

**REQUEST FOR PROPOSAL #09-1619BG
DESIGN BUILD CONSTRUCTION SERVICES
FOR THE
MARINE RESCUE HEADQUARTERS**

Manatee County, a political subdivision of the State of Florida (hereinafter "Manatee County" or the "County") will receive proposals from individuals, corporations, partnerships, and other legal entities authorized to do business in the State of Florida, for the purpose of providing Design Build Construction Services for Bennett Park.

TIME AND DATE DUE: Proposals will be received until 10:00A.M., **May 8, 2009**, at which time they will be publicly opened. All interested parties are invited to attend this opening.

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Important note: A prohibition of Lobbying
has been enacted with the issuance of this Request for Proposal

Please review paragraph A.18 carefully to avoid violation and possible sanctions.

FOR INFORMATION CONTACT:

Blair C. Getz, Contracts Negotiator, Purchasing Division at (941) 749-3053

OR

Darin Cushing, Project Manager, Construction Services Division at (941) 749-3005

Authorized to Release: _____



SECTION A: INFORMATION TO PROPOSERS

PROPOSERS MUST COMPLY WITH THE FOLLOWING INSTRUCTIONS TO BE CONSIDERED FOR SELECTION.

A.01 OPENING LOCATION

These proposals will be publicly opened at Manatee County Purchasing, 1112 Manatee Avenue West, 8th Floor, Suite 803, Bradenton, Florida 34205, in the presence of County officials at the time and date stated on the cover sheet. All Proposers or their representatives are invited to attend.

Proposals become "Public Records" ten (10) days after the proposal opening or if an award decision is made earlier than this time as provided by Florida Statute 119.071. **No announcement of pricing or review of the proposal documents shall be conducted at the public opening of the proposals.**

A.02 BID INFORMATION AND BID DOCUMENTS

Bids and Proposals on <http://www.mymanatee.org>

Bid or Proposal documents and the Notices of Source Selection related to those Bids or Proposals are available for download in a portable document format (.PDF) file on the Manatee County web page on the Purchasing tab under "Bids and Proposals." You may view and print these files using Adobe Acrobat software. You may download a free copy of this software (Adobe) from the County's web page if you do not have it.

Manatee County collaborates with the Manatee Chamber of Commerce on distributing solicitations using the RFP Tool web page on the Chambers website: <http://www.Manateechamber.com> to post Bid and Proposal documents in a portable document format (.PDF) file. This step is in addition to the posting on Manatee County Government web pages.

Manatee County may also use an internet service provider to distribute Bids and Proposals. A link to that service <http://www.DemandStar.com>, is provided on this website under the Tab "DemandStar". Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Complete individual CD's of the proposal documents for the project and/or products can be obtained from **Property Management Department, Construction Services, Dianne Aiken, Phone number 941-749-3005 between the hours of 8:00 am and 4:00 pm, Monday through Friday at no charge.** Complete set of the proposal documents must be used in preparing proposals. Neither Owner nor Engineer assumes any responsibility for errors of misinterpretations resulting from the use of incomplete sets of proposal Documents.

A.02 (CONTINUED)

Electronic copies of Bid or Proposal documents may be requested at no cost per Florida Statute 119.01 (2) (e). These files in PDF format may be obtained by calling the person or persons identified to contact on page one.

A fee may be charged for creating a CD recording or a printed copy of the documents requested. Cost Details shall be provided when you specify the format.

Note: The County posts the Notice of Source Selection seven calendar days prior to the effective date of the award.

IT IS THE RESPONSIBILITY OF EACH VENDOR, PRIOR TO SUBMITTING THEIR BID or PROPOSAL, TO CONTACT THE MANATEE COUNTY PURCHASING OFFICE (see contact information on page one of this document) TO DETERMINE IF ADDENDA WERE ISSUED AND TO MAKE SUCH ADDENDA A PART OF THEIR BID or PROPOSAL.

A public internet connection is available during regular business hours in the lobby of the Purchasing Division. If you have questions which cannot be answered by these sources, please contact the individual named on the front page of the bid or proposal.

Please contact the individual named on the first page of this bid or proposal document, if you have questions on this instruction.

A.03 PROPOSAL FORM DELIVERY REQUIREMENTS

Any proposals received after the stated time and date will not be considered. It shall be the sole responsibility of the Proposer to have their proposal delivered to the Manatee County Purchasing office for receipt on or before the stated time and date.

If a proposal is sent by U.S. Mail, the Proposer shall be responsible for its timely delivery to the Purchasing Office. Proposals delayed by mail shall not be considered, shall not be opened at the public opening, and arrangements shall be made for their return at the Proposer's request and expense.

A.04 CLARIFICATION & ADDENDA

Each Proposer shall examine all Request for Proposal documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to the Request for Proposal shall be made in writing through the Manatee County Purchasing Office. The County shall not be responsible for oral interpretations given by any County employee, representative, or others. The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given.

If any addenda are issued to this Invitation for Proposals, the County will broadcast the addenda through DEMANDSTAR to "planholders" identified on this web service,

however, it shall be the responsibility of each proposer, prior to submitting their proposal, to contact the Manatee County Purchasing Office (see contact information on page 1) to determine if addenda were issued and to make such addenda a part of their proposal.

A.05 SEALED & MARKED

(3) Three signed copies of your proposal shall be submitted in one sealed package, clearly marked on the outside "**Sealed Proposal #09-1619-BG**" / **Design Build Construction Services for the Marine Rescue Headquarters** and addressed to:

Manatee County Purchasing
1112 Manatee Avenue West, Suite 803
Bradenton, FL 34205

A.06 LEGAL NAME

Proposals shall clearly indicate the legal name, address and telephone number of the Proposer which shall be the business entity registered with the State of Florida to provide **Design/Build Construction Services for the Marine Rescue Headquarters** which you have the authority to bind to directly perform the services and contractual duties to Manatee County. Proposals shall be signed above the typed or printed name and title of the signer. The signer shall have the authority to bind the Proposer to the submitted proposal.

A.07 PROPOSAL EXPENSES

All expenses for making proposals to the County are to be borne by the Proposer.

A.08 EXAMINATION OF OFFER

The examination of these proposals and the qualifications of the Proposer shall require a period of not less than ninety (90) calendar days from the date of the opening of the proposals.

A.09 DISCLOSURE ...

Upon receipt, responses become "Public Records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Section 119.071(1)(b)1.a states that sealed bids shall be exempt from inspection or copying until such time as the County provides a notice of a decision or within 10 days after the date the bids are opened, whichever is earlier.

Based on the above, Manatee County will receive bids the Bid or Proposal at the date and time stated, and will make public at the opening the names of the business entities of all that submitted an offer and any amount presented as a total offer without any verification of the mathematics or the completeness of the offer. Upon the expiration of the Statutory term for exemption the actual documents may be inspected or copied.

When County staff have completed a mathematic validation and inspected the completeness of the offers, a tabulation shall be posted on mymanatee.org.

A.10 ERRORS OR OMISSIONS

Once a proposal is submitted, the County shall not accept any request by any proposer to correct errors or omissions in the proposal. No changes shall be allowed until a selection is made and contract negotiations actually begin.

A.11 RESERVED RIGHTS

The County reserves the right to accept or reject any and/or all proposals, to waive irregularities and technicalities, and to request resubmission. Any sole response received by the first submission date may or may not be rejected by the County, depending on available competition and timely needs of the County. The County reserves the right to award the contract to a responsible Proposer submitting a responsive proposal, with a resulting negotiated agreement which is most advantageous and in the best interests of the County. The County shall be the sole judge of the proposal, and the resulting negotiated agreement that is in its best interest and its decision shall be final. Also, the County reserves the right to make such investigation as it deems necessary to determine the ability of any Proposer to perform the work or service requested. Information the County deems necessary to make this determination shall be provided by the Proposer. Such information may include, but shall not be limited to: current financial statements prepared by an independent CPA; verification of availability of equipment and personnel; criminal background information of any Proposer, its employees, agents and personnel; and past performance records.

A.12 APPLICABLE LAWS ...

Bidder or Proposer must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting agreement. Any involvement with any Manatee County procurement shall be in accordance with Manatee County Purchasing Code Ordinance 08-43, as amended. Any actual or prospective Bidder or Proposer who is aggrieved in connection with the solicitation or award of a contract may protest to the Board of County Commissioners of Manatee County as required in Section 2-26/61 of the Purchasing Code.

A protest with respect to this Invitation For Bid or Request for Proposal shall be submitted in writing prior to the scheduled opening date of this proposal, unless the aggrieved person did not know and could not have been reasonably expected to have knowledge of the facts giving rise to such protest prior to the scheduled opening date of this proposal. The protest shall be submitted within seven calendar days after such aggrieved person knows or could have reasonably been expected to know of the facts giving rise thereto.

A.13 CODE OF ETHICS ...

With respect to this proposal, if any Bidder or Proposer violates or is a party to a violation of the Code of Ethics of Manatee County per Manatee County Purchasing Code Ordinance 08-43, Article 3, Ethics in Public Contracting, and/or the state of Florida per Florida Statutes, Chapter 112, Part III, Code of Ethics for Public Officers and Employees, such Bidder or Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future bids or proposals for work or for goods or services for Manatee County.

The County anticipates that all statements made and materials submitted in a proposal will be truthful. If a bidder or proposer is determined to be untruthful in its proposal or any related presentation, such bidder or proposer may be disqualified from further consideration regarding this Invitation For Bid or Request for Proposal.

A.14 COLLUSION

By offering a submission to this Request for Proposal the Proposer certifies the Proposer has not divulged to, discussed or compared his proposal with other Proposers and has not colluded with any other Proposer or parties to this proposal whatsoever. Also, Proposer certifies, and in the case of a joint proposal, each party thereto certifies, as to their own organization that in connection with this proposal:

- a. any prices and/or data submitted have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition,
as to any matter relating to such prices and/or cost data, with any other Proposer or with any competitor;
- b. any prices and/or cost data quoted for this proposal have not been knowingly disclosed by the Proposer prior to the scheduled opening directly or indirectly to any competitor;
- c. no attempt has been made or will be made by the Proposer to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition;
- d. the only person or persons interested in this proposal as principal or principals is/are named therein and that no person other than therein mentioned has any interest in this proposal or in the contract to be entered into; and
- e. no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees.

A.15 PROPOSAL FORMS

Proposals must be submitted in the format specified in Section B of this Request For Proposals. The contents of each proposal shall be separated and arranged with tabs in the same order as listed in the Subsections within Section B identifying the response to each specific item to facilitate an expedient review of all responses.

A.16 PUBLIC ENTITY CRIMES

In accordance with Section 287.133, Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 for Category Two (as of 1/01/2005 is \$25,000) for a period of 36 months from the date of being placed on the convicted vendor list.

A.17 DRUG FREE WORK PLACE

Drug Free Workplace Program: Manatee County Board of County Commissioners adopted a policy regarding maintaining a Drug Free Workplace, Resolution R-93-22. Proposers are asked to review the attached copy of the Resolution and provide either a certification of compliance with the program outlined in this Resolution or describe your firm's policy or program as it relates to maintaining a drug free workplace. This response will be considered with the other criteria described herein.

A.18 LOBBYING

After the issuance of any Request for Proposals or Invitations for Bids, prospective bidders, Proposers or any agent, representative or person acting at the request of such bidder or Proposer shall not contact, communicate with or discuss any matter relating in any way to the Request for Proposals or Invitation for Bids with any officer, agent or employee of Manatee County other than the Purchasing Manager or as directed in the Request for Proposals or Invitation for Bids. This prohibition begins with the issuance of any Request for Proposals or Invitation for Bids, and ends upon execution of the final contract or when the invitation or request has been canceled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Procurement Code.

A.18 LOBBYING (CONTINUED)

NOTE: If required Proposers or Bidders may obtain further clarification or explanation of the Drawings, Specifications and Scope of Services by contacting:

Darin Cushing, Project Manager, Property Management Department

Phone: (941) 749-3005

Fax: (941) (941) 739-3018

Email: darin.cushing@mymanatee.com

Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to a REQUEST FOR PROPOSAL shall be made in writing.

DEADLINE FOR CLARIFICATION REQUESTS

April 29, 2009 at 5:00P.M. shall be the deadline to submit all inquiries, suggestions, or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bids or the Request For Proposals to the Manatee County Purchasing Office.

This deadline has been established to maintain fair treatment for all potential bidders or proposers, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve.

Proposers are hereby notified that all Addendums shall be **acknowledged where indicated on the Proposal Signature Form** and made a part of the above named Proposal documents. Proposals submitted without acknowledgement of any and all Addendums will be considered incomplete.

The County shall not be responsible for oral interpretations given by any County employee, representative, or others.

The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given.

NOTE: If required Proposers Bidders may obtain further clarification or explanation, exclusive of the drawings, specifications or the Scope of Services by contacting:

Blair C. Getz, Contracts Negotiator, Purchasing Division

Phone: (941) 749-3053

Fax: (941) 749-3034

Email: blair.getz@mymanatee.org

The County reserves the right to amend or to add to the names listed as persons to contact and shall be issued in writing by the Purchasing Department .

A.19 PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION ...

County Commissioners adopted a policy prohibiting the award of County contracts to persons, business entities, or affiliates of business entities who have not submitted written certification to the County that they have not been convicted of bribery, attempted bribery, collusion, restraints of trade, price fixing, and violations of certain environmental laws. A Non-Conviction Certification Form is attached for In accordance with Ordinance 08-43, adding Article 5, Manatee County Board of this purpose.

A.20 EQUAL EMPLOYMENT OPPORTUNITY

Manatee County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all prospective Proposers that they will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to participate in response to this advertisement and will not be discriminated against on the grounds of race, color, creed, sex, age or national origin in consideration for an award.

A.21 AMERICANS WITH DISABILITIES ACT

The Board of County Commissioners of Manatee County, Florida, does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of the County's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodation for the public meetings specified herein (i.e. Information Conference or Proposal Opening), should contact the person named on the first page of this document at least twenty four (24) hours in advance of the activity.

SECTION B: FORM OF PROPOSAL

This section identifies specific information which must be contained within each proposal. **The contents of each proposal shall be separated and arranged with tabs in the same order as listed in Sections B.02 and B.03 below, identifying the response to each specific item.**

B.01 MINIMUM QUALIFICATIONS (Licensing) TO BE CONSIDERED: To qualify for any consideration, the Proposer must present proof of certification and current valid licensing in the State of Florida as a General Contractor or registered building contractor as the qualifying agent; or certification and current valid licensing by the State of Florida under §471.023 to practice, or to offer to practice engineering or under §481.219 to practice, or to offer to practice architecture or under §481.31 to practice or to offer to practice landscape architecture.

MINIMUM EXPERIENCE TO BE CONSIDERED: To qualify for any consideration, the Proposer must present proof that they have fully designed and constructed a minimum of three projects that (as closely as possible) matches the specific performance specifications detailed in this Request for Proposals, in the last five years. Further, detail the maintenance/warranty services provided for those facilities.

If subcontractors are included in the agreement given to meet the minimum qualifications, detail the business entities, description of the service provided, and responses in the same level of detail and tabbed order as instructed in this Request For Proposal for the proposer.

For each of the qualifying three (3) facilities, provide the following details:

- a. Name and location of the Client and the facility, the year the construction installation began, the duration of the construction and installation of the equipment, the testing phase of the facility and the date the fully operational Design /Build facility was accepted.

Specify the name and telephone number for the Clients contract manager for the work; and
- b. The names of your firm's key staff and their roles such as project manager, engineers, installers; and
- c. The name and telephone numbers of the persons representing the individual agencies with which the identified key staff directly worked; and
- d. Any state agency which verified compliance with its requirements or standards, and the names and telephone numbers of the key persons with Direct knowledge of this process to achieve compliance.

Only upon determination that satisfactory responses have been provided to the preceding Minimum Qualifications and Experience, consideration shall be given to the following information:

B.02 ADMINISTRATIVE SUBMITTALS

The following documents shall be submitted with the proposal:

- a. Proposal Signature Form.
- b. Drug Free Workplace Certification.
- c. Public Contracting and Environmental Crimes Certification.

B.03 INFORMATION TO BE SUBMITTED

1. Identify the **Design Professional (architect or Engineer, etc.)**, if other than, proposer proposed to provide services for this design build project. Detail the licenses currently held, and the direct experience this individual has with the specific projects similar to the proposed **Marine Rescue Headquarters** and with the proposed General Contractor.

2. Identify the **General Contractor** (or Construction Manager), if other than the proposer, proposed to provide services for this design build project. Detail the licenses currently held, and the direct experience this individual has with specific projects similar to the proposed **Marine Rescue Headquarters** and with the proposed Design Professional.

3. Ability of Team and Professional Personnel:
Submit an Organization Chart with the Project Manager and Key Personnel including primary design and primary construction firms with project responsibilities including any proposed subcontractors. Submit resumes for key project professionals. Submit a listing of LEED®AP professionals on the design build team.

4. Experience with Projects of a Similar Size and Type:
Submit similar project experience information by firm (primary design and primary construction) with a focus on recreation/school projects, LEED projects and government project administration.

5. Past Performance and References:
Submit three references for similar projects. Submit three references each for the primary design firm and the primary contractor on the design build team. Provide contact information and project(s) completed for each reference. State if the design build team has worked together on previous projects. Provide a list of projects (year) previously completed for Manatee County.

B.03 INFORMATION TO BE SUBMITTED (CONTINUED)**6. Project Team Location:**

Provide City and State for offices where the work will be performed. Include the primary design firm and the primary contractor on the design build team. A firm will be considered local if the office where the work will be performed is in Manatee County.

7. Provide a **Schematic Design or general layout drawings** in sufficient detail to depict the Base design for the Marine Rescue Headquarters proposed to be designed and constructed by your firm.

7A. Provide specific details of your concept to achieve the Base design. This shall include a Schematic design and general layout, with details, of the proposed Facility.

7B. Provide why you feel your firm's design is best suited to meet or exceed the performance requirements of this facility as described in the Design Criteria.

8. Detail the **unencumbered bonding capacity** for your business Entity

9. Specify the staff proposed to be located within Manatee County. If any the firm's proposed support staff are to be located in another geographic location, detail the responsibilities and manning level separately for each proposed location.

10 Proposed Project Schedule detailing all significant design and construction issues including, but not limited to:

- a. Schedule of Values
- b. Survey Services
- c. Schematic Design
- d. Detail Design
- e. Equipment Schedule
- f. Permitting
- g. Commencement of Construction
- h. Substantial Completion
- i. Commencement of Acceptance Testing
- j. Commencement of Full Operation

B.03 (CONTINUED)

11. State your firm's current workload of construction and design projects with the current schedule for completion of each project.

Submit your firm's cost proposal; include the detail of design cost and construction cost with a total not to exceed proposed total cost to the County for your design. The Cost Proposals shall be on a separate sheet Titled **Cost Proposals**.

12. Detail all assumptions upon which your proposal is based.

A. How does the offered construction design fulfill the Design Criteria detailed in Section E of this Request for Proposal?

13. Submit any additional information which would assist the County in the evaluation of your proposal.

NOTE:

The County reserves the right to make such investigation and solicit additional information or submittals as it deems necessary to determine the ability of any proposer to perform the Scope of Services as generally outlined in Section E of this Request for Proposal.

SECTION C: SELECTION

C.01 EVALUATION FACTORS

Evaluation factors shall be the proposals, which will overall best meet the needs of Manatee County, the perceived ability of the proposer to perform the Scope of Services as stated in this Request for Proposal, and the cost proposal for the proposed work as determined from the responses to this Request for Proposal and subsequent investigation by the County.

C.02 RELATIVE IMPORTANCE OF EVALUATION FACTORS

No weight has been assigned to the Evaluation Factors stated above.

C.03 PRELIMINARY RANKING

A Selection Committee may determine from the response to this Request for Proposal and subsequent investigation as necessary, the proposers most susceptible of being selected for award.

C.04 REVIEW OF PROPOSERS AND PROPOSALS

Review shall be conducted with responsible proposers who may be reasonably susceptible of being selected for award, for the purposes of clarification to assure full understanding of the abilities of the proposer, and the proposal submitted.

Proposers responding to this Request for Proposal shall be available for presentation/interviews to the Selection Committee and to the Board of County Commissioners upon notification from the Purchasing Office at a time and date determined by the County.

C.05 SELECTION FOR NEGOTIATION

The proposer or proposers whose ability and proposal is determined to be the most advantageous to the County, taking into consideration the evaluation factors set forth in this Request for Proposal, shall be recommended to the Board of County Commissioners for authorization to negotiate an agreement for the stated Scope of Services.

Note that all evaluation factors are considered without assigning a weight factor, and all terms, conditions, and costs are to be negotiated. Therefore, price shall not be either the sole evaluative factor, or the dominant factor in the making the recommendation.

C.05 (CONTINUED)

The recommendation or selection of a proposer for negotiation shall not be construed as vesting any contractual or other rights of any nature in the proposer.

C.06 AWARD

Award of an agreement is subject to the successful negotiations and the vote of the Board of County Commissioners to authorize execution of the agreement.

SECTION D: NEGOTIATION OF THE AGREEMENTD.01 GENERAL

The following general terms and conditions apply to the proposal submitted for consideration and the subsequent negotiations:

- a. The proposal will serve as a basis for negotiating an agreement.
- b. Upon submission, all proposals become the property of the County which has the right to use any or all ideas presented in any proposal submitted in response to this Request for Proposal whether or not the proposal is accepted.

D.02 AGREEMENT

The selected proposer or proposers shall be required to negotiate a formal agreement, in a form acceptable to Manatee County.

The Manatee County Board of County Commissioners will be presented the negotiated agreement as the best and final offer for consideration of award and execution. The Board of County Commissioners shall determine if award of the agreement is to be: considered; rejected and direct further negotiations; rejected and terminate negotiations; or accepted, authorizing the chairman to execute the agreement.

SECTION E: SCOPE OF SERVICES

E.01 SCOPE OF SERVICES SUMMARY

- Design
- Upland Permitting
- Construction

E.02 PROPOSED BUDGET

The Proposers budget shall be for a complete project including design, permitting and construction. Space planning information is included in this RFP but it is ultimately the responsibility of the Design Build Team to work with staff to design, permit and construct a facility that meets the proposed budget.

E.03 PROJECT BACKGROUND

It is the intent of Manatee County to construct a new 4,250 SF Marine Rescue Headquarters building strategically located on the south end of Anna Maria Island with centralized access to Manatee County intracoastal waterways, Sarasota Bay, Manatee County beaches and the Gulf of Mexico. Permitting and design of a dock will be provided under separate contract and is not included in this project.

A schematic Site Plan, Ground Floor Plan and First Floor Plan for design consideration is included in the information provided, see RFP Attachments F, G, H and I. The building will be elevated on concrete piles and have boat/car parking at grade. Pervious paving materials for parking and sidewalks are required by permitting agencies.

E.04 PROJECT LOCATION

East side of Gulf Drive (SR 789) south end of Coquina Beach Park.

Section: 09, 10 Township: 35 South, Range: 16 East, City of Bradenton Beach, Anna Maria Island, Manatee County, Florida

The site for the Marine Rescue Headquarters building is located on the bay side of Coquina Beach Park, south of Leffis Key and north of the public boat ramp. The site is approximately 2 acres in size.

E.05 SITE INFORMATION

Attachment E - Geotechnical Report dated.
Attachment F – Topography with Site Plan.
Attachment G – Aerial with Site Plan

E.06 GENERAL DESIGN

The design of the new Marine Rescue Headquarters building is to be simple and durable. A detailed description of design criteria can be found in RFP **Attachment D – Design Criteria**. The design stages are to include schematic design, design development and construction documents. The Design Build Team will coordinate design reviews at each stage with Manatee County Property Management Department and Public Safety Department staff. Construction cost estimating will be required at each stage of the work.

The building will be **hurricane hardened**, see RFP Attachment D – Design Criteria for requirements. The cost of hardening beyond code requirements shall be provided as an Alternate.

Site work, vehicular and pedestrian circulation, salt tolerant landscaping and irrigation system to code for the new building are included as well as the provision of utility services. Exterior building lighting shall be attached to the structure and shall be designed as required by permit agencies to protect marine life. A wash rack for boats is desired as well as an outside shower with eye wash.

Design of communications systems will be coordinated with the Manatee County Information Services Department (ISD) and the Manatee County Property Management Department. A perimeter security system and access control system (GE Diamond 2 Card Control or equal) shall be included in the project. Provide voice and data wiring.

Manatee County will provide Furnishings, Fixtures and Equipment (FF&E) for the project. An allowance of \$40,000 dollars shall be set aside in the project budget for this purpose.

The project shall be designed and constructed using sustainable methods as described by the US Green Building Council (USGBC) for Leadership in Energy and Environmental Design (LEED) projects. The Design Build Team shall provide complete design, documentation and commissioning to obtain base LEED ® certification for this facility.

Basic serviceable finishes such as sealed and stained concrete floors with painted CMU are desired. The design build team shall explore alternative energy and building systems such as solar, wind, reverse metering and cisterns.

E.07 PERMITTING

Applying for and obtaining all applicable local, state and federal permits for upland improvements is the responsibility of the Design Build Team. Pre-application meetings have been held with SWFWMD, FDEP and the City of Bradenton Beach. See RFP Attachment J – CPE Permitting Report, for a summary of state environmental permitting requirements. City meeting minutes can be found in RFP Attachment D, Exhibit E. Permits required at a minimum are listed below.

