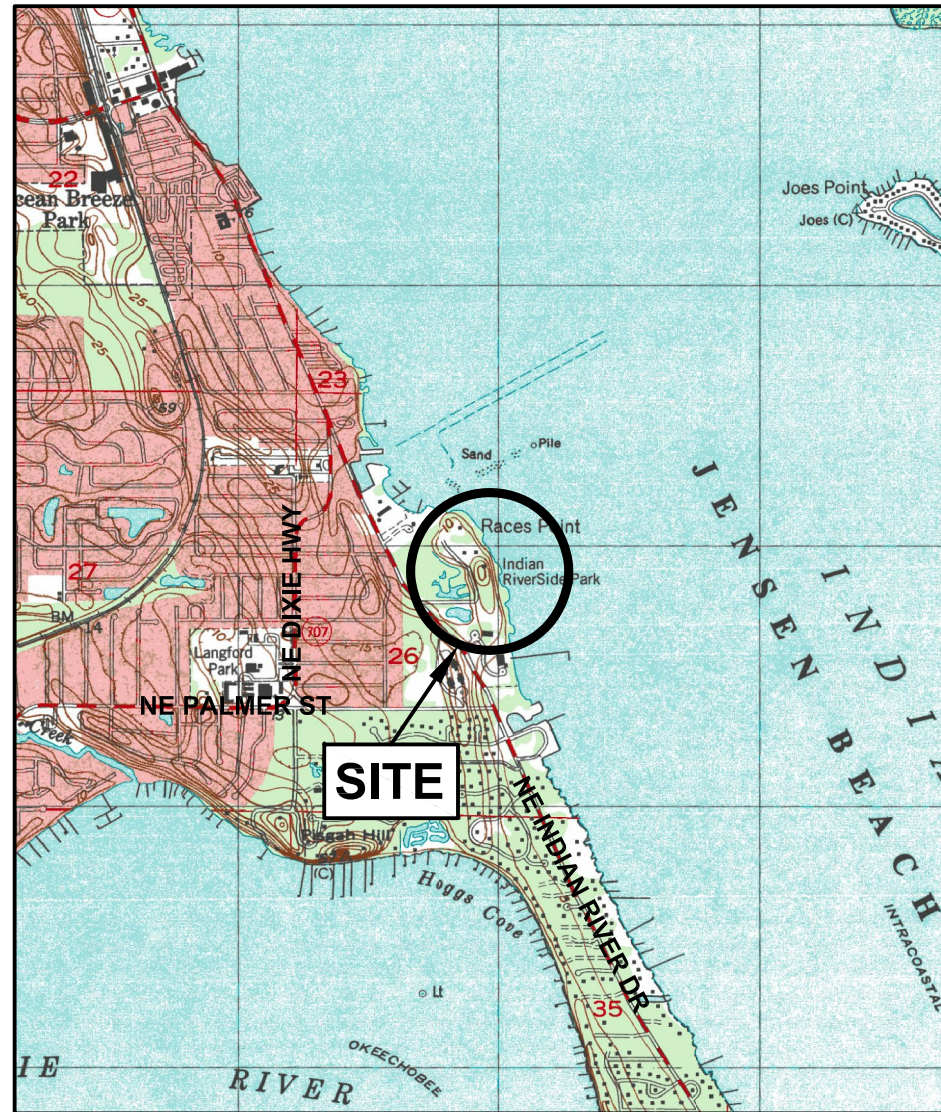
  
David P. Andre, P.E.  
Principal Engineer  
Fla. Reg. No. 53969  
4/24/19

PGA/DPA:pa

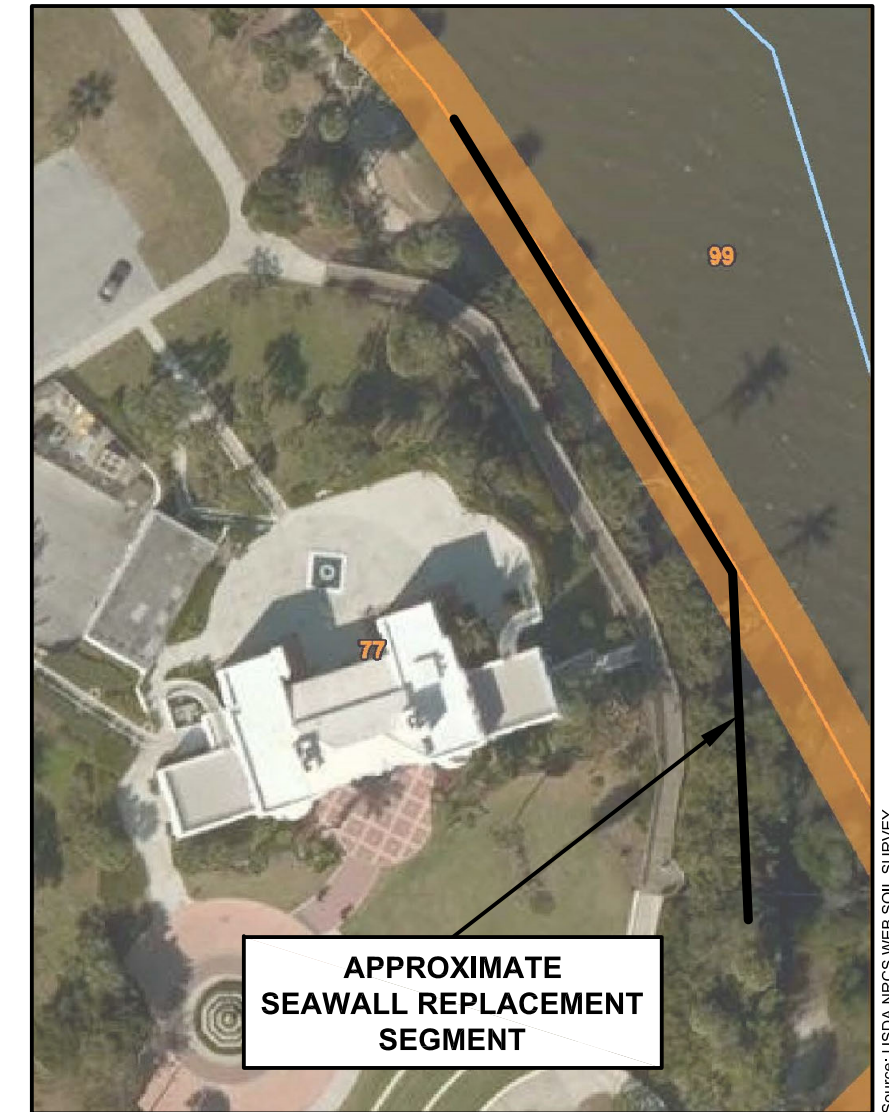
2018 AERIAL PHOTOGRAPH



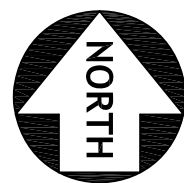
USGS TOPOGRAPHIC MAP  
(2003 USGS Quadrangle Map of "St. Lucie Inlet, Florida")



USDA NRCS WEB SOIL SURVEY MAP



Source: USDA NRCS WEB SOIL SURVEY



NOT TO SCALE

Section 16  
Township 38 South  
Range 41 East

**USDA SOIL TYPE ON SUBJECT SITE**

(Source: USDA Web Soil Survey)

77: Paola and St. Lucie sands, 8 to 20 percent slopes



**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**

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**SITE VICINITY MAPS**

SUBSURFACE SOIL EXPLORATION  
AND GEOTECHNICAL ENGINEERING CONSULTING  
THE MANSION AT TUCKAHOE - INDIAN RIVERSIDE PARK  
SEAWALL REPLACEMENT PROJECT  
MARTIN COUNTY, FLORIDA