1. City of Bradenton Beach Building Permit and Site Plan Review
2. Florida Department of Environmental Protection (FDEP) Coastal Construction Permit
3. Florida Department of Environmental Protection (FDEP) ERP Permit
4. Florida Department of Environmental Protection (FDEP) NPDES Permit
5. Florida Department of Environmental Protection (FDEP) Sanitary Permit
6. Potable Water Permit (Manatee County Health Department)
7. Florida Department of Transportation (FDOT) Letter of No Permit Required for RW Access.
8. Applicable local, state and federal permits

Note that the area designated as “shell mound” on the site plan is spoil from excavation at Leffis Key performed to create lagoon environment habitat. Historic resources have not been observed in the excavation spoil.

Permitting for the proposed dock structure is not included and shall be provided under separate contract. Jurisdictional line delineation and permitting of landward features is included and shall be provided by the Design Build Team.

The Design Build Team shall certify to permit authorities that construction has been completed in substantial accordance with permitting agency requirements at the end of the project.

E.08 CONSTRUCTION

The site is unimproved and has access to Gulf Drive. Storage areas shall be as coordinated with Manatee County Property Management Department. Regular construction progress meetings shall be held monthly, at a minimum. Monthly pay requests shall be submitted for review at the progress meetings. Substantial Completion and Final Completion inspections shall be conducted with Manatee County Property Management.

Complete “As Built” drawings shall be prepared by the Design Build Team and provided to the County in digital CAD drawing format. A complete set of digital “As Built” drawings in 11x17 pdf format shall also be provided to the County at the end of the project.

SECTION F
MANATEE COUNTY LOCAL PREFERENCE LAW AND VENDOR REGISTRATION

F.01 Vendor Registration

All vendors are encouraged to register with Manatee County using the on-line "Vendor Registration" web page on www.mymanatee.org.

Enclosed is a copy of the current Manatee County law that details the County's Local Preference and definition of a Local Business.

If you assert that your firm meets the stated definition of a Local Business, we ask that in addition to registering on the County's Web page, you fill out the attached "**Affidavit As To Local Business Form**" that is the **last page** in this section of the proposal, have the completed document notarized, and mail the original to the following address: Manatee County Administration Center, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205.

Your cooperation in registering your business with Manatee County will enhance our opportunities to identify sources for goods and services, plus identify Local Businesses. This information is used for soliciting quotations up to \$250,000.00 and for competitive solicitations of larger purchases.

You will note that Manatee County collaborates with the Manatee Chamber of Commerce, posting bids on www.manateechamber.com as well as using the same vendor categories for registration.

Our staff can assist you with your registration as needed. Our office hours are 8:00 A.M. to 5:00 P.M., Monday through Friday on regular business days. Please call (941) 749-3014 if you wish to have a purchasing staff member assist you.

Quick steps to on line registration: **www.mymanatee.org**

A link to "Purchasing" is listed under the "Quick Links" on page one of this County Web Site.

On the left hand side of the Purchasing Web page, click on "Vendor Registration."

This will bring up the Vendor Registration form for on-line input. Please note that the definition of a "Local Business" changed on March 17, 2009. The Web page will be updated to include the current Law which has been provided in this section of the **proposal**.

Thank you for reviewing this information and considering registering your business with Manatee County. Registration is not mandatory, however, by taking the time to register, you are helping the County to provide timely notifications of quotation, bid, and proposal opportunities to your business.

MANATEE COUNTY LOCAL PREFERENCE LAW AND VENDOR REGISTRATION

F.02 Section 2-26-6. Local preference, tie bids, local business defined.

(a) Whenever a responsible local business bidder and a responsible non-local business bidder are found, upon the opening of bids, to have both submitted the lowest responsive bid, the bid of the local bidder shall be awarded the contract. Should more than one responsible local business bidder match the responsible non-local business bidder's lowest responsive bid, or should no responsible local business bidder match the lowest responsive bid but two or more responsible non-local business bidders submit lowest responsive bids for equal amounts, then the award of the contract shall be determined by a chance drawing, coin toss, or similar tie-breaking method conducted by the purchasing office and open to the public. Any bidders seeking to be recognized as local businesses for purposes of this local business preference provision may be required by the terms of the bid announcement to certify they meet the definition of local business set forth in this section, and to register as a local business with the county in the manner prescribed by the county to facilitate the county's ability to track the award of contracts to local businesses and to allow the county to provide future notifications to its local businesses concerning other bidding opportunities.

(b) Nothing herein shall be deemed to prohibit the inclusion of requirements with respect to operating and maintaining a local place of business in any invitation for bids when the bidder's location materially affects the provisions of the services or supplies that are required by the invitation.

(c) Local business is defined as a business legally authorized to engage in the sale of the goods and/or services to be procured, and which certifies within its bid that for at least six (6) months prior to the announcement of the solicitation of bids it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employees at that location.

(d) Each solicitation for bids made by the county shall contain terms expressly describing the local business preference policies of the county, and shall provide that by electing to submit a bid pursuant to a request for bids, all bidders are deemed to understand and agree to those policies.

(e) For all contracts for architecture, professional engineering, or other professional services governed by Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, the county shall include the local business status of a firm among the factors considered when selecting which firms are "most highly qualified." In determining which firm is the "most qualified" for purposes of negotiating a satisfactory contract, preference shall be given to a local business where all other relevant factors are equal.

(f) Local preference shall not apply to the following categories of contracts:

1. Goods or services provided under a cooperative purchasing agreement or similar "piggyback" contract;
2. Contracts for professional services subject to Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, except as provided for in subsection (e) above;

F.02 Section 2-26-6. Local preference, tie bids, local business defined. (Continued)

3. Purchases or contracts which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions of receipt of the funds prohibit the preference;

4. Purchases or contracts made pursuant to a non-competitive award process, unless otherwise provided by this section;

5. Any bid announcement which specifically provides that the general local preference policies set forth in this section are suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the county commission or county administrator, or where such suspension is, in the opinion of the county attorney, required by law.

(g) To qualify for local preference under this section, **a local business must certify to the County that it:**

1. Has not within the five years prior to the bid announcement admitted guilt or been found guilty by any court or state or federal regulatory enforcement agency of violation of any criminal law, or a law or administrative regulation regarding fraud;

2. Is not currently subject to an unresolved citation or notice of violation of any Manatee County Code provision, except citations or notices which are the subject of a current legal appeal, as of the date of the bid announcement;

3. Is not delinquent in the payment of any fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, except any such sums which are the subject of a current legal appeal.

Ref: Ordinance 09-21 and 09-23 **PASSED AND DULY ADOPTED** in open session, with a quorum present and voting, on the 17th day of March, 2009.

**MANATEE COUNTY GOVERNMENT
AFFIDAVIT AS TO LOCAL BUSINESS
(Complete and Initial Items B-F)**

A. Authorized Representative

B. I, [name] _____, am the [title] _____

and the duly authorized representative of: [name of business] _____
_____, and that I possess direct personal knowledge to make informed responses to these certifications and the legal authority to make this Affidavit on behalf of myself and the business for which I am acting; and by electing to submit a **proposal** pursuant to this **Request For Proposals**, shall be deemed to understand and agree to the local business preference policies of Manatee County; and that I have the direct knowledge to state that this firm complies with all of the following conditions to be considered to be a Local Business as required by the Manatee County Code of Law, Section 2-26-6.

i. Place of Business: I certify that the above business is legally authorized to engage in the sale of goods and/or services and has a physical place of business in Manatee, DeSoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one (1) fulltime employee at that location. The physical address of the location which meets the above criteria is: _____ [Initial]_____

j. Business History: I certify that business operations began at the above physical address with at least one fulltime employee on [date] _____ [Initial]_____

k. Criminal Violations: I certify that within the past five years of the date of this **proposal** announcement, this business has not admitted guilt nor been found guilty by any court or local, state or federal regulatory enforcement agency of violation of any criminal law or administrative regulation regarding fraud. [Initial]_____

l. Citations or Code Violations: I certify that this business is not currently subject to any unresolved citation or notice of violation of any Manatee County Code provision, with the exception of citations or notices which are the subject of a legal current appeal within the date of this **proposal** announcement. [Initial]_____

m. Fees and Taxes: I certify that within this business is not delinquent in the payment of fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, with the exception of those which are the subject of a legal current appeal. [Initial]_____

Each of the above certifications is required to meet the qualification of "Local Business" under Manatee County Code of Law, 2-26-6.

Signature of Affiant _____

STATE OF FLORIDA
COUNTY OF _____

Sworn to (or affirmed) and subscribed before me this ____ day of _____, 20____, by (name of person making statement).

(Notary Seal) Signature of Notary: _____

Name of Notary (Typed or Printed) _____

Personally Known ____ OR Produced Identification ____ Type of Identification Produced _____

Submit executed copy to Manatee County Purchasing, Suite 803, 1112 Manatee Avenue W., Bradenton, FL 34205

**PROPOSAL SIGNATURE FORM
RFP #09-1619BG
Design Build Construction Services
For the
MARINE RESCUE FACILITY**

Firm Name

Mailing Address:

() _____
Telephone Number

City, State, Zip Code

The undersigned attests to his (her, their) authority to submit this proposal and to bind the firm herein named to perform as per agreement. If the firm is selected by the County the undersigned certifies that he/she will negotiate in good faith to establish an agreement to provide Design Build Construction Services for the MARINE RESCUE FACILITY , according to the requirements of this RFP #09-1619BG.

Signature

Witness Signature

Name and Title of Above Signer

Name and Title of Above Signer

Date: _____

Date: _____

Address of any branch office
Proposed to service Manatee County other than above

Name and Title of Firm's Representative & phone number for Manatee County

Phone Number _____

ATTACHMENT "A"

RESOLUTION R-93-22

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF MANATEE COUNTY, FLORIDA, IMPLEMENTING §3-101(7)3(1) OF THE MANATEE COUNTY PROCUREMENT CODE (ORDINANCE 84-02 AS AMENDED) TO ESTABLISH MINIMUM REQUIREMENTS FOR BIDDERS WITH RESPECT TO MAINTAINING A DRUG FREE WORKPLACE; REQUIRING WRITTEN CERTIFICATION TO THE COUNTY OF COMPLIANCE WITH THE REQUIREMENTS ESTABLISHED HEREIN; AND PROVIDING FOR SEVERABILITY AND EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners of Manatee County recognizes that substance abuse is a complex societal problem that continues to threaten the welfare of the residents and community; and

WHEREAS, the Board of County Commissioners considers substance abuse on the job to be an unsafe and counter-productive work practice; and

WHEREAS, consistent with its policy to promote a safe work environment and encourage personal health for all citizens of Manatee County, the Commission finds it necessary to combat substance abuse in the workplace by promoting education and awareness; and

WHEREAS, consistent with the Drug Free Workplace Act (§112.0455, Florida Statutes) and policies applicable to Manatee County employees pursuant to Resolution R-93-10, the Board of County Commissioners of Manatee County has determined that it is necessary and in the best interest of the County to adopt the drug free workplace requirements for persons or entities contracting with Manatee County; and

WHEREAS, §3-101(7)B of the Manatee County procurement Code (Ordinance 84-02, as amended) authorizes the adoption of requirements for maintaining a drug free workplace applicable to persons or entities bidding on contracts with Manatee County.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Manatee county, Florida, as follows:

1. **Certification Required:** No person or entity submitting a bid pursuant to §3-101 shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease

franchise, concession or management agreement, unless such person or entity has submitted a written certification to the county that it will provide a drug free workplace by:

- a. Providing a written statement to each employee notifying such employee that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance as defined in §893.02(4), Florida statutes, as the same may be amended from time to time, in the person's or entity's workplace is prohibited specifying the actions that will be taken against employees for violation of such prohibition. Such written statement shall inform employees about:
 - (i) the dangers of drug abuse in the workplace;
 - (ii) the person's or entity's policy of maintaining a drug free environment at all its workplaces, including but not limited to all locations where employees perform any task relating to any portion of such contract, business transaction or grant;
 - (iii) any available drug counseling, rehabilitation, and employee assistance programs; and
 - (iv) the penalties that may be imposed upon employees for drug abuse violations.
- b. Requiring the employee to sign a copy of such written statement to acknowledge his or her receipt of same and advice as to the specifics of such policy. Such person or entity shall retain the statements signed by its employees. Such person or entity shall also post in a prominent place at all of its workplaces a written statement of it's policy containing the foregoing elements (i) through (iv).
- c. Notifying the employee in the statement required by subsection 1. that as a condition of employment the employee will:
 - (i) abide by the terms of the statement; and
 - (ii) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such a conviction.
- d. At all times pertinent to the performance of any contract with Manatee County, notify the county within ten (10) days after receiving notice under

subsection c. from an employee or otherwise receiving actual notice of such conviction.

- c. Imposing appropriate personnel action against such employee up to and including termination; or requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency.
 - f. Making a good faith effort to continue to maintain a drug free workplace through implementation of sections a. through e. of this subsection.
2. **Severability.** If any part, section, subsection, or other portion of this Resolution, or any application thereof to any person or circumstances declared to be void, unconstitutional, or invalid for any reason, such part, section, subsection, or other portion, or the prescribed application thereof, shall be severable, and the remaining provisions of this Resolution, and all applications thereof not having been declared void, unconstitutional or invalid, shall remain in full force and effect.
 3. **Effective Date.** This Resolution shall take effect ninety (90) days after adoption by the Board of County Commissioners.

ADOPTED in open session by a majority of the duly elected Board of County Commissioners of Manatee County, Florida, this 2nd day of February, 1993.

**ORIGINAL DOCUMENT SIGNED BY BOARD OF COUNTY COMMISSIONERS
CHAIRMAN MS. LARI ANN HARRIS ON FEBRUARY 2, 1993 AND IS ON FILE AT
MANATEE COUNTY CLERKS OFFICE.**

ATTACHMENT "B"

Drug Free Work Place Certification

SWORN STATEMENT PURSUANT TO SECTION 6-101(7)(B),
MANATEE COUNTY PURCHASING CODE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the Manatee County Board of County Commissioners by _____
[print individual's name and title]

_____ for _____
[print name of entity submitting sworn statement]

whose business address is: _____

and (if applicable) its Federal Employer Identification Number (FEIN) is: _____ (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to the County that it will provide a drug free work place by:

(1) providing a written statement to each employee notifying such employee that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance as defined by § 893.02(4), Florida Statutes, as the same may be amended from time to time, in the person's or entity's work place is prohibited specifying the actions that will be taken against employees for violation of such prohibition. Such written statement shall inform employees about:

- (i) the dangers of drug abuse in the work place;
- (ii) the person's or entity's policy of maintaining a drug free environment at all its work places, including but not limited to all locations where employees perform any task relating to any portion of such contract, business transaction or grant;
- (iii) any available drug counseling, rehabilitation, and employee assistance programs; and
- (iv) the penalties that may be imposed upon employees for drug abuse violations.

(2) Requiring the employee to sign a copy of such written statement to acknowledge his or her receipt of same and advice as to the specifics of such policy. Such person or entity shall retain the statements signed by its employees. Such person or entity shall also post in a prominent place at all of its work places a written statement of its policy containing the foregoing elements (i) through (iv).

(3) Notifying the employee in the statement required by subsection (1) that as a condition of employment the employee will:

- (i) abide by the terms of the statement; and

ATTACHMENT B (Cont'd.)

(ii) notify the employer of any criminal drug statute conviction for a violation occurring in the work place no later than five (5) days after such a conviction.

(4) Notifying the County within ten (10) days after receiving notice under subsection (3) from an employee or otherwise receiving actual notice of such conviction.

(5) Imposing appropriate personnel action against such employee up to and including termination; or requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.

(6) Making a good faith effort to continue to maintain a drug free work place through implementation of sections (1) through (5) stated above.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR THE COUNTY ADMINISTRATOR DETERMINES THAT:

- (1) Such person or entity has made false certification.
- (2) Such person or entity violates such certification by failing to carry out the requirements of sections (1), (2), (3), (4), (5), or (6) or subsection 3-101(7)(B); or
- (3) Such a number of employees of such person or entity have been convicted of violations occurring in the work place as to indicate that such person or entity has failed to make a good faith effort to provide a drug free work place as required by subsection 3-101(7)(B).

[Signature]

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this ___ day of _____, 200__ by _____

Personally known _____ OR Produced identification _____
[Type of identification]

Notary Public Signature My commission expires _____

[Print, type or stamp Commissioned name of Notary Public]

Signatory Requirement - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

Attachment "C"

PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

SWORN STATEMENT PURSUANT TO ARTICLE 6, MANATEE COUNTY PURCHASING CODE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the Manatee County Board of County Commissioners by _____
[print individual's name and title]

_____ for _____
[print name of entity submitting sworn statement]

whose business address is: _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____. If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____

I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to the County that it has not:

(1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or

(2) been convicted of an agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or

(3) been convicted of a violation of an environmental law that, in the sole opinion of the County's Purchasing Director, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner; or

(4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or

(5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such and entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has common ownership or a common Board of Directors. For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests among family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

Attachment C (Cont'd.)

Any person or entity who claims that this Article is inapplicable to him/her/it because a conviction or judgment has been reversed by a court of competent jurisdiction, shall prove the same with documentation satisfactory to the County's Purchasing Director. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with the County.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR THE COUNTY ADMINISTRATOR DETERMINES THAT **SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.**

[Signature]

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this ____ day of _____, 20__ by _____

Personally known _____ OR Produced identification _____
[Type of identification]

Notary Public Signature My commission expires _____

[Print, type or stamp Commissioned name of Notary Public]

Signatory Requirement - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

ATTACHMENT D

**Marine Rescue Headquarters
Design Criteria**

Manatee County

County Commission Members:

Larry Bustle – District One
Dr. Gwendolyn Y. Brown – Chair, District Two
John R. Chappie – District Three
Ron Getman – District Four
Donna Hayes – District Five
Carol Whitmore – At Large
Joe McClash – At Large

Manatee County Property Management Department


Jim Staples - Director


In conjunction with

Manatee County Public Safety Department

William Hutchison - Director

Prepared by:

 **WADE TRIM**
8745 Henderson Road
Suite 220, Renaissance 5
Tampa, FL 33634

 **RENKER · EICH · PARKS ARCHITECTS**
1609 MLK Street North
St. Petersburg, FL 33704-4203

March 2009

MARINE RESCUE HEADQUARTERS DESIGN CRITERIA TABLE OF CONTENT

SECTION 1: DESIGN REQUIREMENTS

- APPLICABLE CODES
- BUILDING CLASSIFICATION AND AREA CALCULATIONS
- FIRE RATING REQUIREMENTS
- OCCUPANT LOAD AND EXIT CALCULATIONS
- LIFE SAFETY REQUIREMENTS
- WIND LOAD / BUILDING LOAD REQUIREMENTS
- FINISH REQUIREMENTS
- PRIMARY OCCUPANCY BASED FIXTURE CALCULATIONS
- SITE DATA
- SITE WORK PERMIT REQUIREMENTS

SECTION 2: DESIGN CRITERIA

GENERAL REQUIREMENTS SUBGROUP
DIVISION 01 - GENERAL REQUIREMENTS

FACILITY CONSTRUCTION SUBGROUP
DIVISION 02 - EXISTING CONDITIONS
DIVISION 03 - CONCRETE
DIVISION 04 - MASONRY
DIVISION 05 - METALS
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
DIVISION 08 - OPENINGS
DIVISION 09 - FINISHES
DIVISION 10 - SPECIALTIES
DIVISION 11 - EQUIPMENT
DIVISION 12 - FURNISHINGS
DIVISION 14 - CONVEYING EQUIPMENT

FACILITY SERVICES SUBGROUP
DIVISION 21 - FIRE SUPPRESSION
DIVISION 22 - PLUMBING
DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING
DIVISION 26 - ELECTRICAL
DIVISION 27 - COMMUNICATIONS
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

SITE AND INFRASTRUCTURE SUBGROUP
DIVISION 31 - EARTHWORK
DIVISION 32 - EXTERIOR IMPROVEMENTS
DIVISION 33 - UTILITIES

EXHIBITS

EXHIBIT A	LOCATION MAPS
EXHIBIT B	WIND BORNE DEBRIS REGION MAP – MANATEE COUNTY FL.
EXHIBIT C	FEMA MAP
EXHIBIT D	SPACE PLANNING PROGRAM FINISHES SUMMARY

SECTION 1: DESIGN REQUIREMENTS

Applicable Codes:

- Florida Building Code 2007
- NFPA 101 Life Safety Code
- Florida Fire Prevention Code
- Florida Building Code Plumbing
- Florida Building Code Mechanical
- Florida Building Code Fuel Gas
- National Electrical Code NFPA 70
- City of Bradenton Beach- Building and Zoning Codes
- Manatee County Health Department
- Southwest Florida Water Management District
- Florida Department of Environmental Regulation
- EPA

Building Structural Systems:

This building is to be designed as a "Hardened" structure. As a basis of design it will follow the Florida Department of Education designation as EHPA "Enhanced Hurricane Protection Area". This requires that the building be designed for 40MPH over the designated Map wind speed of 130 mph. Reference the FBC Section 423.25 and FEMA 55 "Coastal Construction Manual"

The structural building envelope is to be composed of one or combinations of the following:

- Cast-in-place Concrete columns and beams
- Concrete Masonry Units (CMU) Load bearing or infill walls
- Precast Pre-stressed Concrete floor or roof
- Structural Steel Frame
- Open Web Steel Bar Joist
- Cold Formed Steel Truss System
- Steel Floor or Roof Decks
- Structural Insulated Panel System

Building Foundations:

- Refer to the Geotechnical Engineering Report
- This building is required to have deep foundations for Coastal V-Zone scouring Reference FEMA 55 "Coastal Construction Manual"

Building Classification and Area Calculations:

USE AND OCCUPANCY CLASSIFICATION – CHAPTER 3 FBC 2007
FIRST FLOOR - MODERATE HAZARD GROUP S-1 (Boat Storage)
SECOND FLOOR - BUSINESS GROUP B (Civic Administration)
TYPES OF CONSTRUCTION – CHAPTER 6 (table 601)
TYPE: II-B, SPRINKLERED
FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS

Structural Frame –	0
Bearing Walls (int and ext) –	0

Floor Construction	0
Roof Construction	0

GENERAL BUILDING HEIGHTS AND AREAS – CHAPTER 5

ALLOWABLE HEIGHT AND AREAS

BUSINESS GROUP B - 23,000 SF

AREA INCREASE ALLOWED FOR AUTOMATIC SPRINKLER SYSTEM (FBC 506.3) = 300%

Fire Rating Requirements

Note Storage Areas incidental to Business Occupancy need not be provided fire separation if less than 1,000 sf. (note b.)

Occupant Load and Exit Calculations:

Egress Width Per Occupant Served

Stairways = 0.3 inch

Other = 0.2 inch

Life Safety Requirements:

Exit Access Travel Distance (FBC 1016.1) with Sprinkler System
250 ft.

No dead end corridors.

Fire Extinguishers to be – Type 2A-10bc.

Wind Load Building Requirements:

Project is located in Manatee County, Florida.

Basic Wind Speed - 130 mph EHPA + 40 MPH = 170 MPH

Exposure 'C'.

Category IV – Importance Factor I=1.15

Fully enclosed building meeting all impact, component, and cladding requirements.

All building design loads shall meet referenced code requirements.

For EHPA Enhanced Hurricane Protection reference

FBC Section 423.25.4 Structural Standards for Wind Loads

Live Load Building Requirements:

Office Area – 50 psf

Lobbies and Corridors – 100 psf

Partitions – 20 psf

File loading as required

Deflection Limits:

All structural elements are to meet the deflection limits of Section 1604 of the FBC.

Interior Wall and Finish Requirements (Table 803.5)

Interior Finishes	Class
Vertical Exits and Passage Ways	B/C
Exit Access Corridors and Other Exit Ways	B
Rooms and enclosed Spaces	C

Site Data

Section: 9,10, Township: 35 S, Range: 16 E, City of Bradenton Beach, Manatee County, Florida

Address: E. Side of Gulf drive (SR 789), Bradenton Beach, FL 34217

The site for the Marine Rescue Headquarters building is located on the bay side of Coquina Beach Park, south of Leffis Key and north of the public boat ramp. The project site is approximately 2 acres in size and is a portion of a 40 acre parcel.

Parcel ID No.: 7759200004

Flood Zone: VE

The project site is in Velocity Zone V17 (el 12). FEMA Zones V1 – V-30 are defined as areas of 100-year coastal flood with velocity (wave action) base flood elevations and flood hazard factors determined. See Attachment D, Exhibit C – FEMA Map.