Drawn by: PGA

Date: April 2019


Checked by: DPA

Date: April 2019

AACE File No: 18-255

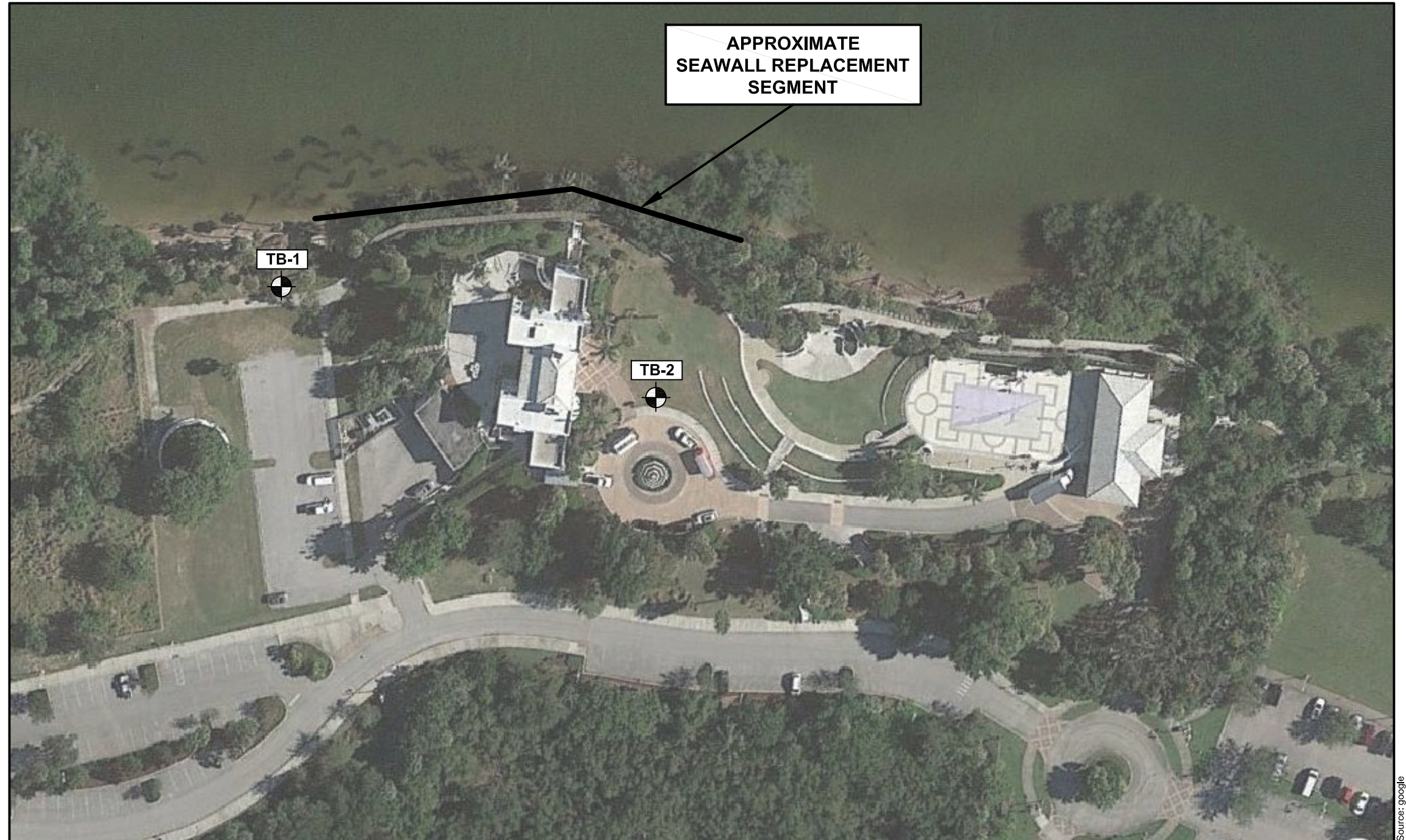
**Figure No. 1**

**LEGEND**

**TB-#**  
 Standard Penetration Test Boring

**NOTE**

Shown and noted field work locations are approximate. All field work locations were located using the provided site schematic, obtained aerial photographs, existing site features, and a hand-held WAAS enabled GPS instrument. Atmospheric disturbances and local weather conditions may affect the accuracy of the GPS instrument readings. As such, the shown field work locations should be considered accurate only to the degree implied by the method of measurement used.



Source: google



NOT TO SCALE



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 834 SW Swan Avenue, Port St. Lucie, FL 34983 772-807-9191 www.AACEinc.com  
 Certificate of Authorization No. 26794

**BORING LOCATION PLAN**

SUBSURFACE SOIL EXPLORATION  
 AND GEOTECHNICAL ENGINEERING CONSULTING  
 THE MANSION AT TUCKAHOE - INDIAN RIVERSIDE PARK  
 SEAWALL REPLACEMENT PROJECT  
 MARTIN COUNTY, FLORIDA

Drawn by: PGA

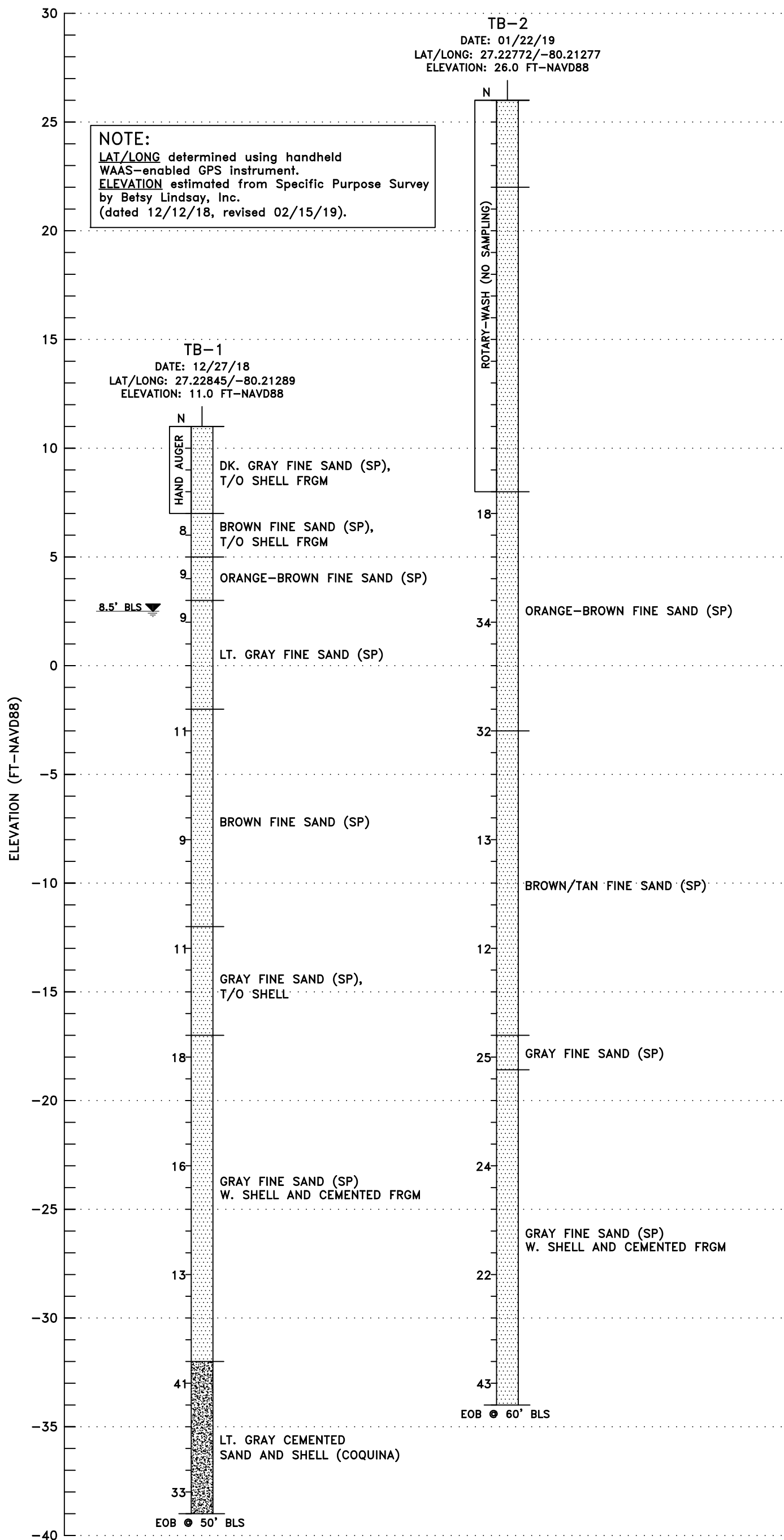
Date: April 2019

Checked by: DPA

Date: April 2019

AACE File No: 18-255

**Figure No. 2**



**SOIL GRAPHICAL LEGEND:**

- FINE SAND (SP)
- CEMENTED SAND AND SHELL (COQUINA)