Hurricane Evacuation Zone: A

Zoning: E2

Land Use: Governmental / Recreation, Vacant

Future Land Use: R/OS

Fire District: FD01, West Manatee Fire Department

Permit Requirements

1. City of Bradenton Beach Building Permit and Site Plan Review
2. Florida Department of Environmental Protection (FDEP) Coastal Construction Permit
3. Florida Department of Environmental Protection (FDEP) ERP Permit
4. Florida Department of Environmental Protection (FDEP) NPDES Permit
5. Florida Department of Environmental Protection (FDEP) Sanitary Permit
6. Potable Water Permit (Manatee County Health Department)
7. Florida Department of Transportation Letter of No Permit Required for RW Access.
8. Applicable local, state and federal permits

SECTION 2: DESIGN CRITERIA

GENERAL REQUIREMENTS SUBGROUP

DIVISION 01 - GENERAL REQUIREMENTS

-SUMMARY
-BASIS OF DESIGN
-CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
-SUSTAINABLE DESIGN REQUIREMENTS
-GENERAL COMMISSIONING REQUIREMENTS
-ALLOWANCE REQUIREMENTS
-SCHEDULE OF VALUES

FACILITY CONSTRUCTION SUBGROUP

DIVISION 02 - EXISTING CONDITIONS

-SITE CONDITIONS

DIVISION 03 - CONCRETE

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-PLANT- PRECAST STRUCTURAL CONCRETE

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-UNIT MASONRY

DIVISION 05 - METALS

-STRUCTURAL STEEL
-STEEL JOIST
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DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

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-INTEGRALLY BONDED UNDERSIDE VAPOR PROTECTION
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-WATER REPELLENTS
-KEE MEMBRANE ROOFING SYSTEM
-SHEET METAL ROOFING
-SHEET METAL FLASHING AND TRIM
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-JOINT SEALANTS
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- ALUMINUM FRAMED ENTRANCES/STOREFRONTS/FLUSH PANEL DOORS
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- DOOR HARDWARE
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- LOUVERS AND VENTS
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- RESINOUS FLOORING
- DYED AND POLISHED CONCRETE FLOORS
- ACOUSTICAL PANEL CEILINGS
- RESILIENT WALL BASE AND ACCESSORIES
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- TILE CARPETING
- EXTERIOR PAINT AND COATING SYSTEMS
- INTERIOR PAINT AND COATING SYSTEMS

DIVISION 10 - SPECIALTIES

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- DIRECTORIES
- SIGNAGE
- TOILET COMPARTMENTS
- OPERABLE PARTITIONS
- TOILET, BATH, AND LAUNDRY ACCESSORIES
- FIRE EXTINGUISHERS AND CABINETS
- LOCKERS

DIVISION 11 - EQUIPMENT

- NOT APPLICABLE

DIVISION 12 - FURNISHINGS

- ENTRANCE FLOOR GRILLES

DIVISION 13 - SPECIAL CONSTRUCTION

- NOT APPLICABLE

DIVISION 14 - CONVEYING EQUIPMENT

- HYDRAULIC ELEVATORS

FACILITY SERVICES SUBGROUP

DIVISION 21 - FIRE SUPPRESSION

- CLASSIFICATION
- SPRINKLER HEADS
- FIRE DEPARTMENT CONNECTIONS

DIVISION 22 – PLUMBING

-SYSTEM PERFORMANCE REQUIREMENTS
-PLUMBING FIXTURES
-PIPE AND FITTINGS
-PLUMBING INSULATION
-CLEANING

DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING

-HVAC Equipment & Efficiency
-IAQ Ventilation & Temperature Control
-HVAC Ductwork
-HVAC Insulation
-HVAC Test and Balancing

DIVISION 26 – ELECTRICAL

-GENERAL WIRING AND EQUIPMENT
-INTERIOR LIGHT FIXTURES
-EXTERIOR LIGHT FIXTURES
-LIGHTING CONTROL
-POWER DISTRIBUTION

DIVISION 27 – COMMUNICATIONS

-SLEEVES
-OUTLETS AND BOXES
-COMMUNICATION ROOM WORK

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

-FIRE ALARM
-VOICE/ALARM SIGNALING

SITE AND INFRASTRUCTURE SUBGROUP

DIVISION 31 – EARTHWORK

-SITE CLEARING
-EARTH MOVING
-DEWATERING
-EXCAVATION SUPPORT AND PROTECTION

DIVISION 32 - EXTERIOR IMPROVEMENTS

-POUROUS PAVING
-PLANTING IRRIGATION
-TURF AND GRASSES
-PLANTS

DIVISION 33 - UTILITIES

-COMMON WORK RESULTS FOR UTILITIES
-STORM UTILITY DRAINAGE PIPING

GENERAL REQUIREMENTS SUBGROUP

DIVISION 01 - GENERAL REQUIREMENTS

SUMMARY:

Design/Builder shall provide services for the life cycle duration of the project fulfilling all requirements as agreed upon and contracted with Manatee County. Services to include but not be limited to:

All contract documents required for permitting and Manatee County review/comment/approval to include but not limited to;

- Drawings
- Specifications
- Shop drawings for review/comment/and or approval
- Product submittals for review/comment/and or approval
- Material and finish samples for review/comment/and or approval
- Closeout documents and certifications

All construction services for delivering and putting in place the Manatee County Marine Rescue Headquarters as described in the Design Criteria Package.

Project control - the selected firm will be responsible for developing and maintaining a strong line of communication with Manatee County.

Performance and Payment Bond – for 100%

BASIS OF DESIGN:

As described and enumerated in the Design Criteria Package and attachments provided by Manatee County.

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL: Includes administrative and procedural requirements for Salvaging, Recycling, and Disposing of nonhazardous demolition and construction waste.

1. Definitions.
2. Performance Requirements: Establishes Project goal based on percentages and a set Of specified materials targeted for waste management.
3. Submittals.
4. Quality Assurance: Includes requirements for a LEED Coordinator.
5. Waste Management Plan.
6. Execution: Includes Plan Implementation, Salvaging, Recycling, and Disposal.

SUSTAINABLE DESIGN REQUIREMENTS: Includes administrative requirements and procedures for compliance with certain USGBC LEED prerequisites and credits needed for the Project to obtain minimum LEED Certification.

1. Related Sections: Divisions 01 through 33 Sections for LEED requirements specific to the work of each of these sections. Requirements may or may not include reference to LEED.
2. Definitions.

3. Submittals: Includes Action Plans, Progress Reports, and Documentation Submittals.
4. Quality Assurance: Includes requirements for a Waste Management Coordinator.
5. Products: Includes Recycled Content, Regional Materials, Certified Wood, and Low-Emitting Materials.
6. Execution: Includes Refrigerant Removal, Construction Waste Management, and Construction Indoor-Air-Quality Management.
7. Reference Document: LEED Project Checklist

GENERAL COMMISSIONING REQUIREMENTS: Includes administrative requirements and procedures that apply to implementation of commissioning without regard to specific systems, assemblies, or components.

1. Definitions:
 - a. OPR: Owner's Project Requirements.
 - b. BoD: Basis of Design.
 - c. CxA: Commissioning Authority.
2. Commissioning Team.
3. Owner's Responsibilities: Includes preparation of the OPR. A/E is to prepare the BoD.
Owner provides both the OPR and the BoD to the CxA.
4. Contractor's Responsibilities: Includes integrating and coordinating commissioning process activities with construction schedule.
5. CxA's Responsibilities: Includes providing the commissioning plan.

ALLOWANCE REQUIREMENTS: LUMP-SUM ALLOWANCES

1. **SCHEDULE OF ALLOWANCES**
Allowance No. 1: Include \$40,000.00 allowance in base cost bid for FFE (furniture) items.

SCHEDULE OF VALUES: BY CSI DIVISION

1. Proposers to provide anticipated cost broken down by CSI Division for project as described in this Design Build Criteria Package.
2. Proposers to provide a statement of project cost associated with designing and constructing building to + 40 MPH over Design Map Wind Speed of 130 MPH, for information purposes only.

FACILITY CONSTRUCTION SUBGROUP

DIVISION 02 - EXISTING CONDITIONS

The site is unimproved with access via shell frontage road to Gulf Drive (SR 789).

DIVISION 03 – CONCRETE

CAST-IN-PLACE CONCRETE **SUMMARY**

This Section specifies cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes.

QUALITY ASSURANCE

Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

Comply with ACI 301, "Specification for Structural Concrete," and ACI 318 "Building Code requirements for Structural Concrete" including the following sections, unless modified by requirements in the Contract Documents:

- "General Requirements."
- "Formwork and Formwork Accessories."
- "Reinforcement and Reinforcement Supports."
- "Concrete Mixtures."
- "Handling, Placing, and Constructing."

Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

STEEL REINFORCEMENT MATERIAL

Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

CONCRETE MATERIALS

Portland Cement ASTM C150

Normal-Weight Aggregate: ASTM C 33, graded, 1-1/2-inch nominal maximum aggregate size.

Water: ASTM C 94/C 94M; potable.

CONCRETE MIXTURES

Comply with ACI 301 requirements for concrete mixtures.

Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301.

Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M.

PLANT-PRECAST STRUCTURAL CONCRETE

PERFORMANCE REQUIREMENTS

Delegated Design: Design precast structural concrete, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

Structural Performance: Precast structural concrete units shall withstand design loads indicated within limits and under conditions indicated.

QUALITY ASSURANCE

Fabricator Qualifications: A firm that assumes responsibility for engineering precast structural concrete units to comply with performance requirements. Responsibility includes preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

Participates in PCI's Plant Certification program:

Installer Qualifications: A precast concrete erector qualified, as evidenced by PCI's Certificate of Compliance.

Design Standards: Comply with ACI 318 and design recommendations in PCI MNL 120, "PCI Design Handbook - Precast and Prestressed Concrete," applicable to types of precast structural concrete units indicated.

MATERIALS

Portland cement conform to ASTM C-150.

Aggregate conform to ASTM C-33

Pre Stressing Steel conform to ASTM-416

DIVISION 04 – MASONRY

UNIT MASONRY

This Section includes unit masonry assemblies consisting of the following:

- Concrete masonry units (CMUs).
- Mortar and grout.
- Reinforcing steel.
- Masonry joint reinforcement.

PERFORMANCE REQUIREMENTS

Masonry Construction shall conform to the requirements of the following:

“Building Code Requirements for Masonry Structures” ACI 530

“Specifications for Masonry Structures” ACI 530.1

Provide structural unit masonry that develops indicated net-area compressive strengths as indicated on drawings. Determine net-area compressive strength (f_m) of masonry from average net-area compressive strengths of masonry units and mortar types (unit-strength method) according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.

QUALITY ASSURANCE

Testing Agency Qualifications: An independent agency qualified according to ASTM C 1093 for testing indicated, as documented according to ASTM E 548.

MATERIALS

Concrete Masonry Units: ASTM C 90.

Grout shall comply with ASTM C-476

Mortar shall comply with ASTM C-270

Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.

Uncoated Steel Reinforcing Bars: ASTM A 615/A 615M or ASTM A 996/A 996M, Grade 60.

Masonry Joint Reinforcement, General: ASTM A 951.

DIVISION 05 – METALS

STRUCTURAL STEEL

QUALITY ASSURANCE

Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector.

Fabricator Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant.

Comply with applicable provisions of the following specifications and documents:

AISC's "Code of Standard Practice for Steel Buildings and Bridges."
AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design Load and Resistance Factor Design Specification for Structural Steel Buildings."
AISC's "Specification for the Design of Steel Hollow Structural Sections."
AISC's "Specification for Allowable Stress Design of Single-Angle Members Specification for Load and Resistance Factor Design of Single-Angle Members."
RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

STRUCTURAL-STEEL MATERIALS

W-Shapes: ASTM A 992/A 992M ASTM A 572/A 572M, Grade 50.

Channels, Angles, S-Shapes: ASTM A 36/A 36M ASTM A 572/A 572M, Grade 50.

Plate and Bar: ASTM A 36/A 36M.

Cold-Formed Hollow Structural Sections: ASTM A 500, Grade B, structural tubing.

Steel Pipe: ASTM A 53/A 53M, Type E or S, Grade B.

Welding Electrodes: Comply with AWS requirements.

High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.

STEEL JOISTS

PERFORMANCE REQUIREMENTS

Structural Performance: Provide joists and connections capable of withstanding design loads indicated.

Design joists to withstand design loads with live load deflections no greater than the following:

Roof Joists: Vertical deflection of 1/240 of the span, 1/360 for plastered ceilings.

QUALITY ASSURANCE

Manufacturer Qualifications: A manufacturer certified by SJI to manufacture joists complying with applicable standard specifications and load tables of SJI "Specifications."

Manufacturer's responsibilities include providing professional engineering services for designing special joists to comply with performance requirements.

SJI Specifications: Comply with standard specifications in SJI's "Specifications" that are applicable to types of joists indicated.

MATERIALS

Steel: Comply with SJI's "Specifications" for web and steel-angle chord members.

Steel Bearing Plates: ASTM A 36/A 36M.

Carbon-Steel Bolts and Threaded Fasteners: ASTM A 307, Grade A, carbon-steel, hex-head bolts and threaded fasteners; carbon-steel nuts; and flat, unhardened steel washers.

High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy hex steel structural bolts; ASTM A 563 heavy hex carbon-steel nuts; and ASTM F 436 hardened carbon-steel washers.

K-SERIES STEEL JOISTS

Manufacture steel joists of type indicated according to "Standard Specifications for Open Web Steel Joists, K-Series" in SJI's "Specifications," with steel-angle top- and bottom-chord members.

STEEL DECK

QUALITY ASSURANCE

Welding: Qualify procedures and personnel according to AWS D1.3, "Structural Welding Code - Sheet Steel."

AISI Specifications: Comply with calculated structural characteristics of steel deck according to AISI's "Specification for the Design of Cold-Formed Steel Structural Members."

MATERIALS

Steel Deck: Fabrication and Erection to comply with The Steel Deck Institute (SDI) "Design Manual for composite Decks, Form Decks and Roof Decks":

Galvanized Steel Sheet: ASTM A 653, zinc coating G90.

Deck Profile: As indicated on plans.

Span Condition: Triple span or more.

Side Laps: Overlapped.

ACCESSORIES

General: Provide manufacturer's standard accessory materials for deck that comply with requirements indicated.

Side-Lap Fasteners: Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.

Galvanizing Repair Paint: ASTM A 780.

METAL STAIRS

1. Galvanized Steel; with concrete filled pan.

EXTERIOR PIPE AND TUBE RAILINGS: Stainless-Steel

3. Tubing: ASTM A 554, Grade MT 304.
4. Pipe: ASTM A 312/A 312M, Grade TP 304.

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

ROUGH CARPENTRY: Furring, grounds, nailers, and blocking.

INTERIOR ARCHITECTURAL WOODWORK: Cabinets and tops.

1. Quality Standard: Comply with AWI's "Architectural Woodwork Quality Standards."
2. Standards Basis: Custom.
3. AWI Type of Cabinet Construction: Reveal overlay on face frame.
4. Provide AWI Quality Certification Program labels and certificates for woodwork, including installation.

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

THERMAL INSULATION: General building insulation installed at project site, excluding roofing insulation.

VAPOR BARRIERS: Underslab.

1. Vapor retarding sheet. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs. Vapor Retarder membrane must meet or exceed all requirements of ASTM E1745 Classes A, B, & C. Thickness not less than 10 mils.

INTEGRALLY BONDED UNDERSLAB VAPOR PROTECTION: Pre-applied Integrally Bonded Sheet Waterproofing Membrane Underslab at elevator pit.

1. 1.2mm (0.046 in) nominal thickness composite sheet membrane comprising 0.8 mm (0.030 in.) of high density polyethylene film, and layers of specially formulated synthetic adhesive layers.

COLD FLUID APPLIED WATERPROOFING:

1. Two-component, unmodified latex-rubber waterproofing. Below grade at elevator pit walls, install with protection board.

SHEET METAL ROOFING: ROLL-FORMED SHEET STANDING SEAM METAL ROOFING

1. Panel Materials:
 - a. Aluminum Sheet: Coil-coated sheet, ASTM B 209, alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.
2. Surface: Smooth, flat finish.
 - a. Exposed Coil-Coated Finish:
 - 1) Retain one exposed finish from first eight subparagraphs below. Verify availability of finishes for products specified. If retaining more than one, indicate location of each on Drawings or by inserts. To obtain a proprietary finish system, insert names of coating manufacturers and products.
 - 2) Revise or insert additional testing requirements in first six subparagraphs below if performance levels indicated in AAMA 620 are insufficient. See Evaluations.
 - b. 3-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
3. Minimum Thickness: 0.040 inch
4. Joint Type: Double folded.
5. Panel Coverage: 16 inches.
6. Panel Height: 1.5 inches.
7. Insulation System – Rigid Insulation under metal roofing – minimum system Total R- Value 23

SHEET METAL FLASHING AND TRIM: Custom-fabricated roof and wall flashings and roofdrainage systems, and manufactured through-wall flashing and reglets.

1. Aluminum Sheet: Coil-coated sheet, ASTM B 209, alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.

KEE MEMBRANE ROOFING

1. KEE Sheet: ASTM D 6754, fabric reinforced.
Manufacturers: Subject to compliance with requirements, provide the following product:
Seaman Corporation – FiberTite
Thickness: Minimum 60 mils nominal.
Exposed Face Color: White.

PENETRATION FIRESTOPPING: Systems installed in fire-resistance-rated walls, horizontal assemblies, and smoke barriers.

1. Bearing UL Label.

FIRE-RESISTIVE JOINT SYSTEMS: Systems installed in or between fire-rated construction, wall/floor intersections and smoke barriers.

1. Bearing UL Label.

JOINT SEALANTS: Elastomeric, latex, solvent-release-curing, preformed, and acoustical sealants.

2. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions present.

EXPANSION CONTROL: For building joints at interior and exterior, both horizontal and vertical.

1. Metal (aluminum) with gaskets.

DIVISION 08 – OPENINGS

HOLLOW METAL FRAMES: Standard hollow metal units (interior only).

1. Metal Frames.
2. General: Comply with ANSI/SDI A250.8.
3. Fabricate frames with mitered or coped corners.
4. Fabricate frames as face welded unless otherwise indicated.

FLUSH WOOD DOORS: Wood-veneer faced solid core units (interior only).

1. Grade: Custom (Grade A faces).
2. Species: White oak.
3. Cut: Rotary cut.
4. Match between Veneer Leaves: Pleasing match.
5. Core: Particleboard.
6. Construction: Five or seven plies. Stiles and rails are bonded to core, and then entire unit abrasive planed before veneering.
7. Transparent Finish:
8. Grade: Custom.
9. Finish: AWI conversion varnish or catalyzed polyurethane system.

ALUMINUM-FRAMED ENTRANCES, STOREFRONTS AND FLUSH ALUMINUM DOORS:

(All exterior and first floor systems) Storefront framing, entrance doors, and hardware.

1. FRAMING SYSTEMS
2. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.
3. Construction: Thermally improved.
4. Glazing System: Retained mechanically with gaskets on four sides.
5. Glazing Plane: Center.
6. Doors: Flush panel aluminum (at storage areas).

ALUMINUM WINDOWS:

1. Window Type: Projected.
2. AAMA/WDMA Performance Requirements: Provide aluminum windows of performance indicated that comply with AAMA/WDMA 101/I.S.2/NAFS.
3. Performance Class and Grade: HC 90.
4. Performance Class: HC.

DOOR HARDWARE:

1. Mortise Locks with Lever Handles.
2. ANSI Grade 1

GLAZING:

1. Interior Fire Rated Glazing
 - a. Fire rated glass ceramic.
2. Exterior Laminated Glazing
 - a. 1/4" heat strengthened tinted exterior lite.
 - b. .090 " PV Interlayer
 - c. 1/4" heat strengthened interior lite.
3. Interior Regular Duty Glazing
 - a. 1/4" Tempered

LOUVERS AND VENTS: Fixed and adjustable louvers; wall vents:

1. Aluminum Architectural grade, water and weather proof.

OVERHEAD COILING DOORS: Manual:

1. Fabricate overhead coiling-door curtain of interlocking metal slats, designed to withstand wind loading referenced, in a continuous length for width of door without splices. Provide slats of thickness and mechanical properties recommended by door manufacturer for performance, size, and type of door required, and as follows; with vision slats.

DIVISION 09 – FINISHES

GYPSUM BOARD AND NON-STRUCTURAL METAL FRAMING: Gypsum Board and Steel framing for gypsum board partitions and ceilings.

1. Steel Framing: Minimum 20 ga.

PORTLAND CEMENT PLASTERING: Comply with ASTM C 926 for applications indicated. Fiber Content: Add fiber to base-coat mixes.

1. Base-Coat Mixes for Use over Metal Lath: Scratch and brown coats for three-coat plasterwork.
2. Base-Coat Mixes for Use over Concrete Unit Masonry: Single base coats for two-coat plasterwork.
3. Job-Mixed Finish-Coat Mixes.

TILING: Ceramic wall tile.

1. Wall Tile – Glazed matt finish 6" x 6" tile.

RESINOUS FLOORING:

Epoxy Resin flooring, and integral 4" base to aluminum base cap screed:

1. Manufacturers:
 - a. DUR-A-FLEX INC.
 - b. DEX-O-TEX; Division of Crossfield Products Corp.
 - c. Key Resin Company
2. Products;
 - a. Locker / Shower / Toilet rooms formula – with anti microbial treatment.

3. Minimum Requirements for above:
 - a. Thickness: 3/16" inch.
 - b. Weight 3lbs. p.s.f.
 - c. Compressive strength 5,450 p.s.i.
 - d. Surface hardness (Durometer >D=):80

DYED AND POLISHED CONCRETE FLOORS:

PRODUCTS AND MANUFACTURERS

1. FGS Hardener Plus, liquid type, hardener, sealer, and densifier by L&M Construction Chemicals, Inc. Omaha, NE
2. Joint Tite 750, plural component, polyurea polymer, semi-rigid joint filler by L&M Construction Chemicals, Inc. Omaha, NE
3. Petrotex, Oil repellent sealer by L&M Construction Chemicals, Inc. Omaha, NE
4. Vivid Concrete Dyes, by L&M Construction Chemicals, Inc. Omaha, Nebraska.
5. FGS Concrete Conditioner, liquid type, by L&M Construction Chemicals, Inc., Omaha, Nebraska.

EQUIPMENT

1. Only as approved by the system manufacturer.
2. Includes: Elliptical and/or planetary grinding and polishing equipment

FINISHES

1. Basis and Level of finish: 1500 grit finish Stained Medium Gloss:
 - a. Two applications of Hardener Plus liquid as applied by certified installers after final polish step is completed.

ACOUSTICAL PANEL CEILINGS: Mineral-base and glass-fiber-base panels with exposed suspension systems.

1. Provide the following:
 - a. Armstrong – Ultima Fine Texture - Item No. 1911
 - b. Edge/Joint Detail: Beveled Tegular.
 - c. Thickness: 3/4 inch.
 - d. Modular Size: 24 by 24 inches.
2. Suspension Sytem: Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 coating designation, with prefinished 15/16-inch- wide metal caps on flanges.
 - a. Structural Classification: Heavy-duty system.
 - b. Face Design: Flat, flush.
 - c. Cap Finish: Painted White.

RESILIENT BASE AND ACCESSORIES: Resilient base, stair accessories, and molding accessories.

RESILIENT TILE FLOORING: Rubber, and vinyl composition.

TILE CARPETING: Modular carpet tile for commercial applications.

EXTERIOR PAINT AND COATING SYSTEMS: Commercial Grade Exterior Products And Systems.

3. MPI Standards: Products: Comply with MPI standards for commercial grade products.
4. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems used.
5. Low-Emmiting Materials: Comply with requirements as stated in Sustainable Design Requirements in Division 01 General Requirements.

INTERIOR PAINT AND COATING SYSTEMS: Commercial Grade Interior Products And Systems.

6. MPI Standards: Products: Comply with MPI standards for commercial grade products.
7. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and paint systems used.
8. Low-Emmiting Materials: Comply with requirements as sated in Sustainable Design Requirements in Division 01 General Requirements.

DIVISION 10 – SPECIALTIES

VISUAL DISPLAY SURFACES:

1. Markerboards and Tackboards.

DIRECTORIES:

1. Nonilluminated type with changeable message strips.

SIGNAGE:

1. Interior Room and Wayfinding Signage.

TOILET COMPARTMENTS: Solid Color Reinforced Composite (SCRC) toilet enclosures, entrance screens and shower dividers.

1. Overhead braced floor anchored.
2. Panels, Pilaster and Walls: 1 inch thick.

TOILET AND BATH ACCESSORIES:

1. Standard commercial units.

FIRE EXTINGUISHERS AND CABINETS:

1. Cabinet:
2. Recessed: Cabinet box (tub) fully recessed in walls of sufficient depth to suit style of trim indicated. Construction: Manufacturer's standard box, with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.
3. Extinguisher:
4. Multipurpose Dry Chemical Type: UL-rated 2A:10BC, 10-lb nominal capacity, in enameled steel container.

LOCKERS: Heavy-duty, athletic type.

1. Locker Arrangement: Double tier with integral base.
2. Material: Solid Plastic – Material Fire Rating Class B.

DIVISION 11 - EQUIPMENT

NA

DIVISION 12 – FURNISHINGS

ENTRANCE FLOOR GRILLES: Rigid treads with various surfaces; recessed metal frames.

1. Provide 1 unit at each exterior door of set of doors - 5'-0" deep x sidewalk width wide – 12"

DIVISION 13 - SPECIAL CONSTRUCTION

NA

DIVISION 14 - CONVEYING EQUIPMENT

HYDRAULIC ELEVATORS: Standard pre-engineered hydraulic passenger elevators.

Rated Capacity: 2100 lbs.

Rated Speed: 110 ft./min.

Clear Car Inside: 5' - 8" x 4' - 3"

Cab Height: Nominal

Hoistway Entrance Size: 3' - 0" wide x 7'-0 high

1. Elevator car enclosures, hoistway entrances and signal equipment.
2. Jack(s).
3. Operation and control systems.
4. Accessibility provisions for physically disabled persons.
5. Equipment, machines, controls, systems and devices as required for safely operating the specified elevators at their rated speed and capacity.
6. Materials and accessories as required to complete the elevator installation.