**PROJECT NOTES:**

TB-# STANDARD PENETRATION TEST [SPT] BORING (ASTM D1586)  
 N SPT RESISTANCE IN BLOWS PER FOOT  
 X.X' GROUNDWATER TABLE (FT BELOW EXIST. GRADE) AT TIME DRILLED  
 EOB END OF BORING  
 BLS BELOW LAND SURFACE  
 SP: UNIFIED SOIL CLASSIFICATION SYSTEM [USCS]  
 USCS GROUPS DETERMINED BY VISUAL CLASSIFICATION  
 DRILL RIG: MOBILE B-57  
 DRILLING METHOD: ROTARY-WASH/BENTONITE SLURRY  
 CASING: INSTALLED AS NOTED  
 HAMMER TYPE: SAFETY/MANUAL



# **APPENDIX I**

## USDA Soil Survey Information



United States  
Department of  
Agriculture

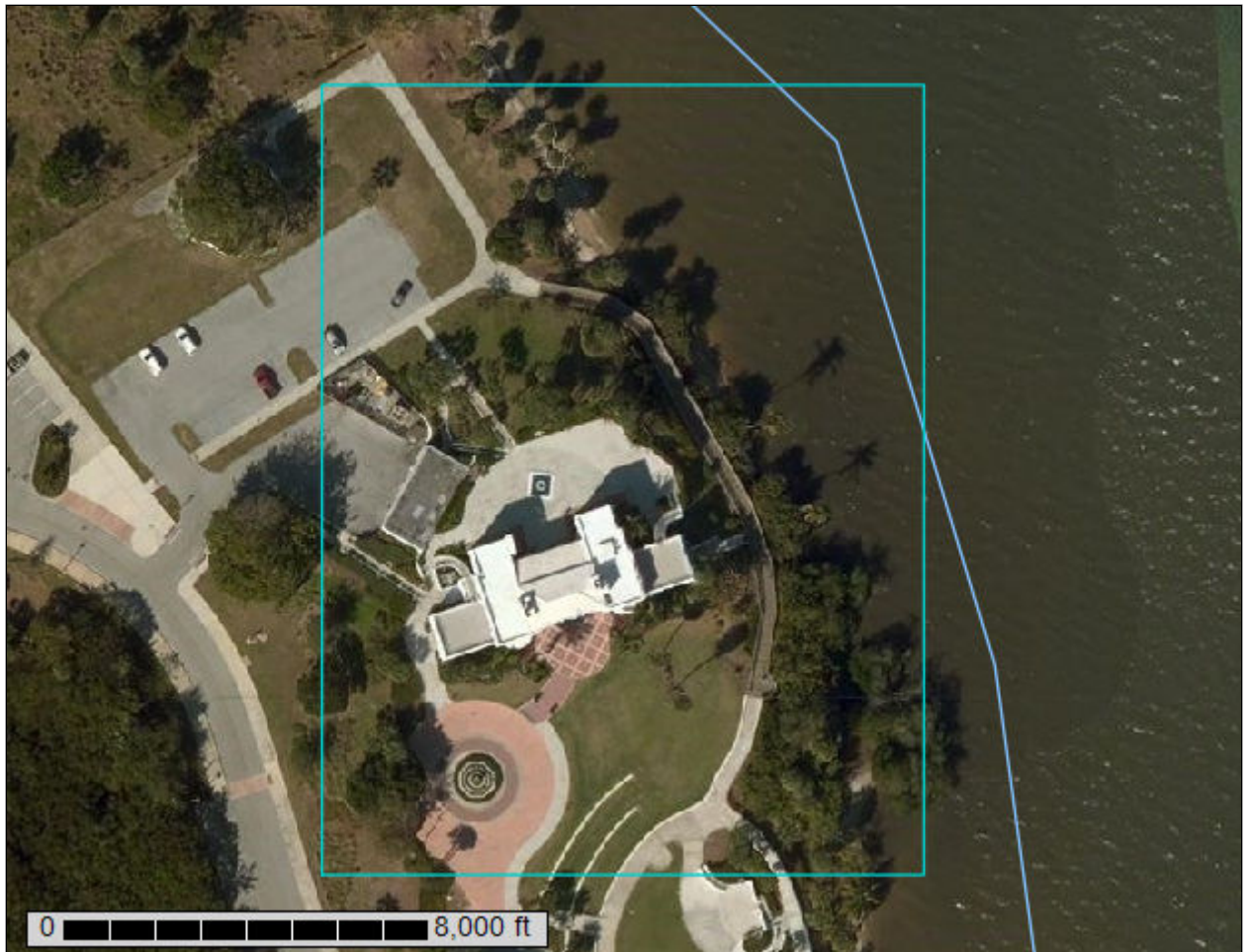
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Martin County, Florida**

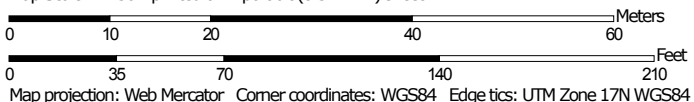
## **Mansion at Tuckahoe Seawall Replacement Project**



Custom Soil Resource Report  
Soil Map (Mansion at Tuckahoe Seawall Replacement Project)




Map Scale: 1:750 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Martin County, Florida  
 Survey Area Data: Version 17, Sep 17, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 14, 2015—May 8, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Map Unit Legend (Mansion at Tuckahoe Seawall Replacement Project)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
77	Paola and St. Lucie sands, 8 to 20 percent slopes	2.3	77.5%
99	Water	0.7	22.5%
<b>Totals for Area of Interest</b>		<b>3.0</b>	<b>100.0%</b>

## Map Unit Descriptions (Mansion at Tuckahoe Seawall Replacement Project)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

## Custom Soil Resource Report

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Martin County, Florida

### 77—Paola and St. Lucie sands, 8 to 20 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1jq9t  
*Mean annual precipitation:* 56 to 64 inches  
*Mean annual air temperature:* 72 to 79 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Paola and similar soils:* 50 percent  
*St. lucie and similar soils:* 45 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Paola

##### Setting

*Landform:* Ridges on marine terraces, knolls on marine terraces  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

##### Typical profile

*A - 0 to 4 inches:* sand  
*E - 4 to 32 inches:* sand  
*C - 32 to 80 inches:* sand

##### Properties and qualities

*Slope:* 8 to 20 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 39.96 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 1.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* A  
*Forage suitability group:* Sandy soils on ridges and dunes of xeric uplands (G156BC113FL)  
*Other vegetative classification:* Sand Pine Scrub (R156BY001FL)  
*Hydric soil rating:* No

## Description of St. Lucie

### Setting

*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Eolian or sandy marine deposits

### Typical profile

*A - 0 to 3 inches:* sand  
*C - 3 to 80 inches:* sand

### Properties and qualities

*Slope:* 8 to 20 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 39.96 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* A  
*Forage suitability group:* Sandy soils on ridges and dunes of xeric uplands (G156BC113FL)  
*Other vegetative classification:* Sand Pine Scrub (R156BY001FL)  
*Hydric soil rating:* No

## Minor Components

### Archbold

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sand Pine Scrub (R156BY001FL)  
*Hydric soil rating:* No

### Pomello

*Percent of map unit:* 2 percent  
*Landform:* Ridges on marine terraces, knolls on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods (R156BY003FL)  
*Hydric soil rating:* No

**99—Water**

**Map Unit Composition**

*Water: 100 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## **APPENDIX II**

### Site Photographs

## The Mansion at Tuckahoe Seawall Replacement Project



View of Mansion, wooden boardwalk, and sloped conditions.

**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**  
GEOTECHNICAL ENGINEERING, CONSTRUCTION MATERIALS TESTING AND ENVIRONMENTAL CONSULTING

## The Mansion at Tuckahoe Seawall Replacement Project



View from boardwalk down towards existing seawall. Failures in seawall are visible with eroded upland slope conditions.

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## The Mansion at Tuckahoe Seawall Replacement Project



View from boardwalk down towards existing seawall, with the seaward buttresses, failures, and eroded upland slope.

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GEOTECHNICAL ENGINEERING, CONSTRUCTION MATERIALS TESTING AND ENVIRONMENTAL CONSULTING

## The Mansion at Tuckahoe Seawall Replacement Project



View from the IntraCoastal Waterway of the existing concrete seawall with the soil-supported buttresses.

**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**

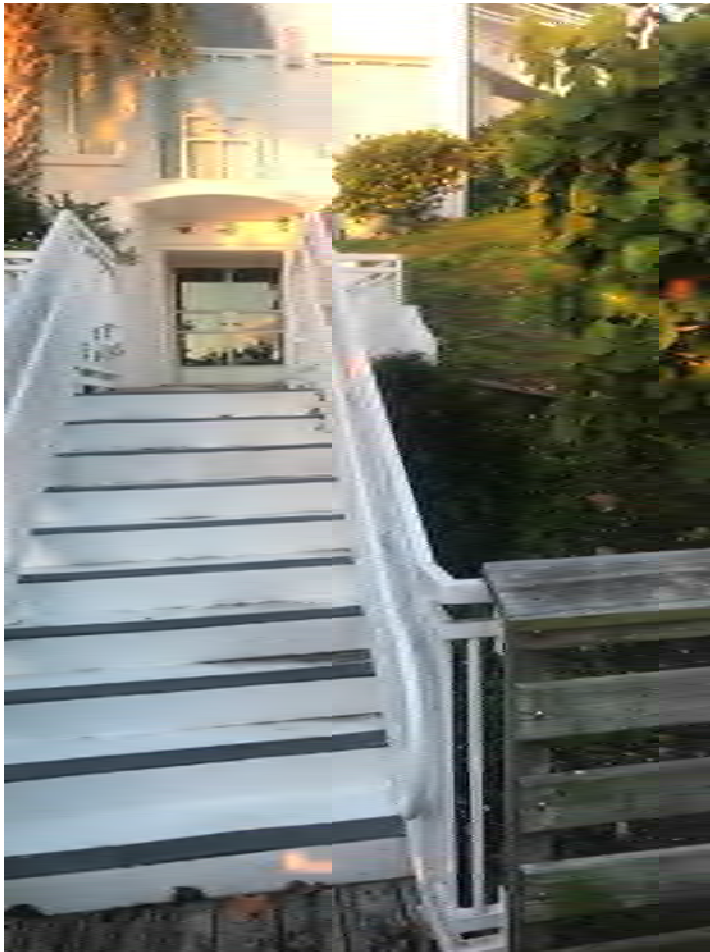
GEOTECHNICAL ENGINEERING, CONSTRUCTION MATERIALS TESTING AND ENVIRONMENTAL CONSULTING

## The Mansion at Tuckahoe Seawall Replacement Project



View of steep sloped conditions (est. 2H:1V) from Mansion  
and down towards existing seawall.