FACILITY SERVICES SUBGROUP

DIVISION 21 - FIRE PROTECTION

SCOPE

This section covers the furnishing and installing of a complete wet pipe automatic sprinkler system, and appurtenances. The fire protection system shall comply with the requirements of NFPA 13.

Work included in this specification shall consist of:

1. Arrange for, obtain and bear the cost of necessary permits, bonds, fees and engineering.
2. Make the connection to the main water piping.
3. Furnish and install alarm bell on the outside of the building.
4. Furnish and install fire department connection.
5. Do the testing of all piping and necessary clean up from fire protection work.
6. Furnish the shop drawings and certificates of inspection.

7. All materials and equipment shall be UL listed and bear the UL label.

STANDARDS, CODES AND REGULATIONS

Fire protection systems shall meet all provisions of NFPA 13 - Standard for the Installation of Sprinkler Systems.

UL and FM Compliance: Fire protection system materials and components shall be Underwriter's Laboratories listed and labeled, and Factory Mutual approved for the application anticipated.

CLASSIFICATION

Sprinkler System is classified as Light Hazard Occupancy in all areas except workshop, kitchen areas, covered vehicle parking areas, storage areas, and mechanical equipment rooms. These areas will be ordinary hazard Group I. Sprinkler heads shall be of the "ordinary temperature" classification, unless noted (maximum ceiling temperature - 100°F).

SUBMITTALS

Submit shop drawings (i.e. working plans) and catalog data for the following:

- Detailed drawings showing layout of heads, valves, piping and location of all accessories.
- Hydraulic Calculations in conformance with NFPA.
- Sprinkler Head Type and Model No.
- Fire Department Connections.
- Firestopping.

SPRINKLER HEADS

All sprinkler heads shall be of the quick response type.

Escutcheons at the ceiling shall be chrome-plated two-piece type to allow removal of the ceiling without removing the sprinkler heads.

Sprinkler Heads: Fusible link or glass bulb type, and style as indicated or required by the application. Unless otherwise indicated, provide heads with nominal 1/2 inch discharge orifice, for "Ordinary" temperature range.

Sprinkler Head Finishes: Provide heads with the following finishes:

Upright, Pendant, and Sidewall Styles: Chrome plated in finish spaces, exposed to view; rough bronze finish for heads in unfinished spaces and not exposed to view. Heads shall be fusible link wax-coated where installed exposed to acids, chemicals, or other corrosive fumes. Heads in vehicle storage areas or other rooms with exposed piping that have direct access with the exterior shall be zinc-coated.

Concealed Style: Rough brass, with painted white cover plate.

Flush Type: Bright chrome, with painted white escutcheon plate.

Recessed Style: Bright chrome, with bright chrome escutcheon plate.

All sprinkler heads shall be UL listed. All escutcheons and accessories shall be metal.

FIRE DEPARTMENT CONNECTIONS

All threaded fire department connections shall have threads that meet the requirements of the local fire department.

EXTRA MATERIALS

Valve Wrenches: Furnish to Owner, 2 valve wrenches for each type of sprinkler head installed.

Provide Sprinkler Heads and Cabinets: Furnish six extra sprinkler heads of each style included in the project. Furnish each style with its own sprinkler head cabinet and special wrenches as specified in this section.

ABOVEGROUND PIPING

Pipe shall be new, designed for 175 psi working pressure, conforming to ASTM specifications and have the manufacturer's name or brand, along with the applicable ASTM standard, marked on each length of pipe.

Interior pipe shall be steel, schedule 40, black and in accordance with specifications ASTM A120 or schedule 10 black and in accordance with specification ASTM A135, (ASTM A120).

Schedule 40 black steel pipe 2 inches and smaller shall be joined by screwed joints in accordance with specification ANSI B2.1; Schedule 40 black steel pipe 2-1/2 inches and larger shall have welded joints in accordance with specifications ANSI B31.10, ANSI B31.10a and ANSI B31.1.Ob, and by mechanical grooved couplings or joined by a UL approved combination of couplings, gaskets and grooves. Grooves may be rolled or cut and they shall be dimensionally compatible with the coupling.

Schedule 10 black steel ASTM A135 sprinkler pipe shall be joined by welded joints in accordance with specifications ANSI B31.10, ANSI B31.10a and ANSI B31.1ob, and/or UL approved mechanical couplings. Couplings may be of the groove type. Grooves shall be rolled only (cut grooving and threading will not be allowed for schedule 10 piping), and they shall be dimensionally compatible with the coupling. Pipe end preparation for the mechanical locking type couplings will be in accordance with the manufacturer's recommendations.

Piping exposed in a room with direct access to the exterior such as the vehicle storage shall have galvanized, primed and painted piping meeting the conditions listed above for black steel.

UNDERGROUND FIRE MAIN

The underground fire main shall be AWWA C-900, Class 150, DR 18 (150 psig rated), UL listed. Where underground fire main may be pressurized by fire pump or fire department connection, underground fire main shall be AWWA C-900, Class 200, DR 14 (200 psig rated). Mechanical restraints shall be installed at each joint. Restraints shall be Uni-Flange 1300 or an approved equal.

Restraints for underground fire protection main shall be clamp-on type made specifically for restraining AWWA C-900 PVC pipe. Restraint shall be ductile iron. Bolts and nuts shall be corrosion resistant steel. Restraint shall be equal to Uni-Flange Corp. Series 1300. Tar coat all iron components prior to burial.

Fittings shall be mechanical joint, 250 psi pressure rating in accordance with ANSI A21.10, tar coated outside, in accordance with ANSI A21.4.

Pipe penetrating building floors, building walls, and pit walls shall be ductile iron, thickness Class 150, 350 psi pressure rating, in accordance with ANSI A21.4. Pipe shall be push-on or mechanical joint on one end and flanged on the other.

AS-BUILT DRAWINGS

Contractor shall keep an accurate record of the location of all site fire water lines installed by him and shall provide owner upon completion of the work with a drawing showing all location dimensions and elevations.

DIVISION 22 – PLUMBING

SCOPE

The building must meet LEED certifications requirements for New Construction. The mechanical engineer shall work with the design and construction team to ensure that the building design and construction achieves the minimum required points to meet LEED certification.

This Section includes plumbing piping systems to a point 5 feet outside the building. Systems include the following:

Plumbing Fixtures, including water closets, urinals, sinks, disposers, lavatories, showers, water coolers, emergency shower, refrigerator connections, hose bibs, and water heaters.

Potable water distribution, including cold- and hot-water supply and hot-water circulation.

If gray water systems are utilized, piping materials from this section apply to these systems also.

Drainage and vent systems, including sanitary and storm.

SYSTEM PERFORMANCE REQUIREMENTS

Provide components and installation capable of producing piping systems with the following minimum working pressure ratings:

Water Distribution Systems, Below Ground: 150 psig.

Water Distribution Systems, Above Ground: 125 psig.

Soil, Waste, and Vent Systems: 10-foot head of water.

Storm Drainage System: 10-foot head of water.

SUBMITTALS

Submit shop drawings and catalog data for the following:

Plumbing fixtures, piping, fittings, glue, solder, etc.

PLUMBING FIXTURES:

Plumbing fixtures shall meet the minimum requirements of the Energy Policy Act of 1992 and the Florida Plumbing Code.

Maximum flow rates for fixtures shall be:

Water Closets	1.6 gallons per flush
Urinals	1 gallon per flush
Lavatories	0.25 gallons per cycle (Lavatories shall be of the metering type only)
Sinks	2.2 gpm at 60 psi
Showers	2.5 gpm at 80 psi

Plumbing fixtures shall be provided to meet the minimum quantities required by the Florida Plumbing Code, Chapter 4, as shown on Table 403.1 for occupancy classification of A-3 and business.

Sensor Operated Fixtures: All flush valves and lavatory faucets shall be sensor operated, or low voltage powered (battery not acceptable) lightning protected.

PIPE AND FITTINGS APPLICATIONS

Use pipe, tube, fittings, and joining methods for piping systems according to the following applications.

Water Distribution Piping Below Ground: Use one the following:

2 to 3-1/2 Inches: Schedule 40 poly(vinyl chloride) (PVC) plastic water pipe, Schedule 40 PVC fittings, and solvent-cemented joints.

2-1/2 to 3-1/2 Inches: Hard copper tube, Type K, cast-copper-alloy solder-joint pressure fittings and soldered joints with Alloy Sn95 solder.

2 Inches and Smaller: Soft copper tube, Type K, cast-copper-alloy solder-joint pressure fittings, and soldered joints with Alloy Sn95 solder.

Water Distribution Piping Above Ground: Use one the following:

3-1/2 Inches and Smaller: Hard copper tube, Type L; wrought-copper or cast-copper-alloy pressure fittings; copper unions; bronze flanges; and solder joints with Alloy Sn95 solder.

3-1/2 Inches and Smaller: Schedule 40 CPVC plastic water pipe, Schedule 40 CPVC fittings, and solvent-cemented joints.

Soil, Waste, and Vent Piping Below Ground: Use the following:

5 to 12 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings in 5- and 6-inch sizes; PVC socket-type Schedule 40 fittings in 8-inch and larger sizes; and solvent-cemented joints.

2 to 4 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings; and solvent-cemented joints.

Soil, Waste, and Vent Piping Above and Below Ground: Use the following:

5 to 12 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings in 5- and 6-inch sizes; PVC socket-type Schedule 40 fittings in 8-inch and larger sizes; and solvent-cemented joints.

2 to 4 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings; and solvent-cemented joints.

Storm Drainage Piping Above Ground: Use the following:

5 to 12 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings in 5- and 6-inch sizes; PVC socket-type Schedule 40 fittings in 8-inch and larger sizes; and solvent-cemented joints.

2 to 4 Inches: Poly(vinyl chloride) (PVC) plastic DWV pipe; PVC socket-type drain, waste, and vent pipe pattern fittings; and solvent-cemented joints.

VALVE APPLICATIONS

Use gate, ball, or butterfly valves.

PLUMBING INSULATION

Insulate hot water and cold water supplies and drains at handicapped lavatories with 1/2" thick "AP" Armaflex insulation, secured with Armstrong 520 adhesive. Insulate drains at

handicapped lavatories with insulation jackets of similar composition to Armaflex with a vinyl cover.

Insulate the body, trap, and all horizontal piping from floor drains and sink receiving cold condensate water with 1" thick fiberglass pipe insulation.

Insulate roof drain bodies and horizontal rainwater leaders of storm water piping.

Test water distribution piping as follows:

Test for leaks and defects in new water distribution piping systems and parts of existing systems that have been altered, extended, or repaired. If testing is performed in segments, submit separate report for each test, complete with diagram of portion of system tested.

Leave uncovered and unconcealed in new, altered, extended, or replaced water distribution piping until it has been tested and approved. Expose work that has been covered or concealed before it has been tested and approved for testing.

Cap and subject the piping system to a static water pressure of 50 psig above the operating pressure without exceeding pressure rating of piping system materials. Isolate test source and allow to stand for 4 hours. Leaks and loss in test pressure constitute defects that must be repaired.

Repair leaks and defects with new materials and retest system or portion thereof until satisfactory results are obtained.

Drainage and Vent Piping System Tests: Test drainage and vent systems according to procedures of authority having jurisdiction or, in absence of published procedure, as follows:

Test for leaks and defects in new drainage and vent piping systems and parts of existing systems that have been altered, extended, or repaired. If testing is performed in segments, submit a separate report for each test, complete with a diagram of the portion of the system tested.

Leave uncovered and unconcealed in new, altered, extended, or replaced drainage and vent piping until it has been tested and approved. Expose for testing work that has been covered or concealed before it has been tested and approved.

Rough Plumbing Test Procedure: Except for outside leaders and perforated or open-jointed drain tile, test piping of plumbing drainage and venting systems on completion of roughing-in piping installation. Tightly close all openings in piping system and fill with water to point of overflow, but not less than 10 feet head of water. Water level shall not drop during the period from 15 minutes before inspection starts through completion of inspection. Inspect joints for leaks.

Finished Plumbing Test Procedure: After plumbing fixtures have been set and their traps filled with water, test connections and prove gastight and watertight. Plug stack openings on roof and building drain where it leaves the building and introduce air into the system equal to pressure of 1-inch water column. Use a U tube or manometer inserted

in the trap of a water closet to measure this pressure. Air pressure shall remain constant without introducing additional air throughout period of inspection. Inspect plumbing fixture connections for gas and water leaks.

Repair leaks and defects using new materials and retest system or portion thereof until satisfactory results are obtained.

CLEANING

Clean and disinfect water distribution piping as follows:

Purge new potable water distribution piping systems and parts of existing potable water systems that have been altered, extended, or repaired prior to use.

Use purging and disinfecting procedure prescribed by authority having jurisdiction or, if a method is not prescribed by that authority, the procedure described in either AWWA C651 or AWWA C652 or as described below:

Flush piping system with clean, potable water until dirty water does not appear at outlets.

Fill system or part thereof with water/chlorine solution containing at least 50 parts per million of chlorine. Isolate (valve off) and allow to stand for 24 hours.

Drain system or part thereof of previous solution and refill with water/chlorine solution containing at least 200 parts per million of chlorine. Isolate and allow to stand for 3 hours.

Flush system with clean, potable water until chlorine does not remain in water coming from system following allowed standing time.

GRAY WATER STORAGE

If a gray water system is installed, the storage tank may not be located such that flooding of the ground floor would cause salt water intrusion into the building plumbing system.

DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING

SCOPE

The building must meet LEED certifications requirements for New Construction. All prerequisites pertaining to HVAC systems shall be met. In addition, the mechanical engineer shall work with the design and construction team to ensure that the building design and construction achieves the minimum required points to meet LEED certification.

This Section includes:

HVAC Equipment & Efficiency
IAQ Ventilation & Temperature Control
HVAC Ductwork
HVAC Insulation

HVAC Test and Balancing

SUBMITTALS

Submit shop drawings and catalog data for the following:

HVAC Equipment – Manufacturer's submittals
HVAC Ductwork (shop drawings)
HVAC Insulation – Manufacturer's submittals

QUALITY ASSURANCE

NFPA Compliance: Comply with the following NFPA Standards:

NFPA 90A, "Standard for the Installation of Air Conditioning and Ventilating Systems," except as indicated otherwise.

HVAC Equipment & Efficiency:

HVAC equipment shall be either packaged or split system direct expansion.

No CFC refrigerants are allowed.

HVAC equipment efficiencies shall meet the minimum requirements of Chapter 13 of the Florida Building Code and the mandatory provisions of ASHRAE 90.1-2004.

HVAC equipment and building energy performance shall exceed the performance of an ASHRAE 90.1 baseline building by a minimum of 14% using the whole building performance rating method in Appendix G.

Exterior heat transfer coils shall have copper fins on copper coils and/or seacoast protected coil coating.

Exterior HVAC equipment shall be located such that it will not be flooded if the ground floor floods.

Exterior HVAC equipment shall have provisions to be protected from storm winds and projectile missile impact that the building is designed for.

WIND LOAD AND FLOOD REQUIREMENTS

All outdoor equipment shall be located above grade, elevated to avoid damage during flooding conditions. The installation shall meet the requirements of FEMA 55 "Coastal Construction Manual". Outdoor equipment shall be designed and installed to withstand 170 mph winds. Where equipment is not rated for such, it shall be enclosed in a suitable structure designed to withstand such wind loads.

TEMPERATURE CONTROL

Zoning – Separate A/C systems shall be provided for the second floor. HVAC systems shall be properly zoned to provide thermostat control for all unique spaces such as multi-purpose rooms, classrooms, and conference rooms. Spaces with similar exposures, functions and occupancy schedules such as adjoining offices may be grouped together on a single thermostat, but in no case shall one thermostat serve more than four occupied spaces. This may be accomplished by using any (or combinations) of the following; multiple A/C units, VAV boxes, Variable Refrigerant Flow Systems.

Incremental, "through the wall" or "window" A/C units shall not be used.

SPACE TEMPERATURES

HVAC systems shall be sized and controlled to maintain the indoor space temperature of 72 degrees F. in the cooling and 70 degrees F. in the heating mode in all rooms.

IAQ & VENTILATION

The building ventilation shall meet the minimum requirements of ASHRAE 62.1-2004, ventilation rate procedure.

All return air systems and mechanical rooms shall be fully ducted. The use of plenums is prohibited.

All systems shall have controls that provide for "occupied" and "unoccupied" modes of operation. In the "unoccupied" mode, outside air dampers shall close and all building exhaust fans shall be off.

FLEXIBLE DUCTS

General: Comply with UL 181, Class 1.

Flexible Ducts - Insulated: Factory-fabricated, insulated, round duct, with an outer jacket enclosing glass fiber (1" thick in conditioned areas, 1-1/2" thick in non-conditioned spaces) insulation around a continuous inner liner. Flexible ducts shall be limited to a maximum length of 6 feet per air device.

SHEET METAL DUCTWORK (Fiberglass ductwork is not acceptable)

Sheet Metal, General: Provide sheet metal in thicknesses indicated, packaged and marked as specified in ASTM A 700.

Galvanized Sheet Steel: Lock-forming quality, ASTM A 527, Coating Designation G 90. Provide mill phosphatized finish for exposed surfaces of ducts exposed to view.

SEALING MATERIALS

Joint and Seam Sealant: One-part, non-sag, solvent-release-curing, polymerized butyl sealant complying with FSTT-S-001657, Type I; formulated with a minimum of 75% solids.

Flanged Joint Mastics: One-part, acid-curing, silicone elastomeric joint sealants, complying with ASTM C 920, Type S, Grade NS, Class 25, Use O.

RECTANGULAR DUCT FABRICATION

General: Fabricate rectangular ducts with galvanized sheet steel, in accordance with SMACNA "HVAC Duct Construction Standards. Conform to the requirements in the referenced standard for metal thickness, reinforcing types and intervals, tie rod applications, and joint types and intervals. No ductwork shall be exposed outside the facility.

Static Pressure Classifications: Design and construct duct systems to the following pressure classifications:

Supply Ducts: 3 inches water gage.

Return Ducts: 2 inches water gage, negative pressure.

Exhaust Ducts: 2 inches water gage, negative pressure.

AIR DEVICES

All air devices (diffusers, registers, grilles and louvers) shall be of aluminum construction. Exterior louvers shall comply with Miami-Dade County, Florida Notice of Acceptance #97-1023.04.

DUCT SYSTEMS INSULATION SCHEDULE

INTERIOR CONCEALED HVAC SUPPLY, OUTSIDE AIR, AND RETURN DUCTS AND PLENUMS

MATERIAL	FORM	THICKNESS IN INCHES	VAPOR BARRIER REQ'D	FIELD- APPLIED JACKET
GLASS FIBER	WRAP	2	YES	NONE

INTERIOR EXPOSED HVAC SUPPLY, OUTSIDE AIR, AND RETURN DUCTS AND PLENUMS
(NOTE: MECHANICAL ROOMS ARE EXPOSED AND SHALL BE INSULATED AS SUCH)

MATERIAL	FORM	THICKNESS IN INCHES	VAPOR BARRIER REQ'D	FIELD- APPLIED JACKET
GLASS FIBER	BOARD-RECT.	1-1/2	YES	NONE

CONDENSATE DRAINS

Insulate condensate drain piping above concealed spaced and in all mechanical rooms with 1/2" thick "AP" Armaflex or approved equal. Insulate all condensate lines located in return air plenums (in their entirety) with 1" fiberglass pipe insulation with all-service jacket.

DUCTWORK

Insulate all galvanized steel supply and return air ductwork. Exhaust ducts shall not be insulated. Insulate outside air intake ducts to outside air opening.

Duct wrap shall be specifically designed for wrapping heating and air conditioning ductwork and include 2" overlap facing tab to provide for continuous vapor seal. Duct wrap shall be 2" thick, 1.5 lb. density, foil-scrim-kraft laminated vapor barrier facing, minimum installed R-value equal to 6.0, and a maximum flame spread/smoke development rating of 25/50 per ASTM E84. The use of internal duct lining is prohibited.

AIR DEVICES

Insulate all exposed metal surfaces on back of ceiling diffusers with 1" thick fiberglass with vapor barrier.

TEST AND BALANCE

Test, adjust, and balance the following mechanical systems:

Supply return and exhaust air systems, all pressure/flow ranges; including variable volume and double duct systems. Test and balance all air devices and traverse duct at each air handler and exhaust fan (record static and CFM).

Agency Qualifications:

The independent testing, adjusting, and balancing agency certified by National Environmental Balancing Bureau (NEBB) or Associated Air Balance Council (AABC) in those testing and balancing disciplines required for this project, and having at least one Professional Engineer registered in the State in which the services are to be performed, certified by NEBB or AABC as a Test and Balance Engineer.

Codes and Standards:

NEBB: "Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems."

AABC: "National Standards For Total System Balance."

Forms shall be those standard forms prepared by the AABC or NEBB.

Certified Reports: Submit testing, adjusting, and balancing reports bearing the seal and signature of the Test and Balance Engineer. The reports shall be certified proof that the systems have been tested, adjusted, and balanced in accordance with the referenced standards; are an accurate representation of how the systems have been installed; are a true representation of how the systems are operating at the completion of the testing, adjusting, and balancing procedures; and are an accurate record of all final quantities measured, to establish normal operating values of the systems. Follow the procedures and format specified below:

Draft reports: Upon completion of testing, adjusting, and balancing procedures, prepare draft reports on the approved forms. Draft reports may be hand written, but must be complete, factual, accurate, and legible. Organize and format draft reports in the same

manner specified for the final reports. Submit 2 complete sets of draft reports. Only 1 complete set of draft reports will be returned.

Final Report: Upon verification and approval of draft reports, prepare final reports, type written, and organized and formatted as specified below. Submit 2 complete sets of final reports.

Report Format: Report forms shall be those standard forms prepared by the referenced standard for each respective item and system to be tested, adjusted, and balanced. Bind report forms complete with schematic systems diagrams and other data in reinforced, vinyl, three ring binders. Provide binding edge labels with the project identification and a title descriptive of the contents. Divide the contents of the binder into the below listed divisions, separated by divider tabs:

General Information and Summary
Air Systems
Temperature Control Systems

DIVISION 26 – ELECTRICAL

SCOPE

This section includes the furnishing and installation of a complete electrical power distribution system. The electrical installation will include empty conduit run to the property line at the street for communications cable interface. The electrical system shall comply with the requirements of NFPA 70 – 2005 (National Electric Code).

Work included in this specification shall consist of:

General Wiring and Equipment

1. Wiring shall be run in metal conduit concealed in ceiling space and walls and complying with the following standards:
 - EMT: ANSI C80.3
 - FMC: Zinc-coated steel
 - Boxes (interior locations): Sheet Metal Outlet and Device Boxes – NEMA OS 1.
 - Boxes (exterior locations): Marine grade boxes and covers – Yellow fiberglass, FD type.
 - Minimum conduit size: ¾”.
2. Exposed Exterior wiring shall be run in Rigid Aluminum (ANSI C80-5) or PVC schedule 80.
3. Conductors for general wiring shall comply with the following standards:
 - Copper. NEMA WC 70
 - Insulation: THHN-THWN
 - Minimum wire size: #12 AWG
4. Wiring Devices. Provide number and location of wiring devices adequate to the area function. Coordinate with user requirements and cabinet details.

Wiring Devices shall comply with the following standards:

- Receptacles: 20A, 120V. 5-20R configuration. Specification grade. UL 498
- Switches: 20A, 120/277V. Specification grade. UL 20.
- Wall Plates: Smooth, high-impact thermoplastic.
- Exterior Locations: Corrosion resistance in non-metallic high-impact housing or cast aluminum.

5. Interior Lighting Fixtures. Provide general lighting in all spaces. Provide specialized lighting that meets the requirements of each area and the user needs.
 - General Lighting: Fluorescent Lamp. Recessed.
 - T8 lamps. CRI: 75 minimum
 - High power-factor, electronic ballast. THD< 20%
 - Exit Signs: LED with Battery back-up
 - Emergency light Units: Sealed battery, Test button and Charger LED indicator.
 - Compliance with space power limits required by Florida Building Code.
6. Exterior Light Fixtures. Provide security lighting along the perimeter of the building and parking lighting adequate to the site needs. Comply with the minimum requirements of the IES standards. The exterior lighting shall comply with Florida FFWCC Marine Turtle Protection lighting requirements.
 - Metal halide Light Fixtures mounted on walls or poles.
 - Compliance with Dark Skies Outdoor Light County Regulations.
 - Precast concrete poles
 - Structural certification for wind load pole selection.
7. Lighting Control. Provide light control adequate to each area functional needs including wall switches, dimmers, and occupancy sensors. Comply with requirements of applicable codes.
 - Compliance with Florida Building Code Energy Efficiency Requirements Chapter 13.
 - Automatic Lighting Shutoff and space control.
 - Exterior light control. Electronic Time control, programmable with astronomic time and power failure backup.
8. Power Distribution. Provide a power distribution system that meets the requirements of the new building. Pay all fees and obtain permits. Coordinate with the power company the service details. Coordinate panel, system capacity and layout with HVAC equipment, user furnished equipment and general electrical equipment and lights. Provide spare capacity to allow expansion of second floor. Furnish equipment that meet the following minimum standards:
 - Panel boards. Commercial grade. Comply with NEMA PB1.
 - Dead Front, Bolt-on circuit breaker type with 25% spare spaces.
 - Short circuit rated to interrupt available symmetrical short-circuit current.

- Heavy-Duty disconnect switches, quick-break, quick-make type with pad-lockable handle.
 - Motor controllers. Enclosed combination starters with HOA selector and pilot light.
 - Dockside Power: Switched twist-lock non-metallic or cast aluminum enclosure.
Rain proof.
9. Transient Voltage Surge Suppression. Provide TVSS protection at the main service panel and at the next level panel. Meet the following minimum standards:
- Compliance with UL 1449(latest edition)
 - Service panel: Category C3. Surge current 120kA per phase with L-N; L-L; L-G and N-G mode suppression.
 - Panelboards: Class B locations. 30 kA, L-N; N-G mode suppression
 - Suppressed voltage rating: 400V, 120/240V.
10. Transfer Switch. Provide manual transfer switch to switchover power source from utility to portable generator. Provide portable generator connector box. Meet the following minimum standard.
- Double-Throw switch. Non-fusible.
 - Power blocks for generator cables connection.

WIND LOAD AND FLOOD REQUIREMENTS

The Building Main Service Switch and electrical panel boards and all outdoor equipment and electrical devices shall be located above grade, elevated to avoid damage during flooding conditions. The installation shall meet the requirements of FEMA 55 "Coastal Construction Manual". Outdoor equipment shall be designed and installed to withstand 170 mph winds. Where equipment is not rated for such, it shall be enclosed in a suitable structure designed to withstand such wind loads.

DIVISION 27 – COMMUNICATIONS

Provide a complete cabling system for data/voice communications including cables, patch panels, racks and outlets, fully tested. Work and devices shall conform to relevant sections of TIA/EIA 568,569 and 606.

CABLES

Cables shall be UTP Cat 5e or higher complying with TIA/EIA-568. Cables shall be run concealed secured to walls with appropriate tie downs in accessible areas and run in conduit where exposed or in non-accessible spaces.

Terminate cables in patch panels with front RJ-45 jacks and rear 110 type connectors color coded for 568A wiring and integral labels located in racks at communication rooms. Provide and terminate cables in communication outlet faceplate with modular jackets for data and voice at locations selected locations.

TESTING

Cables and terminations shall be tested to verify both the electrical characteristics and correctness of the termination sequence and labeling. Testing connections shall be made to modular jacks at the outlets and at the patch panels.

Testing shall comply with the transmission standards in TIA/EIA-568 and will include length, cross talk, ACR at both ends, attenuation, impedances, reflections and bit error rate at all 100Base-T data rates.

SLEEVES

Steel pipe sleeve: EMT conduit 2 1/2" diameter minimum.

Rectangular Openings: Galvanized sheet steel.

Seals: Shrinkage-resistance grout to seal around sleeve and structure.

Fire rated walls or floors penetrations: Install sleeves that extend 2" minimum above finished floor level. Maintain fire rating of wall or floor at pathway of cable penetration sleeves with firestop material.. Seal space outside of sleeve penetrating masonry or concrete with grout.

Outlet Boxes

Provide 4" square boxes 2 1/2" deep min. flush wall mounted with extension to accommodate communication device plate. Extend one 1" conduit minimum up to access ceiling space.

Conduit shall terminate with a 45 degree bend and plastic bushing.

Communication Room

Provide wall or floor mounting rack for communication equipment.

Provide plywood backboard with fire-retardant coat, 48" X 48" minimum.

Provide #6 AWG ground cable from building system ground. Leave coiled at board for future termination by communications contractor.

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

SCOPE

Provide a non-coded addressable system, with multiplex signal transmission, dedicated to fire alarm only. Provide complete with control unit, manual pull stations, area and duct smoke detectors and notification appliances with addressable interface devices. Provide digital alarm transmitter for remote alarm notification.

CODE COMPLIANCE

Comply with the requirements of NFPA 72 (Fire Alarm) and Life Safety code (NFPA 101) requirements for the building occupancy classification.

SUBMITTALS

Submittal shall be approved by the authorities having jurisdiction.

Provide shop drawings prepared by manufacturer certified technicians that will include product data, wiring diagrams, layout plans, riser diagram with notification circuit voltage drop and load, battery calculations, and installation details. Provide 25% minimum spare capacity in all circuits and battery installed capacity. Provide calculations for voice alarm speakers and amplifiers.

SYSTEM REQUIREMENTS

Upon receiving a fire alarm signal the control panel shall initiate actions required by the Codes that include as a minimum the following:

- Continuously operate alarm notification devices
- Activate voice/alarm communication system
- Identify alarm device at control unit and remote annunciator
- Transmit alarm signal to remote receiving station

- Shutoff air-conditioning equipment

Fire Alarm Control Unit

- Field Programmable, modular complying with UL 864.
- Initiation addressable signal circuit
- Addressable control circuit
- Alphanumeric display and system control
- Initiating device, notification appliance and signaling circuits per NFPA class B.

Manual Fire Alarm Station

Single-action breaking glass type. With addressable module and key reset.

Smoke Detectors

Photoelectric type with integral addressable module. Self-restoring.

Provide duct smoke detectors at locations indicated by HVAC plans. Provide remote test and annunciator stations in public places.

Notification Appliance

- Connected to a notification circuit, zoned as indicated.
- Electric=vibrating horn, 24 V. UL 464. 90 dBA sound level minimum.
- Visible notification: Xenon strobe. UL 1971. Adjustable light output 15 thru 119 cd.

Fire Protection Waterflow Devices

Provide addressable interface units at the Riser valve control and zone valve control as indicated by the Fire Protection plans.

Remote Annunciator

Functions shall match those of the fire alarm panel. Provide acknowledging, silencing, and resetting functions.

Digital Alarm Communicator Transmitter

Comply with UL 632. Upon receive of fire alarm signal, capture one telephone line and dial preset number of selected remote monitoring service.

Testing

3. System Testing: Comply with "Test Methods" Table in the "Testing" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
4. Test audible appliances for the public operating mode according to manufacturer's written instructions. Perform the test using a portable sound-level meter complying with Type 2 requirements in ANSI S1.4.
5. Test visible appliances for the public operating mode according to manufacturer's written instructions.
6. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" Section of the "Fundamentals of Fire Alarm Systems" Chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" Section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.

SITE AND INFRASTRUCTURE SUBGROUP

DIVISION 31 – EARTHWORK

All work under this Division shall be performed in accordance with OSHA regulations.

311000 SITE CLEARING

Site Clearing includes protecting existing vegetation to remain, removing existing vegetation, and temporary erosion and sedimentation control measures.

Provide erosion control and sediment control as required by local, state and federal agencies including NPDES Permit, installation and maintenance of devices during construction and local agency inspections.

Provide tree protection barriers and maintenance during construction per Manatee County / City of Bradenton Beach requirements.

312000 EARTH MOVING

Earth Moving includes preparing subgrades for at grade surfaces, walks, porous pavements, excavating and backfilling for building piles and structures, subbase course for pervious walks, subbase course and base course for pervious paving, subsurface drainage backfill for piles and trenches, Excavating and backfilling trenches for utilities and pits for buried utility structures.

Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.

Backfill material to be placed in accordance with FDOT Section 125. Maximum unit weight per cubic foot shall be as determined by AASHTO T99, Method C for compaction.

Soil Materials

All soil materials shall be "beach compatible sand" material as required and approved by Florida Department of Environmental Protection (FDEP) for use waterward of the Coastal Construction Line (CCL).

Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations. Satisfactory Soils: Soil Classification as applicable according to ASTM D2487 free of rock or gravel larger than 1" diameter, debris, waste, organic materials, and other deleterious matter. Remove muck and unsuitable material from fill areas prior to placement of fill.

Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.

Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.

Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (37.5-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.

Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch (25-mm) sieve and 0 to 5 percent passing a No. 4 (4.75-mm) sieve.

Sand: ASTM C 33; fine aggregate.

Geotextiles

Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288.

Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288.

312319 DEWATERING

Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

Design dewatering system, including comprehensive engineering analysis by a qualified professional engineer.

Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, that excavation does not flood, and that damage to subgrades and permanent structures is prevented.

Prevent surface water from entering excavations by grading, dikes, or other means.

Accomplish dewatering without damaging existing buildings, structures, and site improvements adjacent to excavation.

Remove dewatering system when no longer required for construction.

Regulatory Requirements: Conform to the provisions of 2.01 Florida Environmental Land and Water Management Act of 1972 (F.S. 380.012 et seq.). Comply with governing agency

notification regulations before beginning dewatering. Comply with hauling and disposal regulations of authorities having jurisdiction. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Provide sumps, sedimentation tanks, and other flow-control devices as required by authorities having jurisdiction.

Interruption of Existing Utilities: Do not interrupt any utility serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated.

315000 EXCAVATION SUPPORT AND PROTECTION

Design, furnish, install, monitor, and maintain excavation support and protection system capable of supporting excavation sidewalls and of resisting soil and hydrostatic pressure and superimposed and construction loads.

Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.

Monitor vibrations, settlements, and movements.

Remove excavation support and protection systems when construction has progressed sufficiently to support excavation and bear soil and hydrostatic pressures. Remove in stages to avoid disturbing underlying soils or damaging structures, pavements, facilities, and utilities.

Structural Steel: ASTM A 36/A 36M, ASTM A 690/A 690M, or ASTM A 992/A 992M.

Steel Sheet Piling: ASTM A 328/A 328M, ASTM A 572/A 572M, or ASTM A 690/A 690M; with continuous interlocks.

Cast-in-Place Concrete: ACI 301, of compressive strength required for application.

Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.

DIVISION 32 – EXTERIOR IMPROVEMENTS

All work under this Division shall be performed in accordance with OSHA regulations.

POROUS PAVING

Materials and construction to be in accordance with Manatee County / City of Bradenton Beach standards.

Porous Pavements shall be as approved by permitting agencies and as selected and approved by Manatee County Property Management Department.

MATERIALS

A. Coarse Aggregate

The coarse aggregate gradation shall conform to ASTM D692 and to coarse aggregate as specified in FDOT, Section 901.

- B. Fine Aggregate
The fine aggregate gradation shall conform to ASTM D1073, AASHTO M29, and to fine aggregate as specified in FDOT, Section 902.
- C. Mineral Filler
The mineral filler gradation shall conform to AASHTO M17 and to mineral filler as specified in FDOT, Section 917.
- D. Walkways shall meet ADA requirements: 2% cross slope maximum and 1:20 maximum longitudinal slope.

328400 PLANTING IRRIGATION

Design and construct irrigation system to provide 100% coverage establishment period watering for proposed landscaping. Acceptable manufacturers are Hunter, Rain Bird, and Toro or equal. Review irrigation system design with and obtain approval of manufacturer(s) from Manatee County Property Management Department.

Provide sufficient number of heads with spray patterns necessary to provide required coverage without overspray on to walkways, buildings and equipment. Provide low volume irrigation systems as appropriate for sustainable design and LEED ® certification.

Irrigation Piping: Class 200 PVC mainline, Class 160 PVC laterals and Schedule 40 PVC sleeves. Provide a 3 inch sleeve under all walks, drives and parking.

329200 TURF AND GRASSES

Match existing turf species with sod to restore areas disturbed by construction. Sod shall be top quality weed and disease free, installed tightly butted to create a level and even surface free from dips and holes. Sod shall be installed so that soil line at the base of the blade is even with adjacent walks, curbs and drives. Review existing turf with and obtain approval of turf species from Manatee County Property Management Department.

329300 PLANTS

MATERIALS

- A. Plant Material (Florida native, drought tolerant, salt tolerant species required)
 - 1. All plant material shall be Florida No. 1 or better according to Grades and Standards for Nursery Plants. All materials shall be healthy, vigorous, free of diseases and insects, pruned for best natural shape and without symptoms of nutritional deficiency. All plants must be true to variety, cultivar, and/or species. Plants must be naturally bushy, dense, in good foliage, well branched, and of good appearance. The nursery/nurseries from which they are derived shall be under regulatory inspection by the Florida State Department of Agriculture and/or the Florida State Plant Board or an equivalent agency, if derived from outside the state of Florida. Plants entering from outside the state of

Florida must bear the entry certificate of the State Department of Agriculture of the state of Florida. All plant materials will be subject to approval for quality, size, and color. Plants lacking compactness or proper proportions, plants which are weak or thin, and plants injured by close planting in nursery rows will not be accepted. Plant materials which have been cut back from larger grades to meet certain specified requirements will be rejected. Plants used where symmetry is required shall be matched as nearly as possible. No wounds will be present with a diameter of more than 1-inch and such wounds will show vigorous growth on all edges.

2. Container Grown Trees and Plants shall have been grown in a container large enough and for a sufficient time to allow the root system to have developed well enough to hold the soil together firmly. Plants that have become pot bound or plants with a root system too large for the container will not be accepted.

3. All plants of the *Palmaceae* Family shall have the roots adequately wrapped before transplanting except when they are container grown. Burlapping will not be required if the palm is dug from marl or heavy soil that adheres to the roots and retains its shape without crumbling. During transporting and after arrival, root balls of palms shall be carefully protected from wind and exposure to the sun. Palms not planted within 12 hours after delivery to the job site, shall have their root balls covered with a moist material and the palm bud shall not be allowed to dry out.

4. As a specific requirement, all field grown or collected plant material shall be root pruned six weeks prior to transplanting. Plants grown in soil of a loose texture which does not readily adhere to the root system, or in the case of large plants or trees, shall have sound hog wire placed around the burlapped ball before the plant is removed from the excavation. The wire shall be looped and tensioned until the burlapped ball is substantially packaged so as to prevent loosening of the soil around the roots during handling. Wired balled and burlapped plants shall otherwise comply with the requirements for balled and burlapped plants described in American Standard for Nursery Stock.

5. Single trunk tree species shall have a single, straight trunk for a height of not less than 50% of the overall tree height.

B. Topsoil Backfill for Planting (subject to FDEP approval)

1. Topsoil backfill that is indigenous to the area, naturally fertile, of a loamy-sand or sand-loam agricultural nature and free from substances deleterious to plant growth shall be imported to the project site. It shall be free of admixtures except as specified herein or on the drawings. It shall be free of sticks, stones, bottles, and other superfluous plant matter and materials. It shall be in a normally moist, unmuddy, and unwet condition.

2. Composition: 1/3 sterilized peat, 2/3 native topsoil.

3. Topsoil backfill is to have an acidity range of between pH 5.5 and 6.5 Organic content to be between 2% and 25%. Soluble salts to be between 175 ppm and 800 ppm. Permeability to be a minimum of 0.33 feet per day. Submit test results to the Owner's Representative per Article 1.03, Submittals, of this Section.

4. The pH reaction shall be adjusted to pH 5.5 - 7.0 by either adding sulfur to lower the pH level of alkaline soils or by adding dolomitic agricultural limestone to raise the pH level. The acceptable pH range for acidic environment plants such as azaleas is 4.5 - 5.5. The topsoil backfill is to be used for all exterior planting.

C. Peat and Humus

1. Peat shall be mixed with Topsoil Backfill for all planting beds.
2. Peat and humus shall be of a suitable type and shall consist of reed peat or sedge peat, but not peat moss. It shall be free of sticks, stones, weeds, roots, and of the undesirable debris and shall be derived from a source, which endogenously produces peat of this nature. It shall be delivered containing between 35% and 50% moisture. It shall be dark brown to black in color, granulated, free of lumps and shall have been conditioned in a storage pile for at least six months.

D. Fertilizer

All plant material will be fertilized during planting.

1. Pelletized Fertilizer

Fertilizer shall be "AGRIFORM 21 GRAM" tablets, slow release, 20-10-5 analysis or approved equal. Rates of application shall be as follows:

1-gallon can plants	1 tablet each
3-gallon can plants	2 tablets each
5-gallon can plants	3 tablets each
Palm Trees (single stem)	4-6 tablets each
Palm Trees (multiple stems)	1 tablet per each 3-inch of stem diameter, cumulative diameter measurement.
Trees	1 tablet per each 2-inch of caliper, for multiple trunks, the diameter measurement will be cumulative.

2. Ground Cover/Annual Flower Fertilizer

All ground covers and annuals will be fertilized during planting. Ground cover/annual flower fertilizer shall be "OSMOCOTE" Time Release Fertilizer 14-14-14 applied at manufacturer's suggested rates.

3. Turf Fertilizer (16-4-8) Guaranteed Analysis with 50% organic nitrogen by weight.

E. Sod

1. Sod shall be installed to prevent erosion as necessary where areas have been damaged due to construction and/or due to the storage of materials. Grass for sodding shall be freshly cut in squares one foot wide by one or two feet long. It shall be derived from an area having a soil type similar to the soil on which it is to be laid. It shall be healthy, free of weeds, insects including ground pearls and spittle bugs, in naturally green condition, and shall have an abundance of roots contained within a mat of topsoil derived in the harvesting process from the area where grown. Brown, dry, irregularly smooth, and/or unfresh sod will be rejected.

F. Mulch

1. Recycled Hardwood Log Mulch

Mulch material shall be recycled hardwood log mulch made from ground logs, limbs, and branches of 5 inch diameter or larger. The mulch shall be free of other vegetative yard waste, palm trees, metal, sand, plastic, and other foreign material. The mulch shall have the consistency and appearance of commercial harvested cypress mulch. Mulch pieces shall be fibrous and mat together. Wood chip pieces are not acceptable. The recycled hardwood log mulch shall be sterile and free from viable weed and grass seed.

Sustainable source mulch may be used if above requirements are met and samples are approved by Manatee County Property Management Department.

G. Wound Dressing/Pruning Paint

1. Wounds may be treated if desired by the Landscape Contractor, only with a coat of Elmer's white "Glue All." Asphaltic base tree paint is not acceptable.

H. Insecticides/Pesticides/Herbicides

1. Pre-emergent herbicide is required for shrub and ground cover beds. A pre-emergent granular herbicide such as Dow Elanco Snapshot or Scotts OH II or approved equal shall be applied to all planted beds and mulched tree saucers. The herbicide active ingredients shall be suitable for control of broadleaf weeds and annual grasses in landscape ornamental areas. The granular herbicide shall be applied by a hand held rotary applicator such as a whirlybird. The herbicide shall be applied at a rate recommended by the manufacturer. The granular herbicide shall be broadcast over the planting bed after the plants have been planted and before mulch is spread.

I. Antidesiccant

1. Antidesiccants are required for field grown trees. Antidesiccant shall be "Wilt Pruf" TM or approved equal delivered in manufacturer's container and used in accordance with the manufacturer's instructions.

J. Staking

1. Trees shall be self supporting at the time of installation. Staking and guying may be provided at the installer's discretion to prevent overturning until root anchoring occurs.

DIVISION 33 – UTILITIES

All work under this Division shall be performed in accordance with OSHA regulations.

Locate utility piping so that it will not extend beneath proposed structures and be adversely affected by the structure loads.

330500 COMMON WORK RESULTS FOR UTILITIES

Common work results for utilities includes piping, joining materials, transition fittings, sleeves, identification devices, grout, flowable fill, piped utility demolition, piping system, equipment installation requirements, painting, concrete bases, metal supports and anchorages.

Materials and construction to be in accordance with Manatee County / City of Bradenton Beach utility standards.

POTABLE WATER

Requirements of Regulatory Agencies: Cleaning and Disinfection - Conform to the applicable requirements of state and local health authorities having jurisdiction for disinfection and testing.

A. Piping Systems

All water and fire mains to be as required by Manatee County / City of Bradenton Beach. Water service pipes to be Polyethylene Class 200, DR 9 Driscopipe™ or equal meeting AWWA C901.

1. Polyethylene Pressure Pipe

Polyethylene pipe and tubing 3" diameter and smaller shall be pressure SDR 11 (DIPS) Bluestripe, or equal, meeting the requirements of AWWA C901 (latest revision) and the following ASTM requirement:

Material Designation PPI/ASTM	PE3408
Material Classification	ASTM D-1248 III C5 P34
Cell Classification	ASTM D-3350

2. Joints

Where PE pipe is jointed to PE pipe, it shall be by thermal butt fusion. Thermal fusion shall be accomplished in accordance with the recommendations of the pipe manufacturer and fusion equipment supplier. The contractor installing thermal butt fused PE pipe shall have a minimum of five (5) year's experience performing this type of work.

Mechanical joints and fittings shall meet the requirements of: AWWA C901, ASTM D3350 and ASTM D3140

B. Corporation Stops

Corporation stops, couplings and plugs shall be water service bronze of type and size required by Manatee County / City of Bradenton Beach.

C. Service Clamps

Clamps shall be compatible with the main and service lead, with stainless steel straps

with epoxy coated ductile material to avoid crushing the main out-of-round.

D. Curb Stops

Water service bronze of types and sizes required by Manatee County / City of Bradenton Beach.

E. Threaded Fittings

Threads for water main service fittings shall conform to the requirements of AWWA C800 and AWWA C800 Appendix for Materials.

F. Polyvinyl Chloride (PVC) Piping Systems

1. Pipe and Couplings

Pressure class-rated PVC pipe and accessories four to twelve inch (4"-12") in diameter, where shown or as specified on the drawings, shall meet the requirements of AWWA Specification C-900 "Polyvinyl Chloride (PVC) Pressure Pipe". Pipe shall be Class 150, meeting the requirements of Dimensional Ratio (DR) 18 and shall have the dimension of ductile iron outside diameters. Each length of pipe shall be hydrotested to four (4) times its pressure class pressure by the manufacturer in accordance with AWWA C-900.

2. Joints

Push-on or mechanical elastomeric gasket type, conforming to ASTM D3139.

3. Fittings

Polyvinyl Chloride

Two hundred (200) pound Pressure Class conforming to AWWA C900 of types and sizes indicated on the Plans.

4. Gaskets

Elastomeric seal type conforming to ASTM F477.

5. Lubricants

Manufacturers standard non-toxic conforming to AWWA C900.

G. Valves and Hydrants

1. Bronze Bodied Gate Valves

Values shall be composed of brass conforming to ASTM B62 (85-5-5) and to federal specification WW-V-541, Class A, Type I, wedge disc, non-rising stem gate.

2. Resilient - Seated Line Valves

Valves shall conform to AWWA Standard C 509 with non-rising stems.

3. Fire Hydrants

Dry barrel breakaway compression type, 5 1/4", with counter clockwise opening fire hydrants conforming to AWWA C502-85 with approved U.L. Listed (AWWA, U.L., and F.M. colophons must be cast in upper barrel of each hydrant.

4. Tapping Sleeves

Mechanical joint sleeves shall be furnished complete with valve, stops, caps, plugs and joint accessories as indicated on the Plan. The sleeve shall be of a 2-section type.

- H. Valve Boxes
Gray iron castings conforming to ASTM A48, Class 20. Overall length shall be adjustable to meet grade.
- I. Bolts, Studs, and Nuts
Bolts, studs, and nuts shall be as specified on the Plans and shall conform to the requirements of AWWA C500 and the ASTM standards listed below:
Bronze ASTM B98, Steel ASTM A307, Grade B, Cadmium Plating ASTM A165, Grade N.S., Zinc Coating ASTM A153 or A164, Type G.S.
- Tee head bolts and nuts shall be high strength, low alloy steel conforming to ANSI/AWWA C111/A21.11.
- J. Granular Material
Granular material shall be material passing a 1-inch sieve and at least 35% retained on a No. 200 sieve and meeting the approval of Manatee County / City of Bradenton Beach.

SANITARY SEWER

A. Plastic Pipe Systems

All sanitary mains to be SDR 26 (CL-160) pipe, pigmented green.

1. PVC Pipe

Pipe in sizes 6-inch through 12-inch, for use in non-pressure gravity sewer mains and laterals shall have an SDR of 26 and conform to ASTM D3034. PVC pipe sizes over 12-inch shall be approved by Manatee County. PVC pipe shall be made of PVC plastic, homogenous throughout and free from visible cracks, holes, foreign inclusions of other injurious defects. The pipe shall be uniform in color, density and other physical properties.

All pipe shall be in compliance with the above standard and be clearly marked as follows at intervals of 5 feet or less:

Manufacturer's name or trademark.

Nominal pipe size. PVC cell classification (eg. 12454-B)

The legend "Type PSM SDR-26 PVC Sewer Pipe" and the designation ASTM D-3034.

In addition to the above-mentioned requirements, all PVC sanitary pipe shall be color-coded green to conform to Manatee County / City of Bradenton Beach Standards.

2. PVC Fittings

PVC sewer fittings shall conform to the requirements of ASTM D-3043 and shall be an SDR of 26. Six-inch PVC fittings for sewer laterals shall be SDR 26. Fittings shall be molded in one piece with elastomeric joints and minimum socket depths as measured in accordance with ASTM D-3034. Fittings not currently available in molded form may be fabricated in accordance with ASTM D-3034 with manufacturer's standard pipe bells and gaskets. Gasket shall have a minimum cross sectional area of 0.20 square inch and conform to ASTM F-477 specifications

3. Jointing PVC Pipe

The PVC joints shall be of the push-on type so that the pipe and fittings may be connected on the job without the use of solvent cement or any special equipment. The push-on joint shall be a single rubber gasket conforming to ASTM F-477, designed to be assembled by the positioning of a continuous molded rubber ring gasket in an annular recess in the pipe or fitting socket and the forcing of the plain end of the entering pipe into the socket, thereby compressing the gasket radially to the pipe to form a positive seal. The gasket and annular recess shall be designed and shaped so that the gasket is locked in place against displacement as the joint is assembled. The rubber ring joint shall be designed for thermal expansion or contraction with a total temperature change of at least 75 degrees F in each joint per length of pipe. The bell shall consist of an integral wall section with a solid cross-section elastomeric ring that shall meet requirements of ASTM F-477. The thickened bell section shall be designed to be at least as strong as the pipe wall. Lubricant furnished for lubricating joints shall be nontoxic, shall not support the growth of bacteria, and shall have no deteriorating effects on the gasket or pipe material.