**The Mansion at Tuckahoe Seawall Replacement Project**



View of steps leading up to east side of Mansion,  
with cracking visible in the entrance feature(s).

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GEOTECHNICAL ENGINEERING, CONSTRUCTION MATERIALS TESTING AND ENVIRONMENTAL CONSULTING

## **APPENDIX III**

### **General Notes**

(Soil Borings, Sampling and Testing Methods)

**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**  
**SOIL BORING, SAMPLING AND TESTING METHODS**

**GENERAL**

Andersen Andre Consulting Engineers, Inc. (AACE) borings describe subsurface conditions only at the locations drilled and at the time drilled. They provide no information about subsurface conditions below the bottom of the boreholes. At locations not explored, surface conditions that differ from those observed in the borings may exist and should be anticipated.

The information reported on our boring logs is based on our drillers' logs and on visual examination in our laboratory of disturbed soil samples recovered from the borings. The distinction shown on the logs between soil types is approximate only. The actual transition from one soil to another may be gradual and indistinct.

The groundwater depth shown on our boring logs is the water level the driller observed in the borehole when it was drilled. These water levels may have been influenced by the drilling procedures, especially in borings made by rotary drilling with bentonitic drilling mud. An accurate determination of groundwater level requires long-term observation of suitable monitoring wells. Fluctuations in groundwater levels throughout the year should be anticipated.

The absence of a groundwater level on certain logs indicates that no groundwater data is available. It does not mean that groundwater will not be encountered at that boring location at some other point in time.

**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 (0.6m) long, 2-inch (50mm) O.D. split-barrell sampler attached to the end of a string of drilling rods is driven 24 inches (0.60m) into the ground by successive blows of a 140-pound (63.5 Kg) hammer freely dropping 30 inches (0.76m). The number of blows needed for each 6 inches (0.15m) increments penetration is recorded. The sum of the blows required for penetration of the middle two 6-inch (0.15m) increments of penetration constitutes the test result of N-value. After the test, the sampler is extracted from the ground and opened to allow visual description 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):

<b>Cohesionless Soils:</b>	<b><u>N-Value</u></b>	<b><u>Description</u></b>
	0 to 4	Very loose
	4 to 10	Loose
	10 to 30	Medium dense
	30 to 50	Dense
	Above 50	Very dense

<b>Cohesive Soils:</b>	<b><u>N-Value</u></b>	<b><u>Description</u></b>	<b><u>Qu</u></b>
	0 to 2	Very soft	Below 0.25 tsf (25 kPa)
	2 to 4	Soft	0.25 to 0.50 tsf (25 to 50 kPa)
	4 to 8	Medium stiff	0.50 to 1.0 tsf (50 to 100 kPa)
	8 to 15	Stiff	1.0 to 2.0 tsf (100 to 200 kPa)
	15 to 30	Very stiff	2.0 to 4.0 tsf (200 to 400 kPa)
	Above 30	Hard	Above 4.0 tsf (400 kPa)

The tests are usually performed at 5 foot (1.5m) intervals. However, more frequent or continuous testing is done by AACE 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 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, 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. After completion of a test borings, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed by backfilling, either with accumulated cuttings or lean cement.

Representative split-spoon samples from each sampling interval and from different strata are brought to our laboratory in air-tight jars for classification and testing, if necessary. Afterwards, the samples are discarded unless prior arrangement have been made.

### **POWER AUGER BORINGS**

Auger borings (ASTM D-1452) are used when a relatively large, continuous sampling of soil strata close to the ground surface is desired. A 4-inch (100 mm) diameter, continuous flight, helical auger with a cutting head at its end is screwed into the ground in 5-foot (1.5m) sections. It is powered by the rotary drill rig. The sample is recovered by withdrawing the auger out of the ground without rotating it. The soil sample so obtained, is classified in the field and representative samples placed in bags or jars and returned to the AACE soils laboratory for classification and testing, if necessary.

### **HAND AUGER BORINGS**

Hand auger borings are used, if soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5-foot [1.5m]) depth or when access is not available to power drilling equipment. A 3-inch (75mm) diameter hand bucket auger with a cutting head is simultaneously turned and pressed into the ground. The bucket auger is retrieved at approximately 6-inch (0.15m) interval and its contents emptied for inspection. On occasion post-hole diggers are used, especially in the upper 3 feet (1m) or so. Penetrometer probings can be used in the upper 5 feet (1.5m) to determine the relative density of the soils. The soil sample obtained is described and representative samples put in bags or jars and transported to the AACE soils laboratory for classification and testing, if necessary.

## **UNDISTURBED SAMPLING**

Undisturbed sampling (ASTM D-1587) implies the recovery of soil samples in a state as close to their natural condition as possible. Complete preservation of in situ conditions cannot be realized; however, with careful handling and proper sampling techniques, disturbance during sampling can be minimized for most geotechnical engineering purposes. Testing of undisturbed samples gives a more accurate estimate of in situ behavior than is possible with disturbed samples.

Normally, we obtain undisturbed samples by pushing a 2.875-inch (73 mm) I.D., thin wall seamless steel tube 24 inches (0.6 m) into the soil with a single stoke of a hydraulic ram. The sampler, which is a Shelby tube, is 30 (0.8 m) inches long. After the sampler is retrieved, the ends are sealed in the field and it is transported to our laboratory for visual description and testing, as needed.

## **ROCK CORING**

In case rock strata is encountered and rock strength/continuity/composition information is needed for foundation or mining purposes, the rock can be cored (ASTM D-2113) and 2-inch to 4-inch diameter rock core samples be obtained for further laboratory analyses. The rock coring is performed through flush-joint steel casing temporarily installed through the overburden soils above the rock formation and also installed into the rock. The double- or triple-tube core barrels are advanced into the rock typically in 5-foot intervals and then retrieved to the surface. The barrel is then opened so that the core sample can be extruded. Preliminary field measurements of the recovered rock cores include percent recovery and Rock Quality Designation (RQD) values. The rock cores are placed in secure core boxes and then transported to our laboratory for further inspection and testing, as needed.

## **SFWMD EXFILTRATION TESTS**

In order to estimate the hydraulic conductivity of the upper soils, constant head or falling head exfiltration tests can be performed. These tests are performed in accordance with methods described in the South Florida Water Management District (SFWMD) Permit Information Manual, Volume IV. In brief, a 6 to 9 inch diameter hole is augered to depths of about 5 to 7 feet; the bottom one foot is filled with 57-stone; and a 6-foot long slotted PVC pipe is lowered into the hole. The distance from the groundwater table and to the ground surface is recorded and the hole is then saturated for 10 minutes with the water level maintained at the ground surface.

If a constant head test is performed, the rate of pumping will be recorded at fixed intervals of 1 minute for a total of 10 minutes, following the saturation period.

## **LABORATORY TEST METHODS**

Soil samples returned to the AACE soils laboratory are visually observed by a geotechnical engineer or a trained technician to obtain more accurate description of the soil strata. Laboratory testing is performed on selected samples as deemed necessary to aid in soil classification and to help 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 discussed in this report.



**THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA**  
**CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES**

The soil descriptions shown on the logs are based upon visual-manual procedures in accordance with local practice. Soil classification is performed in general accordance with the United Soil Classification System and is also based on visual-manual procedures.

BOULDERS (>12" [300 MM]) and COBBLES (3" [75 MM] TO 12" [300 MM]):

**GRAVEL:**            Coarse Gravel:            3/4" (19 mm) to 3" (75 mm)  
                                  Fine Gravel:                No. 4 (4.75 mm) Sieve to 3/4" (19 mm)

Descriptive adjectives:

0 - 5%	– no mention of gravel in description
5 - 15%	– trace
15 - 29%	– some
30 - 49%	– gravelly (shell, limerock, cemented sands)

**SANDS:**

COARSE SAND:    No. 10 (2 mm) Sieve to No. 4 (4.75 mm) Sieve  
 MEDIUM SAND: No. 40 (425 μm) Sieve to No. 10 (2 mm) Sieve  
 FINE SAND:                No. 200 (75 μm) Sieve to No. 40 (425 μm) Sieve

Descriptive adjectives:

0 - 5%	– no mention of sand in description
5 - 15%	– trace
15 - 29%	– some
30 - 49%	– sandy

**SILT/CLAY:**            < #200 (75μM) Sieve

SILTY OR SILT:    PI < 4  
 SILTY CLAYEY OR SILTY CLAY: 4 ≤ PI ≤ 7  
 CLAYEY OR CLAY: PI > 7

Descriptive adjectives:

< - 5%	– clean (no mention of silt or clay in description)
5 - 15%	– slightly
16 - 35%	– clayey, silty, or silty clayey
36 - 49%	– very

**ORGANIC SOILS:**

<b>Organic Content</b>	<b>Descriptive Adjectives</b>	<b>Classification</b>
0 - 2.5%	Usually no mention of organics in description	See Above
2.6 - 5%	slightly organic	add "with organic fines" to group name
5 - 30%	organic	SM with organic fines  Organic Silt (OL) Organic Clay (OL) Organic Silt (OH)

**THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA  
CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES**

Organic Clay (OH)

**HIGHLY ORGANIC SOILS AND MATTER:**

<b>Organic Content</b>	<b>Descriptive Adjectives</b>	<b>Classification</b>
30 - 75%	sandy peat	Peat (PT)
	silty peat	Peat (PT)
> 75%	amorphous peat	Peat (PT)
	fibrous peat	Peat (PT)

**STRATIFICATION AND STRUCTURE:**

<b><u>Descriptive Term</u></b>	<b><u>Thickness</u></b>
with interbedded	
seam	-- less than ½ inch (13 mm) thick
layer	-- ½ to 12-inches (300 mm) thick
stratum	-- more than 12-inches (300 mm) thick
pocket	-- small, erratic deposit, usually less than 1-foot
lens	-- lenticular deposits
occasional	-- one or less per foot of thickness
frequent	-- more than one per foot of thickness
calcareous	-- containing calcium carbonate (reaction to diluted HCL)
hardpan	-- spodic horizon usually medium dense
marl	-- mixture of carbonate clays, silts, shells and sands

**ROCK CLASSIFICATION (FLORIDA) CHART:**

<b><u>Symbol</u></b>	<b><u>Typical Description</u></b>
LS	Hard Bedded Limestone or Caprock
WLS	Fractured or Weathered Limestone
LR	Limerock (gravel, sand, silt and clay mixture)
SLS	Stratified Limestone and Soils

**THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHEAST FLORIDA**  
**CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES**

**LEGEND FOR BORING LOGS**

N:	Number of blows to drive a 2-inch OD split spoon sampler 12 inches using a 140-pound hammer dropped 30 inches
R:	Refusal (less than six inches advance of the split spoon after 50 hammer blows)
MC:	Moisture content (percent of dry weight)
OC:	Organic content (percent of dry weight)
PL:	Moisture content at the plastic limit
LL:	Moisture content at the liquid limit
PI:	Plasticity index (LL-PL)
qu:	Unconfined compressive strength (tons per square foot, unless otherwise noted)
-200:	Percent passing a No. 200 sieve (200 wash)
+40:	Percent retained above a No. 40 sieve
US:	Undisturbed sample obtained with a thin-wall Shelby tube
k:	Permeability (feet per minute, unless otherwise noted)
DD:	Dry density (pounds per cubic foot)
TW:	Total unit weight (pounds per cubic foot)