Wyes and riser fittings shall be gasketed connections. If female adapters SDR 26 or 35 are available, solvent welds shall be acceptable upon approval by Manatee County / City of Bradenton Beach.

Rubber doughnuts are not to be used.

B. Joints for Dissimilar Pipe

Joints between pipe of different materials shall be made using flanged connections. Metal piping shall not be threaded into plastic fittings, valves, or couplings, nor shall plastic piping be threaded into metal valves, fittings, or couplings.

C. Pipe Bedding and Pipe Cover Materials

Pipe bedding material shall be as required by FDOT. Pipe cover material shall be equal to common fill as required by FDOT. Pipe bedding and cover material for polyethylene coated ductile pipe fittings shall be well graded sand.

D. Bolt, Studs, Nuts

Cadmium Plating: ASTM A165, Grade N.S.

Zinc Coating: ASTM A153 or A164, Type G.S.

E. Concrete

In accordance with FDOT Section 345, use Class II; 3,500-psi strength; Type I cement; 6.0 sacks cement per cubic yard; 5 coarse aggregate; silica sand fine aggregate; three (3) percent to six (6) percent air content; three (3) maximum slump; no admixtures without Manatee County's approval.

F. Concrete Reinforcement

In accordance with FDOT Section 931, use ASTM A615, Grade 60 for bars and ASTM A185 for welded wire fabric.

G. Granular Material

Granular material shall be material passing a 1-inch sieve and at least 35% retained on a No. 200 sieve and meeting the approval of the Manatee County.

UTILITY COLOR CODING

Utilities shall have detectable strips and /or be color coded as required by Manatee County / City of Bradenton Beach and as according to the APW Uniform Color Code as follows:

Red: Electric.

Yellow: Gas, oil, steam, and dangerous materials.

Orange: Telephone and other communications.

Blue: Potable Water.

Green: Sanitary Sewer systems.

Lavender: Reclaimed Water

334100 STORM UTILITY DRAINAGE PIPING

Storm Utility Drainage Piping includes pipe and fittings, couplings, expansion joints and deflection fittings, cleanouts, drains, encasement for piping, manholes, channel drainage systems, catch basins, storm water inlets, storm water structures and outfalls.

Maintain drainage patterns directing flow away from buildings and in to storm water conveyance systems. Relocate existing storm water system components so that piping will not extend beneath the proposed building and be adversely affected by building loads.

Provide a minimum of 12 inch cover over storm piping. Provide pipe joints that are properly sealed.

Storm water pipe to be Reinforced Concrete Pipe (RCP) Class III, Wall B per ASTM C 76, Contech™ PVC A-2000 or Ultra-rib™ PVC as applicable. Inlets, manholes and junction boxes shall meet ASTM C 478. Inlets to be FDOT Inlet Type "D" per FDOT Standard Index 232.

Ensure positive drainage to prevent low areas "bird baths" in paved areas.

Storm water system shall be designed and constructed in accordance with Manatee County / City of Bradenton Beach standards and FDEP (SWFWMD) requirements.

Conform to Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, current edition, for storm water system components such as inlets, man hole covers, reinforced concrete piping systems, PVC piping systems, and mitered end sections.

RFP Attachment D

**MARINE RESCUE HEADQUARTERS DESIGN CRITERIA
EXHIBITS**

EXHIBIT A	LOCATION MAPS
EXHIBIT B	WIND BORNE DEBRIS REGION MAP MANATEE COUNTY FL.
EXHIBIT C	FEMA MAP
EXHIBIT D	SPACE PLANNING PROGRAM FINISHES SUMMARY

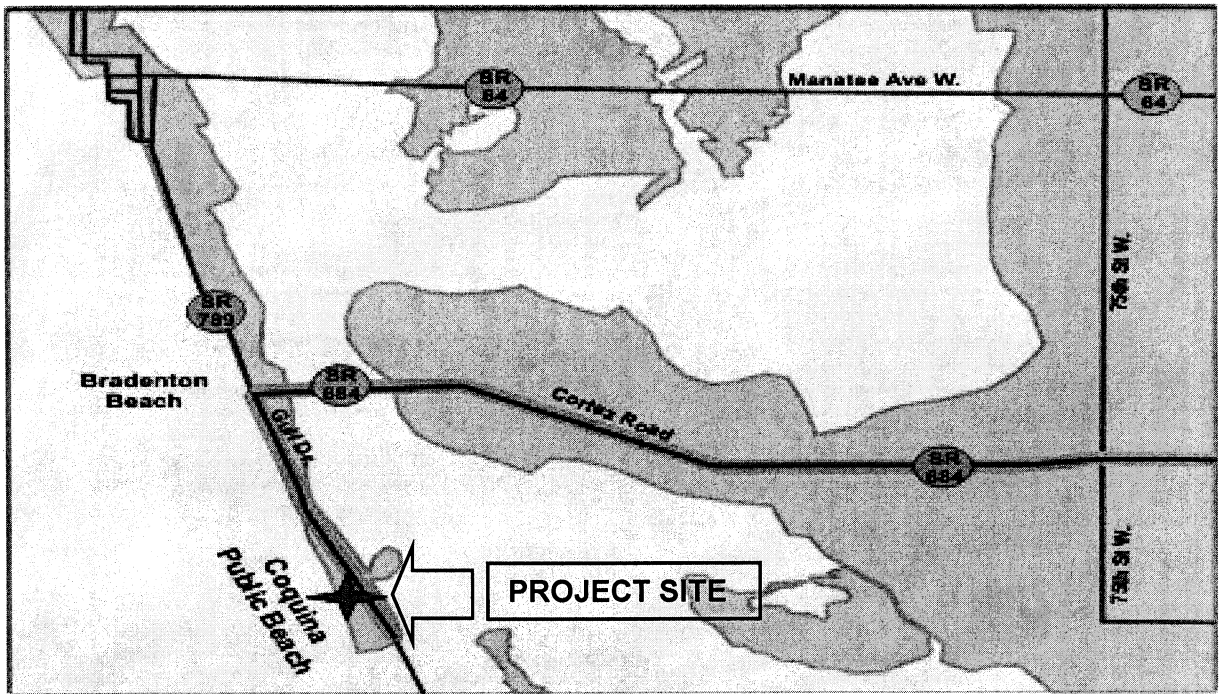
RFP Attachment D

**MARINE RESCUE HEADQUARTERS DESIGN CRITERIA
EXHIBITS**

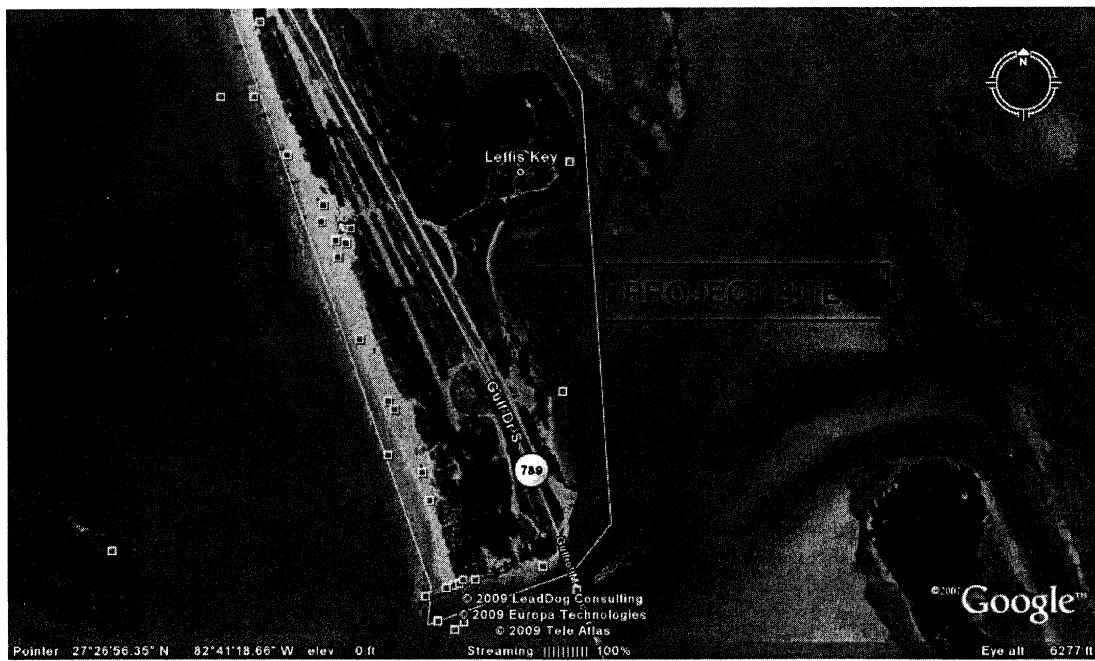
EXHIBIT A

LOCATION MAPS

EXHIBIT A - LOCATION MAPS



STREET LOCATION MAP

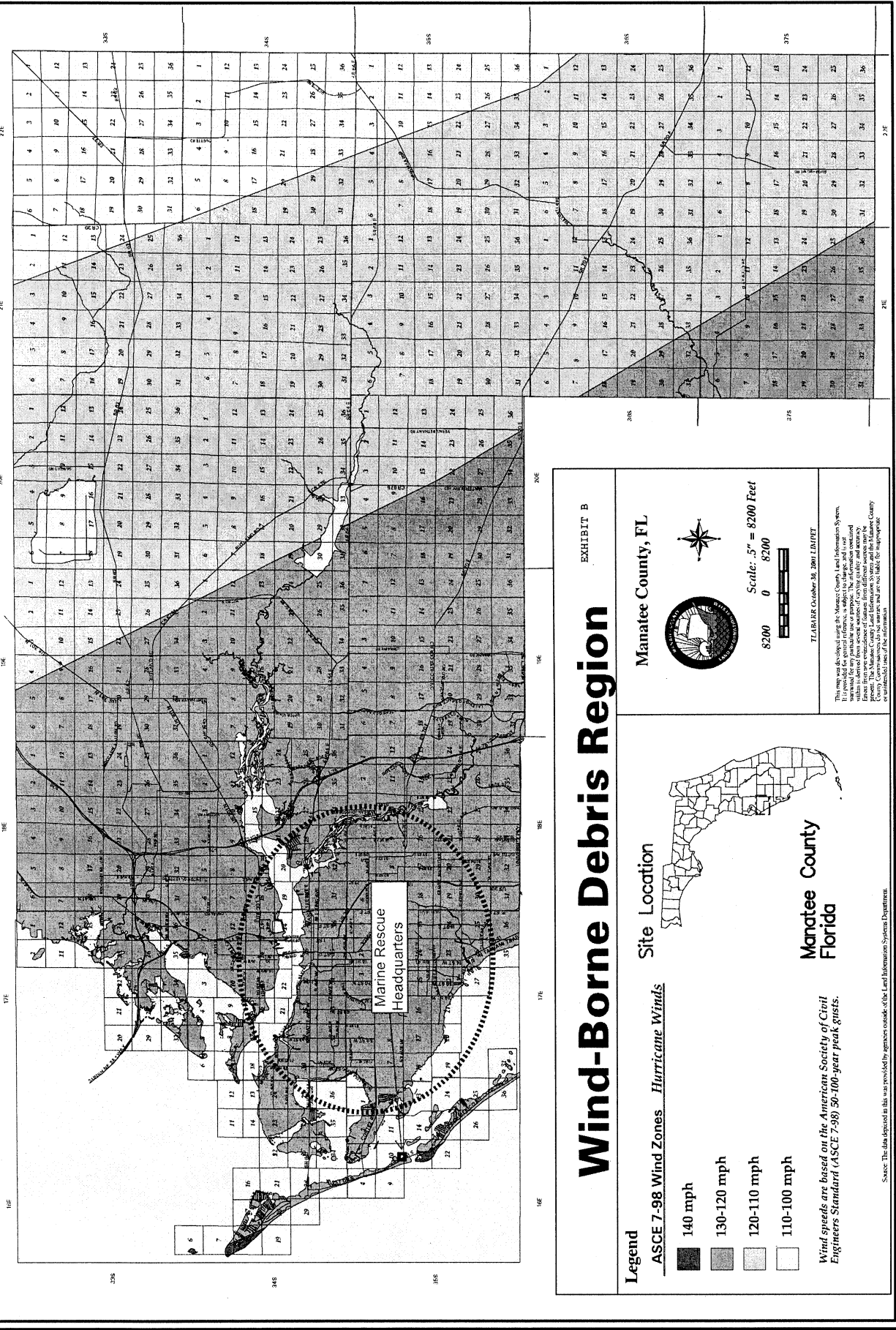


AERIAL LOCATION MAP

RFP Attachment D

**MARINE RESCUE HEADQUARTERS DESIGN CRITERIA
EXHIBITS**

EXHIBIT B WIND BORNE DEBRIS REGION MAP
 MANATEE COUNTY FL.



Wind-Borne Debris Region

EXHIBIT B

Manatee County, FL

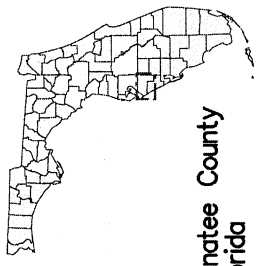


Scale: 5" = 8200 Feet
0 8200



FLAIRMK October 19, 2001 LIMPET

Site Location



Manatee County
Florida

Legend

ASCE 7-98 Wind Zones *Hurricane Winds*

- 140 mph
- 130-120 mph
- 120-110 mph
- 110-100 mph

Wind speeds are based on the American Society of Civil Engineers Standard (ASCE 7-98) 50-100-year peak gusts.

This map was developed using the Manatee County Land Information System. It is intended for informational use only. The information contained herein is not intended to be used for any purpose other than that for which it was prepared. Errors in this map are the responsibility of the user. Manatee County does not warrant the accuracy, completeness, or timeliness of the information or any data derived therefrom.

Source: The data depicted in this map was provided by agencies outside of the Land Information Systems Department.

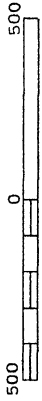
RFP Attachment D

**MARINE RESCUE HEADQUARTERS DESIGN CRITERIA
EXHIBITS**

EXHIBIT C

FEMA MAP

APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BRADENTON BEACH,
FLORIDA
MANATEE COUNTY

(SEE MAP INDEX FOR PANELS NOT PRINTED)

NOTE—
THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNIT AND/OR OTHERWISE PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1990 (PL. 101-591).

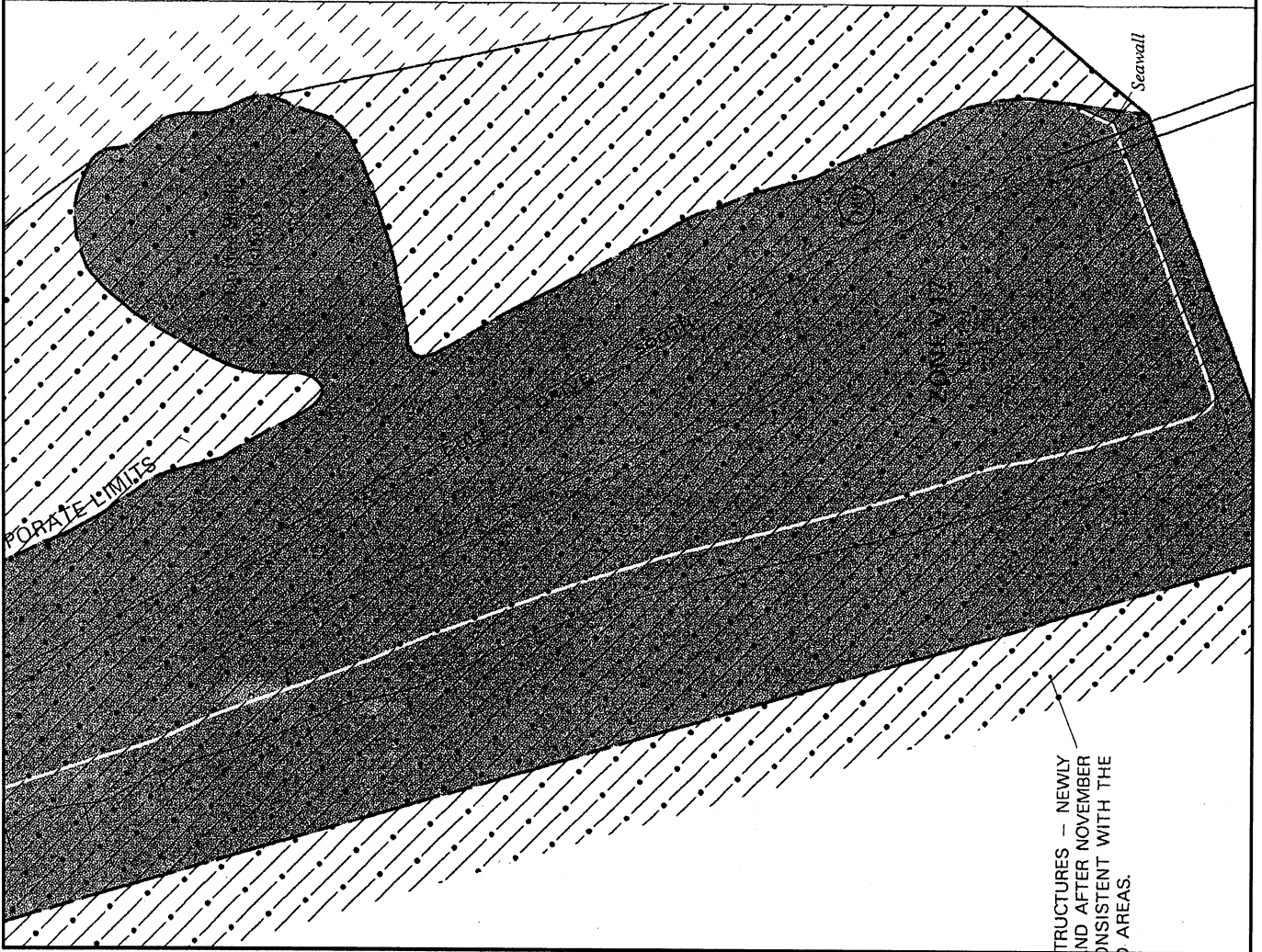
COMMUNITY-PANEL NUMBER
125091 0002 C

MAP REVISED:
MAY 18, 1992



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



RFP Attachment D

**MARINE RESCUE HEADQUARTERS DESIGN CRITERIA
EXHIBITS**

EXHIBIT D

SPACE PLANNING PROGRAM FINISHES SUMMARY

SECOND LEVEL SPACES	Clg Hgt	Ceiling Materials	Walls	Floor	Other /FFE
Lobby / Reception	8' - 8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Dyed Polished and Sealed Concrete	
Storage Areas	8' - 8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Dyed Polished and Sealed Concrete	Provide Shower and Eye Wash
Offices	8' - 8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Carpet	
Restroom	8' +	Gypsum Waterproof Painted	Gypsum & Ceramic Tile	Resinous Flooring	
Locker Areas	8' +	Gypsum Waterproof Painted	Gypsum & Ceramic Tile	Resinous Flooring	Lockers and Benches
WH Room / Janitor	8' +	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Sealed Concrete	
Corridors	8'-8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Dyed Polished and Sealed Concrete	
Kitchen	8'-8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Resinous Flooring	
Classrooms	8'-8"	Acoustical Panel Ceilings	Gypsum Wall Board / Paint	Carpet	
Mechanical / Electrical / Elevator Equip	-	Exposed to Structure	Gypsum or CMU	Sealed Concrete	

EXHIBIT D

Manatee County - Marine Rescue Headquarters
Space Summary Finish Criteria

GROUND LEVEL SPACES	Clg Hgt	Ceiling Materials	Walls	Floor	Other /FFE
Covered Entry	16' +/-		-	Dyed Polished and Sealed Concrete	Entrance Floor Grill
Elevator Vestibule	8' +	Acoustical Panel Ceilings	CMU / Painted	Dyed Polished and Sealed Concrete	
Elevator	8' +	Acoustical Panel Ceilings	Plastic Laminate	VCT	
Storage Areas	16' +/-	Exposed Structure / Painted	CMU / Painted	Dyed Polished and Sealed Concrete	
Workshop Area	16' +/-	Exposed Structure / Painted	CMU / Painted	Dyed Polished and Sealed Concrete	
Garage Areas	16' +/-	Exposed Structure / Painted	CMU / Painted	Dyed Polished and Sealed Concrete	

ATTACHMENT "E"

**SUBSURFACE SOIL EXPLORATION,
ANALYSIS AND RECOMMENDATIONS
FOR PROPOSED
MARINE RESCUE STATION,
LEFFIS KEY,
MANATEE COUNTY, FLORIDA**



Ardaman & Associates, Inc.

OFFICES

- Orlando**, 8008 S. Orange Avenue, Orlando, Florida 32809, Phone (407) 855-3860
Bartow, 1525 Centennial Drive, Bartow, Florida 33830, Phone (863) 533-0858
Cocoa, 1300 N. Cocoa Boulevard, Cocoa, Florida 32922, Phone (321) 632-2503
Fort Lauderdale, 3665 Park Central Boulevard North, Pompano Beach, Florida 33064, Phone (954) 969-8788
Fort Myers, 9970 Bavaria Road, Fort Myers, Florida 33913, Phone (239) 768-6600
Miami, 2608 W. 84th Street, Hialeah, Florida 33016, Phone (305) 825-2683
Port Charlotte, 740 Tamiami Trail, Unit 3, Port Charlotte, Florida 33954, Phone (941) 624-3393
Port St. Lucie, 460 NW Concourse Place Unit #1, Port St. Lucie, Florida 34986-2248, Phone (772) 878-0072
Sarasota, 78 Sarasota Center Blvd., Sarasota, Florida 34240, Phone (941) 922-3526
Tallahassee, 3175 West Tharpe Street, Tallahassee, Florida 32303, Phone (850) 576-6131
Tampa, 3925 Coconut Palm Drive, Suite 115, Tampa, Florida 33619, Phone (813) 620-3389
West Palm Beach, 2511 Westgate Avenue, Suite 10, West Palm Beach, Florida 33409, Phone (561) 687-8200

MEMBERS:
A.S.F.E.

American Concrete Institute
American Society for Testing and Materials
Florida Institute of Consulting Engineers



Ardaman & Associates, Inc.

Geotechnical, Environmental and
Materials Consultants

April 3, 2009
File No.09-7131

**TO: Manatee County Property Management Department
1112 Manatee Avenue West
Bradenton FL 34208**

Attention: John Rowland

**SUBJECT: Subsurface Soil Exploration, Analysis and Recommendations for Proposed Marine
Rescue Station, Leffis Key, Manatee County, Florida**

Dear Mr. Rowland:

As requested, our firm has completed a subsurface soil exploration program at the above-referenced site. The purpose of this program was to determine the nature and condition of the subsurface soils at the site and to make recommendations regarding a pile foundation system for the support of the proposed structure.

This report documents our findings and conclusions. It has been prepared for the exclusive use of Manatee County Property Management Department and their consultants for specific application to the subject project, in accordance with generally-accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

SCOPE

The scope of our services has included the following items:

1. Conducting two (2) Standard Penetration Test borings to determine the nature and condition of the subsurface soils.

2. Reviewing each soil sample obtained in our field testing program by a geotechnical engineer in the laboratory for further investigation and classification.
3. Analyzing the existing soil conditions with respect to the proposed construction.
4. Preparing this report to document the results of our field testing program, engineering analysis and recommendations.

FIELD EXPLORATION PROGRAM

Our field exploration program consisted of conducting two (2) Standard Penetration Test borings at the locations shown on the attached Figure 1. These borings were performed to determine the nature and condition of the subsurface soils to a depth of 40 feet below the existing ground surface. The test boring locations and number were determined by our firm. The test borings were located in the field utilizing available landmarks and a 100 foot tape. The test boring locations should only be considered accurate to the degree implied by the method used. Should more accurate locations be required, a registered land surveyor should be retained. The equipment and procedures used in the borings are described in greater detail in Appendix I of this report.

GENERAL SUBSURFACE CONDITIONS

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



A generalization of the subsurface soil conditions encountered in the borings is described below:

ELEVATION (ft, NGVD)			
<u>FROM</u>		<u>TO</u>	<u>SOIL DESCRIPTION</u>
+10.5	-	-18	medium dense fine sand
-18	-	-23	medium dense fine sand with shell
-23	-	-32	loose fine sand with silt and shell
-32	-	termination	hard cemented calcareous sand (limerock)

On the date of our field exploration program the water table was encountered at a elevation of approximately 1.3 feet, NGVD. The water table level is anticipated to fluctuate due to seasonal rainfall variations, the tides and other factors.

LABORATORY TESTING PROGRAM

Representative soil samples obtained during our field sampling operation were packaged and transferred to our office and, thereafter, examined by a geotechnical engineer to obtain more accurate descriptions of the existing soil strata. The soils samples were visually classified in general accordance with the Unified Soil Classification System (ASTM D-2488-84). The resulting soil descriptions are shown on the soil boring profiles presented in the Appendix I of this report.

In addition, we conducted seven (7) percent fines analyses (ASTM D-1140) and three (3) grain-size analyses (ASTM D-422) on selected soil samples obtained from the borings. The results of these tests are presented adjacent to the sample depth on the boring profiles. The grain-size distribution curves are presented in Appendix II.



ANALYSIS AND RECOMMENDATIONS

It is our understanding that the proposed construction is to consist of a new marine rescue station elevated over boat storage, and that a pile foundation system is to be utilized.

Soils Analysis and Foundation Recommendations

Foundations for the proposed structure may be designed utilizing either augered cast-in-place concrete or prestressed concrete piles. We typically recommend that piles be installed so that pile toe is at an elevation of approximately 10 feet below sea level due to scour potential. Based on the survey data provided, the average elevation in the area of the proposed structure is +8 feet NGVD, this would require a minimum pile embedment of 18 feet. The following design criteria may be utilized:

PILE TYPE & SIZE	ESTIMATED PILE TOE EMBEDMENT (Below existing grade)	ESTIMATED ALLOWABLE COMPRESSIVE CAPACITY	ESTIMATED ALLOWABLE TENSILE CAPACITY	ESTIMATED ALLOWABLE LATERAL CAPACITY
14" Diameter Augered Cast-In-Place Concrete	18 feet	25 tons	6 tons	4 tons
12" x 12" Prestressed Concrete	18 feet	25 tons	6 tons	4 tons



The estimated allowable lateral capacity is calculated based upon the assumption of lateral load being applied at or near existing ground surface. Should the Department of Environmental Protection or design professionals require a pile toe embedment depth different from our recommendations, we must be given the opportunity to review their requirements, as they may substantially impact our recommendations. Piles penetrating the soils strata deeper than we have recommended will result in a substantial reduction of compressive capacity.

Augered Cast-In-Place Piles

The successful auger cast pile installation will depend upon the expertise of the contractor and the techniques used. While the installation of piles can be monitored to determine that the piles are installed in general accordance with specifications, it is not possible to make an absolute determination of actual pile capacity based upon installation activities as with driven piles.

A representative of Ardaman & Associates, Inc. should be present during pile installation to provide the necessary engineering documentation. Documentation would include information relative to pile penetration, condition of hole prior to concrete placement, the amount of concrete injected and the type of reinforcement used. Concrete quality control is also essential and should include field slump tests and compressive strength determinations. We have included a sample auger injected concrete pile specification as Appendix III of this report. This specification is made as a guide to the design professionals and we recommend that part of it be incorporated into the project specifications. We recommend a minimum torque of 25,000 ft-lbs and a minimum dead weight (including the drive motor and auger) of 5000 lbs plus another 1000 lbs. The piles should be spaced so that they are no closer to each other than 3.0 times their maximum diameter (or 3.5 feet) on-center.



Driven Piles

In order to achieve the desired penetration, it may be necessary to pre-auger or pre-drill the surficial sand and shell. This will prevent over-stressing of the piles during the pile installation procedure and reduce vibrations resulting from the pile installation process. Jetting or washing should not be permitted as this may substantially reduce pile capacity. The piles should be driven the final 3.0 feet with a hammer capable of developing at least 20,000 ft-lbs of driving energy. The piles should be spaced so that they are no closer to each other than 3.0 times their maximum diameter on center. A driving resistance analysis, in accordance with Standard Building Code recommendations, should be conducted to confirm the capabilities of this report. A representative of Ardaman & Associates, Inc. should be present during pile installation to provide the necessary documentation.

GENERAL COMMENTS

The analysis and recommendations submitted in this report are based upon the data obtained from two (2) test borings performed at the locations indicated on the attached Figure 1. While the borings are representative of the subsurface conditions at their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and may be encountered. The nature and extent of variations may not become evident until during the course of pile installation. If variations then appear evident, it will be necessary for a reevaluation of the recommendations of this report to be made after performing on-site observations during the construction period and noting the characteristics of any variations. The boring logs and related information are based upon the driller's logs and visual examination of selected samples in the laboratory. The delineation between soil types shown on the logs is approximate, and the



Manatee County Property Management Department
File No. 09-7131
April 3, 2009

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description represents our interpretation of the subsurface conditions at the designated boring location on the particular date drilled.

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

Very truly yours,

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

Brian D. Runkles

Brian D. Runkles, E.I.
Staff Engineer

BDR/SBP:nh

Scott B. Perkins

Scott B. Perkins, P.E. 4-3-09
Senior Project Engineer
Fl. Lic. No. 46678



Ardaman & Associates, Inc.

APPENDIX I

SOIL BORING, SAMPLING AND TESTING METHODS

SOIL BORING, SAMPLING AND TESTING METHODS

Standard Penetration Test

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

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

Cohesive Soils:	<u>N-Value</u>	<u>Description</u>	<u>Qu (ton/ft²)</u>
	0 to 2	Very soft	Below 0.25
	2 to 4	Soft	0.25 to 0.50
	4 to 8	Medium stiff	0.50 to 1.0
	8 to 15	Stiff	1.0 to 2.0
	15 to 30	Very stiff	2.0 to 4.0
	Above 30	Hard	Above 4.0

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

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

Power Auger Borings

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

Hand Auger Borings

Hand auger borings are used, is soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5-foot) depth or when access is not available to power drilling equipment. A 3-inch 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 intervals and its contents emptied for inspection. Sometimes post-hole diggers are used, especially in the upper three feet or so. The soil sample obtained is classified and representative samples put in bags or jars and transported to the laboratory for further classification and testing.

Undisturbed Sampling

Undisturbed sampling 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. Examination and 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 I.D., thin wall seamless steel tube 24 inches into the soil with a single stroke of a hydraulic ram. The sampler, which is Shelby tube, is 30 inches long. After the sampler is retrieved, the ends are sealed in the field and is transported to our laboratory for further examination and testing, as needed.

Laboratory Test Methods

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

NM	-Natural Moisture (Water) Content; ASTM D-2216
-200	-Percent Finer Than No. 200 Sieve; ASTM D-1140
DD	-Dry Density of Undisturbed Sample
k	-Hydraulic Conductivity (Coefficient of Permeability)
LL	-Liquid Limit; ASTM D-4318
PI	-Plasticity Index (LL-PL); ASTM D-4318
OC	-Organic Content; ASTM D-2977
Qu	-Unconfined Compression Strength; ASTM D-2166 (soil), D-2938 (rock)

BORING LOCATION: See Figure 1
CLIENT: Manatee County Property Management Dept.
DATE DRILLED: 4/2/09 **START:** **FINISH:**
PROJECT: Marine Rescue Station
GROUND SURFACE ELEVATION: 10.5 **LOCATION:** Leffis Key, Manatee County, Florida
WATER TABLE DEPTH: 9.33' **TIME:** **DATE:** 4/2/09 **DRILL CREW:** Jim & Dan **LOGGED BY:** Dan

DRILL MAKE & MODEL: CME-45 **BIT:** 2-7/8" tricone **DRILLING RODS:** AWJ
DRILLING METHOD: SPT/wash **WEATHER CONDITIONS:**

DEPTH, FT.	ELEVATION, FT.	SPT N-VALUE	SAMPLE NO.	GRAPHIC LOG	USCS	SOIL DESCRIPTION	WATER CONTENT (%)	PERCENT FINES	ORGANIC CONTENT (%)	LIQUID LIMIT	PLAST. INDEX
0					SP	light gray fine sand with shell fragments					
	10		1		SP	brown & light gray fine sand					
	16										
6	22										
	16		2		SP	very light gray fine sand					
	24										
	22		3		SP	brownish gray fine sand					
	20		4		SP	brownish gray fine sand					
12											
	19		5		SP	light gray fine sand					
18											
	33		6								
	-12				SP	light gray fine sand with shell					
24											
	10		7		SP	gray fine sand with shell					
	-18										
30											
	16		8								
	-24		9		SP-SM	gray fine sand with silt and shell					
36											
	5										
	-30		10			end of boring					
42											

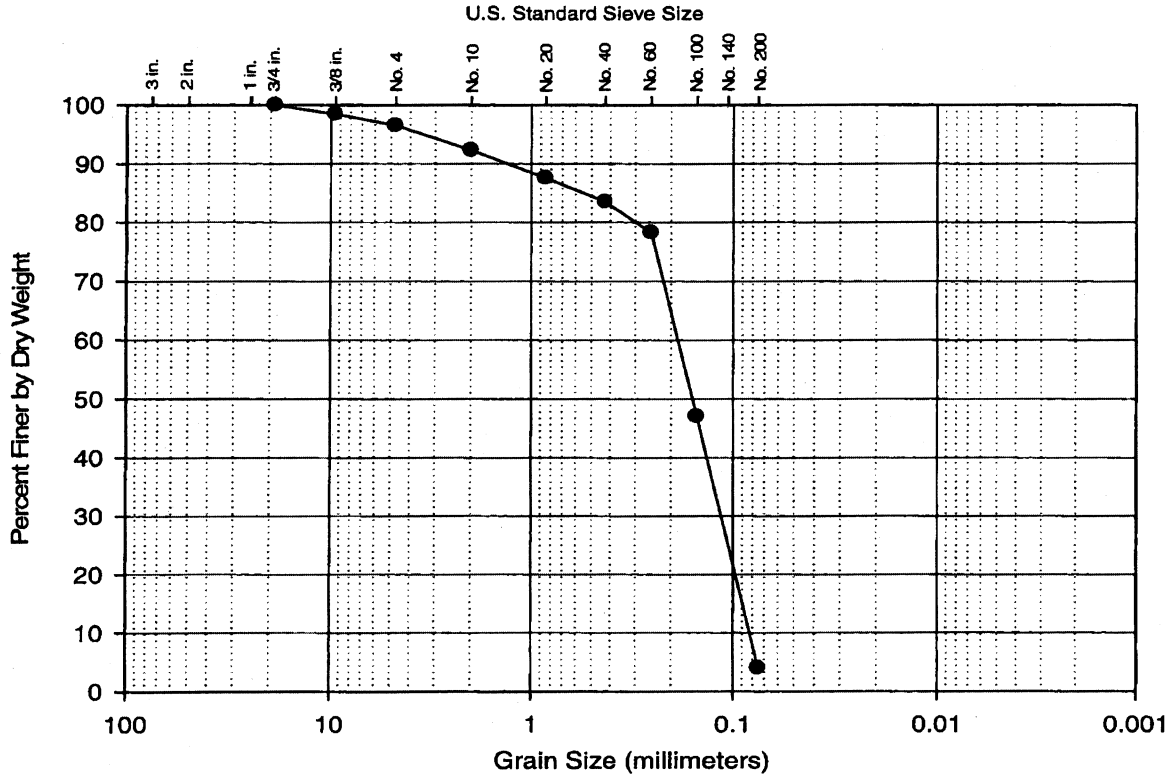
BORING LOCATION: See Figure 1
CLIENT: Manatee County Property Management Dept.
DATE DRILLED: 4/2/09 **START:** **FINISH:**
PROJECT: Marine Rescue Station
GROUND SURFACE ELEVATION: 4.7
LOCATION: Leffis Key, Manatee County, Florida
WATER TABLE DEPTH: 3.25' **TIME:** **DATE:** 4/2/09
DRILL CREW: Jim & Dan **LOGGED BY:** Dan

DRILL MAKE & MODEL: CME-45 **BIT:** 2-7/8" tricone **DRILLING RODS:** AWJ
DRILLING METHOD: SPT/wash **WEATHER CONDITIONS:**

DEPTH, FT.	ELEVATION, FT.	SPT N-VALUE	SAMPLE NO.	GRAPHIC LOG	USCS	SOIL DESCRIPTION	WATER CONTENT (%)	PERCENT FINES	ORGANIC CONTENT (%)	LIQUID LIMIT	PLAST. INDEX
0					SP	brown fine sand with shell		4.0			
	20		1		SP	light gray fine sand with shell					
	25							1.7			
	8		2					3.7			
6	6		3		SP	gray fine sand					
	20				SP	gray fine sand with shell					
	30		4					1.8			
	27		5		SP	light gray fine sand		1.7			
12											
	27		6					1.3			
	-12										
18					SP	brownish gray fine sand					
	14		7					1.6			
	-18										
24					SP	gray fine sand with shell					
	16		8					4.9			
	-24										
30					SP-SM	gray fine sand with silt and shell					
	4		9					6.2			
	-30										
36											
	5		10					6.9			
	-36										
	54		11			pale brown hard cemented sand (limerock)					
						end of boring					
42											

APPENDIX II
GRAIN SIZE CURVES

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt	Clay
Coarse	Fine	Coarse	Medium	Fine		

SAMPLE DATA:

Boring No.: B-2
 Sample No.: 1
 Sample Depth (ft): 1.5
 Sampling Date: 4/2/09
 Unified Soil Class: SP
 Soil Description: brown fine sand with shell

SIEVE ANALYSIS:

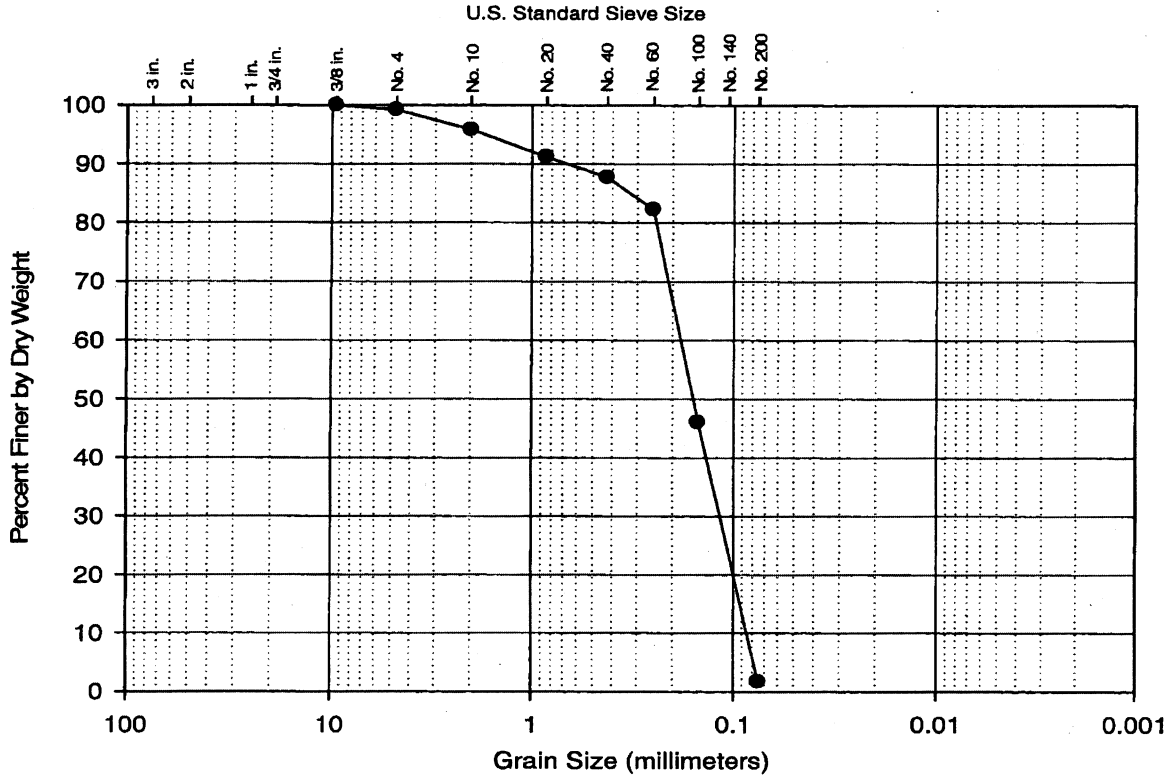
Sieve Size	Percent Finer
3/4 in.	100.0
3/8 in.	98.4
No. 4	96.5
No. 10	92.3
No. 20	87.6
No. 40	83.5
No. 60	78.3
No. 100	47.0
No. 200	4.0

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

**Marine Rescue Station
 Manatee County, Florida**

DRAWN BY: bdr	CHECKED BY:	DATE: 4/3/09
FILE NO.: 09-7131	APPROVED BY:	PLATE: 1

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt	Clay
Coarse	Fine	Coarse	Medium	Fine		

SAMPLE DATA:

Boring No.: B-2
 Sample No.: 2
 Sample Depth (ft): 5
 Sampling Date: 4/2/09
 Unified Soil Class: SP
 Soil Description: light gray fine sand with shell

SIEVE ANALYSIS:

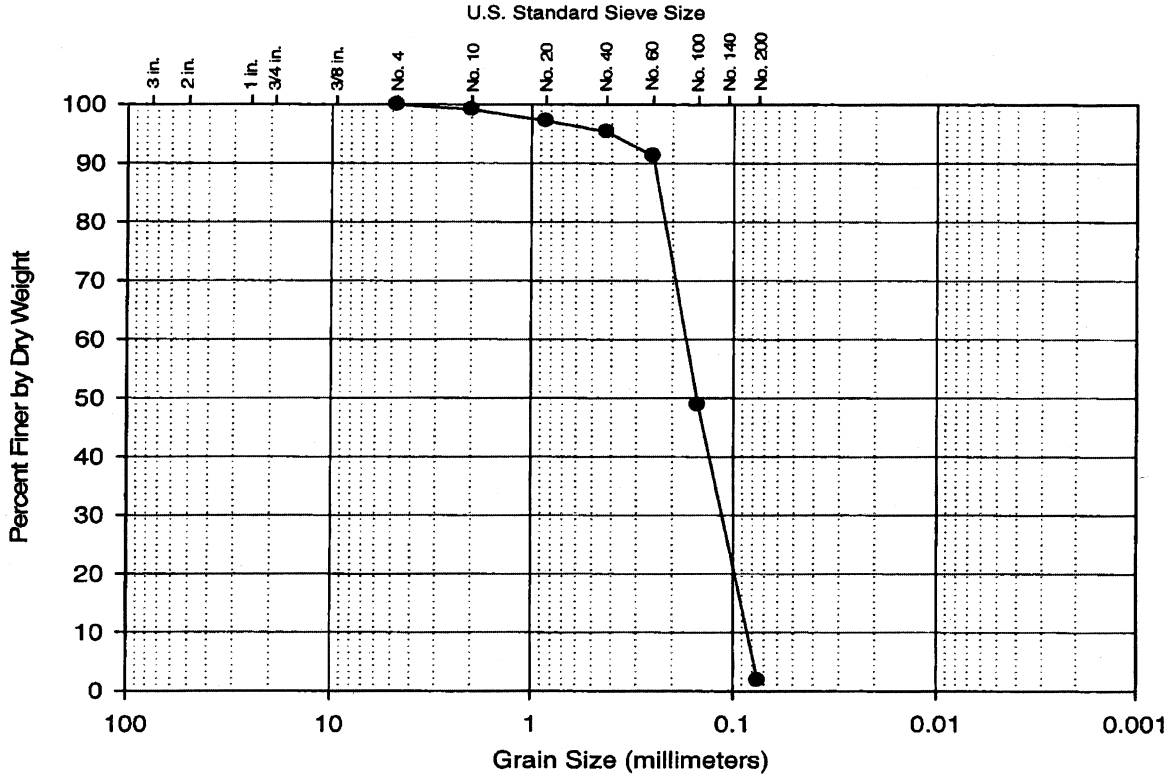
Sieve Size	Percent Finer
3/8 in.	100.0
No. 4	99.2
No. 10	95.8
No. 20	91.2
No. 40	87.7
No. 60	82.2
No. 100	46.0
No. 200	1.7

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

**Marine Rescue Station
 Manatee County, Florida**

DRAWN BY: bdr	CHECKED BY:	DATE: 4/3/09
FILE NO.: 09-7131	APPROVED BY:	PLATE: 2

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt	Clay
Coarse	Fine	Coarse	Medium	Fine		

SAMPLE DATA:

Boring No.: B-2
 Sample No.: 4
 Sample Depth (ft): 8
 Sampling Date: 4/2/09
 Unified Soil Class: SP
 Soil Description: light gray fine sand

SIEVE ANALYSIS:

Sieve Size	Percent Finer
No. 4	100.0
No. 10	99.1
No. 20	97.2
No. 40	95.4
No. 60	91.3
No. 100	48.9
No. 200	1.8



**Marine Rescue Station
 Manatee County, Florida**

DRAWN BY: bdr	CHECKED BY:	DATE: 4/3/09
FILE NO.: 09-7131	APPROVED BY:	PLATE: 3

APPENDIX III

AUGER CAST PILE SPECS

SPECIFICATIONS FOR AUGERED CAST-IN-PLACE CONCRETE PILES

A. General

This phase of the contract includes auger-injected concrete piles. These piles are to be installed and load-tested as per plans and specifications. The contractor performing the work shall have a minimum of ten (10) years of experience installation of auger cast piles.

1. **Cast-In-Place Piles:** A continuous-flight, hollow-shaft auger shall be rotated into the ground to the specified pile depth. Cement mortar shall then be injected through the auger shaft, as the auger is being withdrawn in such a way as to exert removing pressure on the withdrawing earth filled auger, as well as lateral pressure on the soil surrounding the grout-filled pile hole.
2. **Cement Grout** shall consist of a mixture of Portland cement, flyash, retarder, sand, and water so proportioned and mixed as to produce a mortar capable of maintaining the solids in suspension without appreciable water gain, and which may be pumped without difficulty. The strength of the grout shall be determined by three-inch diameter, six-inch high test samples. Two-inch mortar cubes shall not be allowed.

B. Materials

1. Portland cement shall conform to Federal Specifications SS-C192 for cements, Portland, or current ASTM Standards, Designation C-150.
2. Flyash shall conform to commercial grade.
3. Water shall be fresh, clean, and free from injurious amounts of sewage, oil, acid, alkali, slate or organic matter.
4. Other admixtures may include Pozzolite #8, or other similar approved retarders.
5. Fine aggregate shall meet the requirements of current ASTM standards, Designation C-33, except as to grading.

Sand grading shall be reasonably consistent, and shall conform to the following requirements, as delivered to the grout mixer:

<u>U.S. Standard Sieve</u>	<u>Cumulative Percent by Weight:</u>	
	<u>Passing</u>	<u>Retained</u>
8	100	0
16	95 - 100	1 - 5
30	55 - 80	20 - 45
50	30 - 55	45 - 70
100	10 - 30	70 - 90
200	0 - 10	90 - 100

The sand shall have a fineness modulus of not less than 1.30, nor more than 2.10. The fineness modulus is defined as the total divided by 100 of the percentages retained on the U.S. Standard Sieve Nos. 16, 30, 50 and 100.

C. Location of Piles

Piles shall be located as shown on drawings or as otherwise directed by the Engineer. Pile centers shall be located to an accuracy of plus or minus three inches.

D. Mixing and Pumping of Cement Grout

Only approved mixing and pumping equipment shall be used in the preparation and handling of cement grout. A screen no larger than one-quarter inch mesh shall be used between the mixer and the agitator. All oil or other rust inhibitors shall be removed from the mixing drums, stirring mechanisms and other portions of the equipment in contact with the grout before the mixers are used.

All materials shall be accurately measured by volume as they are fed to the mixer. The order of placing the materials in the mixer shall be as follows: (1) water, (2) fluidifier, and (3) other solids in order of increasing particle size.

The quantity of water used shall be such as to produce a mortar having a consistency of not less than twenty-one seconds when tested with a three-quarter diameter nozzle cone. Time of mixing shall not be less than one minute.

E. Pile Installation

1. All piles will be augered to a minimum tip elevation, as shown in the design drawings.
2. All piles shall be installed under the observation of the Soils Engineer. Piles installed in his absence will be rejected.
3. The piling contractor shall be responsible to furnish the reinforcing steel and proper installation as shown in plans and drawings. All reinforcing shall be installed after the pile is formed, but no later than fifteen minutes after the removal of auger and filling of the pile cavity.
4. Pile cut-off may be accomplished by removing fresh grout from the top of the pile, or by cutting off to final cut-off point at any time after initial set has occurred.
5. Piles within the same pile cap shall not be installed until initial set has occurred in all previously-installed piles. In no case is the next pile in the same cap to be installed until a four-hour period has elapsed. The initial set/four-hour period will also apply to piles installed in other areas where piles are closer than 6.0 feet from a previously-installed pile.

F. Reinforcing Steel

The piling contractor shall be responsible to furnish the reinforcing steel and proper installation, as shown in plans and drawings. The reinforcing shall be installed after the pile is formed, but no later than fifteen minutes after the removal of auger and filling of the pile cavity. Suitable spreaders shall be installed to assure positioning of the steel in the pile.

G. Inspection

No piles shall be installed by the Contractor unless the representative of the Soils Engineer is present. The piling contractor shall comply with the directions of the Engineer and make available all data, information and other pertinent items upon his request. The Engineer shall have the authority to reject any and all piles or materials that do not meet the requirements of the above specifications.

H. Preparation of Grout Test Specimens

The pile contractor shall engage an Engineering Testing Laboratory to make and break 3-inch diameter by 6-inch high test cylinders of the cement grout used. A set of four (4) cylinders shall be taken from the bypass line of the grout pump when the auger is out of the ground or prior to commencement of pumping.