## **APPENDIX IV**

### AACE Project Limitations and Conditions

**ANDERSEN ANDRE CONSULTING ENGINEERS, INC.**  
(revised January 24, 2007)

***Project Limitations and Conditions***

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Andersen Andre Consulting Engineers, Inc. has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made herein. Further, the report, in all cases, is subject to the following limitations and conditions:

**VARIABLE/UNANTICIPATED SUBSURFACE CONDITIONS**

The engineering analysis, evaluation and subsequent recommendations presented herein are based on the data obtained from our field explorations, at the specific locations explored on the dates indicated in the report. This report does not reflect any subsurface variations (e.g. soil types, groundwater levels, etc.) which may occur adjacent or between borings.

The nature and extent of any such variations may not become evident until construction/excavation commences. In the event such variations are encountered, Andersen Andre Consulting Engineers, Inc. may find it necessary to (1) perform additional subsurface explorations, (2) conduct in-the-field observations of encountered variations, and/or re-evaluate the conclusions and recommendations presented herein.

We at Andersen Andre Consulting Engineers, Inc. recommend that the project specifications necessitate the contractor immediately notifying Andersen Andre Consulting Engineers, Inc., the owner and the design engineer (if applicable) if subsurface conditions are encountered that are different from those presented in this report.

No claim by the contractor for any conditions differing from those expected in the plans and specifications, or presented in this report, should be allowed unless the contractor notifies the owner and Andersen Andre Consulting Engineers, Inc. of such differing site conditions. Additionally, we recommend that all foundation work and site improvements be observed by an Andersen Andre Consulting Engineers, Inc. representative.

**SOIL STRATA CHANGES**

Soil strata changes are indicated by a horizontal line on the soil boring profiles (boring logs) presented within this report. However, the actual strata's changes may be more gradual and indistinct. Where changes occur between soil samples, the locations of the changes must be estimated using the available information and may not be at the exact depth indicated.

**SINKHOLE POTENTIAL**

Unless specifically requested in writing, a subsurface exploration performed by Andersen Andre Consulting Engineers, Inc. is not intended to be an evaluation for sinkhole potential.

## **MISINTERPRETATION OF SUBSURFACE SOIL EXPLORATION REPORT**

Andersen Andre Consulting Engineers, Inc. is responsible for the conclusions and recommendations presented herein, based upon the subsurface data obtained during this project. If others render conclusions or opinions, or make recommendations based upon the data presented in this report, those conclusions, opinions and/or recommendations are not the responsibility of Andersen Andre Consulting Engineers, Inc.

## **CHANGED STRUCTURE OR LOCATION**

This report was prepared to assist the owner, architect and/or civil engineer in the design of the subject project. If any changes in the construction, design and/or location of the structures as discussed in this report are planned, or if any structures are included or added that are not discussed in this report, the conclusions and recommendations contained in this report may not be valid. All such changes in the project plans should be made known to Andersen Andre Consulting Engineers, Inc. for our subsequent re-evaluation.

## **USE OF REPORT BY BIDDERS**

Bidders who are reviewing this report prior to submission of a bid are cautioned that this report was prepared to assist the owners and project designers. Bidders should coordinate their own subsurface explorations (e.g.; soil borings, test pits, etc.) for the purpose of determining any conditions that may affect construction operations. Andersen Andre Consulting Engineers, Inc. cannot be held responsible for any interpretations made using this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which may affect construction operations.

## **IN-THE-FIELD OBSERVATIONS**

Andersen Andre Consulting Engineers, Inc. attempts to identify subsurface conditions, including soil stratigraphy, water levels, zones of lost circulation, "hard" or "soft" drilling, subsurface obstructions, etc. However, lack of mention in the report does not preclude the presence of such conditions.

## **LOCATION OF BURIED OBJECTS**

Users of this report are cautioned that there was no requirement for Andersen Andre Consulting Engineers, Inc. to attempt to locate any man-made, underground objects during the course of this exploration, and that no attempts to locate any such objects were performed. Andersen Andre Consulting Engineers, Inc. cannot be responsible for any buried man-made objects which are subsequently encountered during construction.

## **PASSAGE OF TIME**

This report reflects subsurface conditions that were encountered at the time/date indicated in the report. Significant changes can occur at the site during the passage of time. The user of the report recognizes the inherent risk in using the information presented herein after a reasonable amount of time has passed. We recommend the user of the report contact Andersen Andre Consulting Engineers, Inc. with any questions or concerns regarding this issue.

# Important Information about Your Geotechnical Engineering Report

*Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.*

*While you cannot eliminate all such risks, you can manage them. The following information is provided to help.*

## **Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects**

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the report for any purpose or project except the one originally contemplated.*

## **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## **A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors**

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## **Subsurface Conditions Can Change**

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

## **Most Geotechnical Findings Are Professional Opinions**

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## **A Report's Recommendations Are *Not* Final**

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

### **A Geotechnical Engineering Report Is Subject to Misinterpretation**

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

### **Do Not Redraw the Engineer's Logs**

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

### **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that

have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### **Geoenvironmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

### **Obtain Professional Assistance To Deal with Mold**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

### **Rely, on Your ASFE-Member Geotechnical Engineer for Additional Assistance**

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

## **ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION**

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