Test samples shall not be taken from the pressure line during forming of the pile. If directed by the Engineer, they may be taken from the discharge of the mixing batch. The test samples shall be broken at seven and twenty-eight days with two (2) reserve samples. The frequency of sampling will be for each day of installation. The distribution of the test reports shall be according to the general specifications.

I. Load Testing

Compression or tension tests, when required, shall be test loaded to a minimum of two (2) times the design load. The test procedures shall be coordinated by the Contractor through Ardaman & Associates, Inc., Sarasota Office.

J. Records, Control and Survey

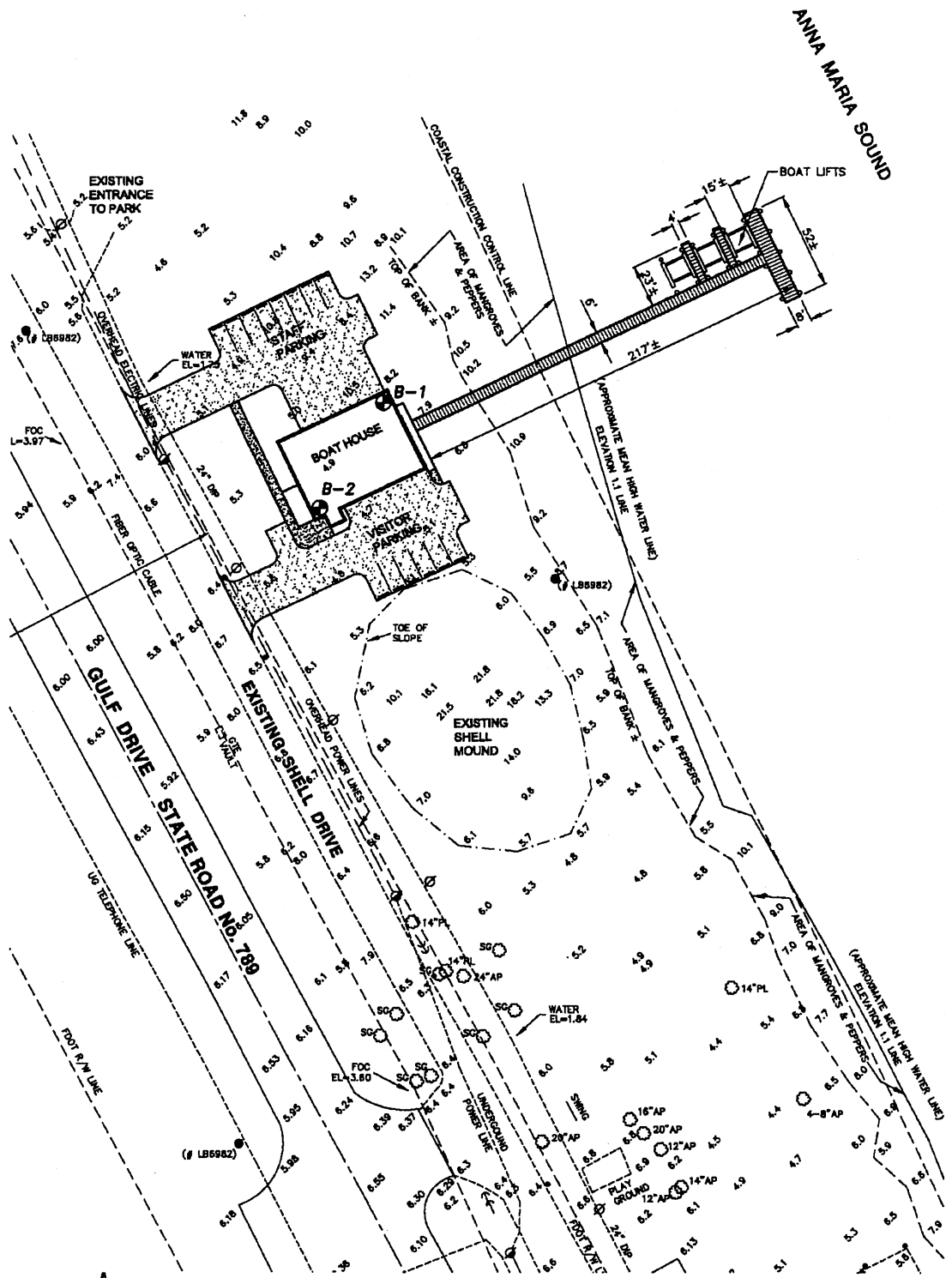
Complete records of each pile installation shall be obtained under the direction of the Soils Engineer to be retained by the Owner. The records shall include length, theoretical volume and actual volume of grout pumped. The location and elevation of the top of each pile will be determined by a registered surveyor.

K. Site and Soil Inspection

The complete soil boring logs and analyses of the subsurface soil conditions prepared by Ardaman & Associates, Inc., Soil Engineers, are available. The piling contractor is urged to acquaint himself with the report and the configurations of the underlying soil strata prior to preparing his bid.

Any data concerning subsurface soil conditions is provided for the Contractor's information only. If the Contractor desires to obtain additional site information at his own expense, he may take borings or soundings, install test piles, or dig test pits on the site of the work. Permission for admission to the property must first be obtained from the Owner.

Base PDF Image By: Manatee County Property Management Dept.



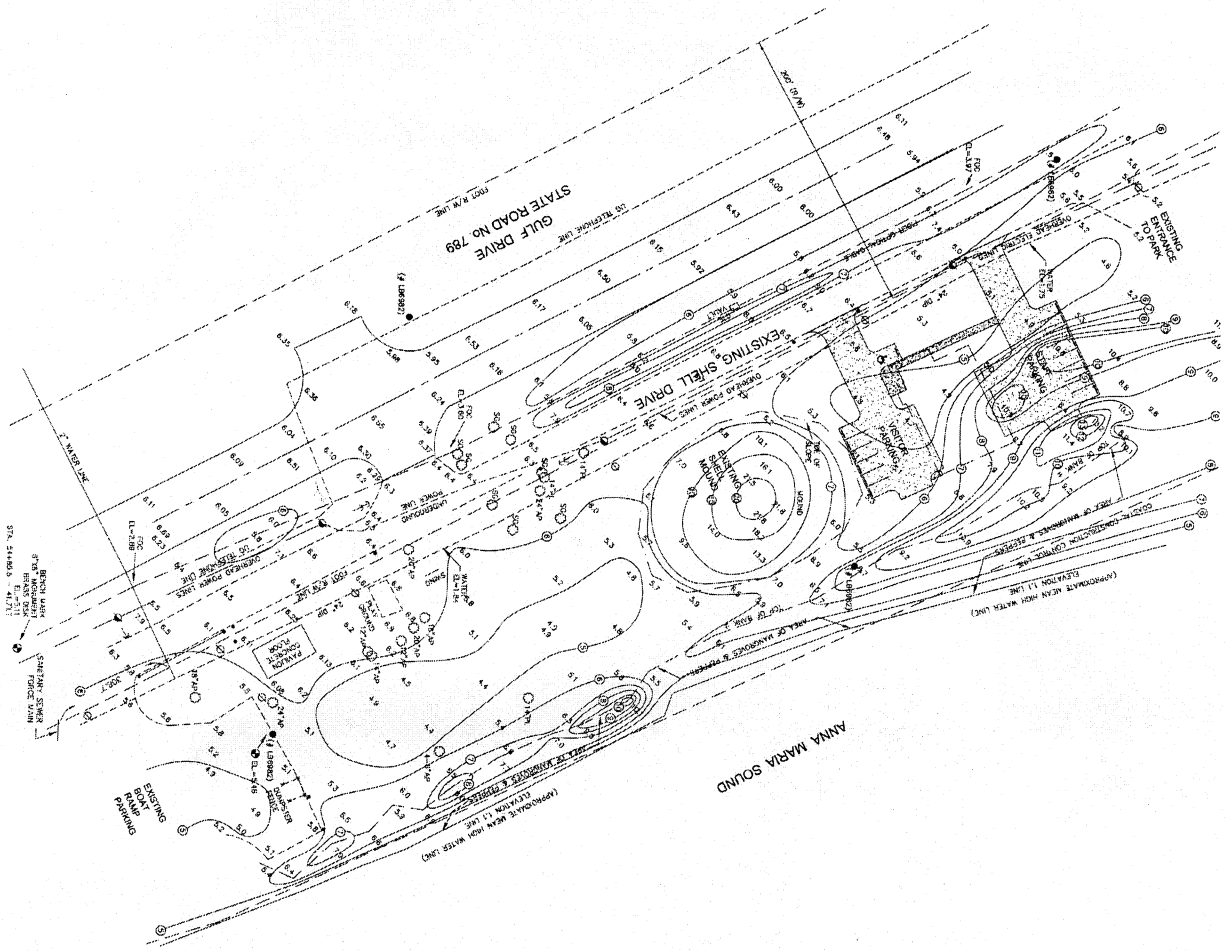
SCALE: NTS

● TEST BORING LOCATIONS

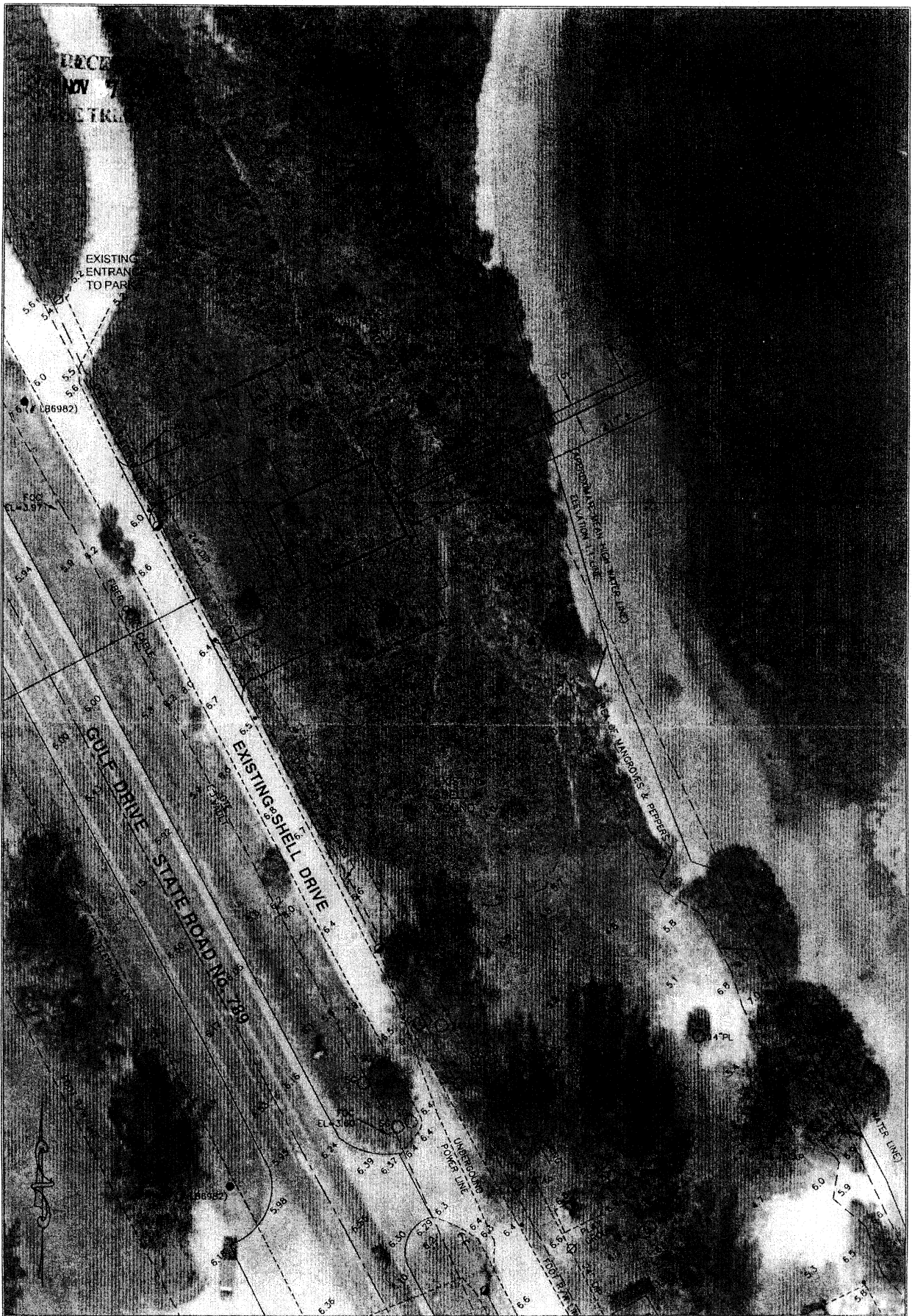
Ardaman & Associates, Inc.
 Geotechnical, Environmental and
 Materials Consultants

Test Locations
 Marine Rescue Station
 Manatee County, Florida

DRAWN BY: KGS	CHECKED BY:	DATE: 4/2/09
FILE NO. 09-7131	APPROVED BY:	FIGURE: 1



ATTACHMENT F
 ARCHITECTURAL SITE PLAN 1
 SCALE: 1" = 100'-0"
 DATE: 08/14/2013 10:41:13 AM



MARIANE PROPERTY MANAGEMENT



Proposed Sheriff / Marine Rescue Station
Coquina Beach

ATTACHMENT G

SCALE: 1"=50'
DWG. No:
Sheet: 1 OF 1
Proj. No:
Drawn By: S.C.

MANATEE COUNTY
 PROPERTY MANAGEMENT
 SURVEY DIVISION
 1022 26TH AVENUE EAST
 BRADENTON, FLORIDA
 34008 (941) 755-7490



**FAMILY BRYANT
ARCHITECTS**
1001 MANATEE AVE. W.
BRADENTON, FL 34906
TEL: 941.746.2747
FAX: 941.746.2747
www.family-bryant.com

Michael P. Bryant
AIA 0010462

"To the best of the Architect's knowledge, information and belief, the construction documents are complete and applicable to the project as shown, and are not intended to be a contract. The Architect is not responsible for construction methods or materials used in the construction of the project." (AIA A191 Contract Documents, 2007)

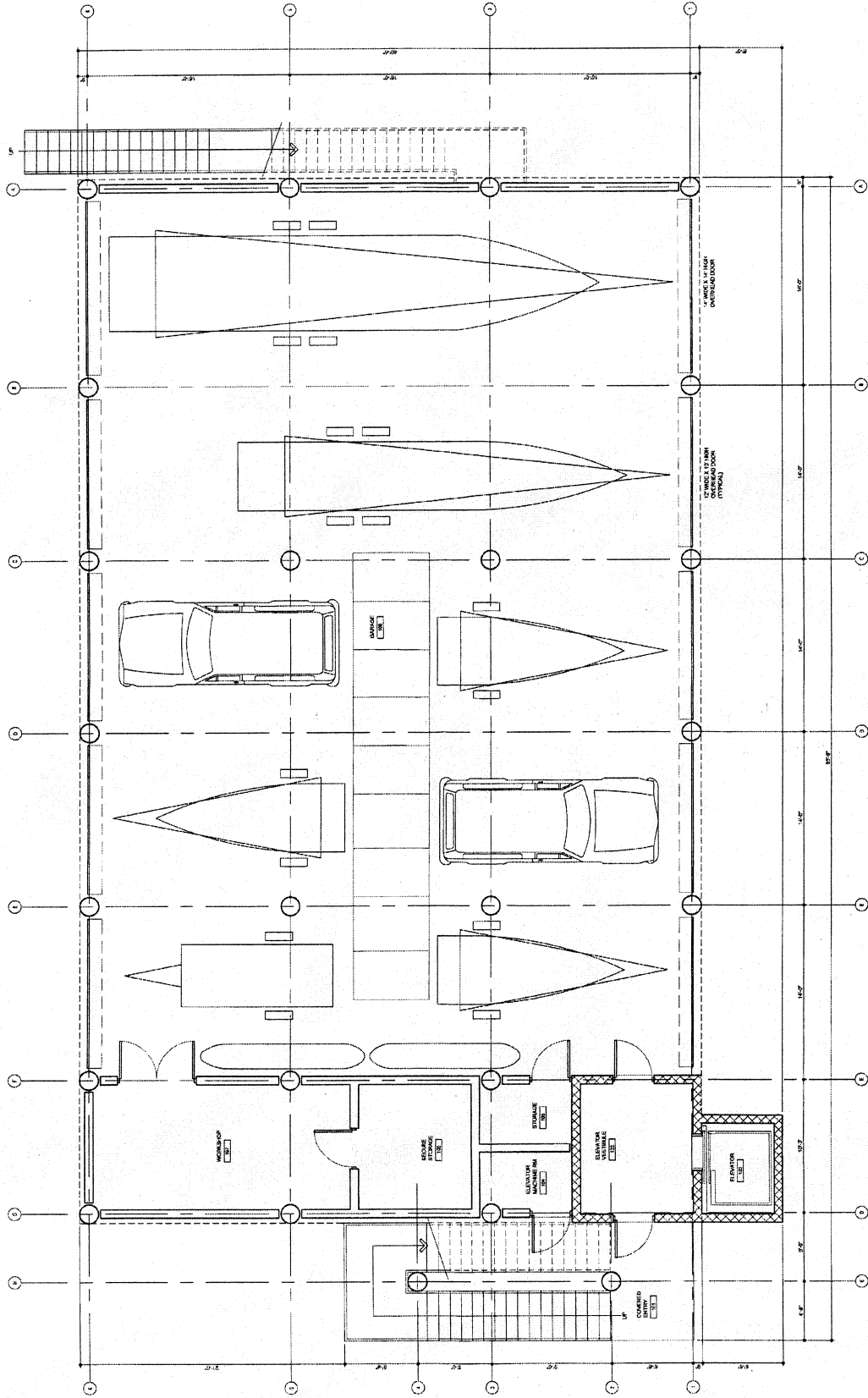
Project No. 2013.006
Drawing No. 12.01.010
Checked By: P. BRYANT

MANATEE COUNTY LIFE GUARD STATION
GROUND FLOOR
DIMS, NOTES & TAGS

Construction Documents
Not for Construction

A3.1.1

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ATTACHMENT H

GROUND FLOOR - DIMS, NOTES & TAGS 1





FAMLEY BRYANT
ARCHITECTS, INC.
1801 MANATEE AVE. W.
BRIDGEVILLE, FL 34608
P: 813.749.5477
www.famleybryant.com

Michael P. Bryant
A/E 01/16/02

To the best of my knowledge and belief, the preparation of these documents complies with the requirements of the Florida Building Code, Chapter 610, and the Florida Building Code, Chapter 611, and I am not providing any warranty, express or implied, for the use of these documents for any purpose other than that intended by the client.

Project No: 2233.04
Drawing No: 102
Checked By: JMB
Date: 12 APR 06
Revised:

MANATEE COUNTY LIFE GUARD STATION

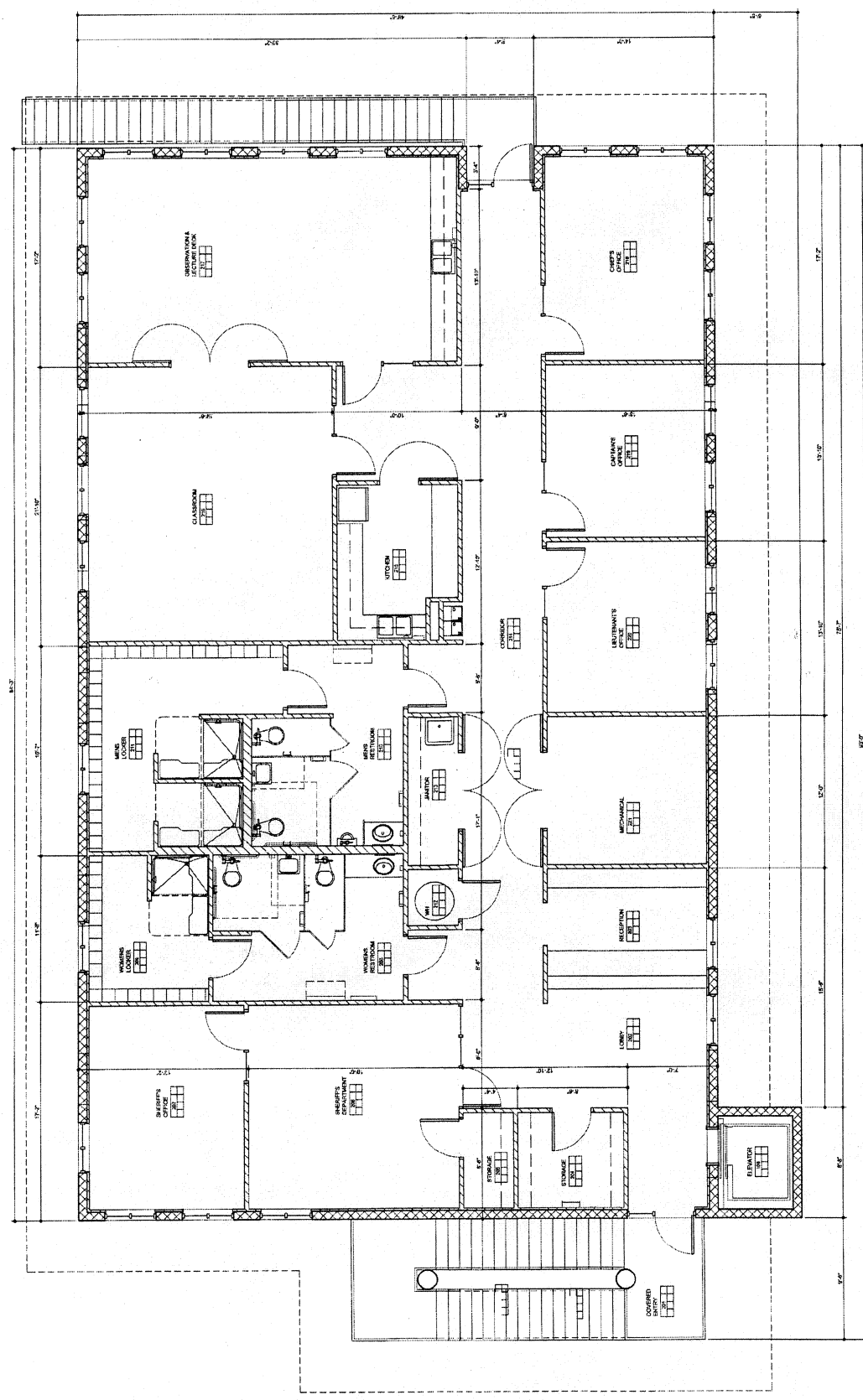
SECOND FLOOR
DIMENSIONS PLAN

Construction Documents
Not for Construction

A3.2.1

Originals printed @ 24" x 36"
Scale: 1/8" = 1'-0"
AR 18/04/06 10:56:00 AM

W/MSD



ATTACHMENT I

SECOND FLOOR - DIMENSIONS PLAN 1



ATTACHMENT J



COASTAL PLANNING & ENGINEERING, INC.

2481 NW BOCA RATON BOULEVARD, BOCA RATON, FL 33431

(561) 391-8102 Telephone (561) 391-9116 Facsimile

Web Site: <http://www.coastalplanning.net>

E-mail: mail@coastalplanning.net

8446.60

December 4, 2008

Tom Yarger, PMP
Construction Services Projects Supervisor
Property Management Dept.
1112 Manatee Ave., Suite 803
Bradenton, FL 34205

Re: Manatee County Marine Rescue Headquarters; Investigation of Permitting Feasibility

Dear Mr. Yarger:

This letter report is a summary of the results of our investigation into the feasibility of securing Florida Department of Environmental Protection (FDEP) and US Army Corp of Engineers (USACE) permits for the proposed Marine Rescue Headquarters. Project elements were discussed with the USACE and the FDEP during pre-application conference calls conducted to address permitting of the proposed Marine Rescue Headquarters. The investigation resulted in the determination that the Marine Safety Headquarters is permittable with some modification and potential mangrove mitigation and/or exotic vegetation removal at the project site.

On October 15, 2008, Doug Mann (CPE Senior Coastal Engineer) and Jessica Craft (CPE Marine Biologist) visited Anna Maria Island to conduct a preliminary investigation of the proposed Marine Rescue Headquarters site. Previously, we had requested that representatives from FDEP and USACE conduct a site visit with us, but neither agency was able to accommodate our request. The October 15, 2008 site observation identified several factors which would affect project permitting. First, a narrow line of mangroves was observed along the mean high water line along the Bay side perimeter of the project site. In order to construct the dock, it was determined that removal of a 10 foot wide mangrove area will be required. Second, seagrass resources were observed in the area proposed for dock development. The seagrass was found to extend to approximately the distance offshore as shown in the site plan aerials. During the diving effort to identify the seagrass, it was noted that adequate water depth appears to exist to ingress and egress the dock site, as was further suggested by the observation of boats anchored offshore of the project site. Based on observations at the project site, it was anticipated that a comprehensive wetland delineation, seagrass mapping effort and bathymetric survey would be required prior to submission of permit applications in order to demonstrate avoidance and/or minimization of any impacts to resources. Detailed site visit observation reports prepared by Mr. Mann and Ms. Craft are provided as attachments to this letter.

Three separate teleconference calls were conducted after it was determined that on-site meetings were not required or could not be accommodated. On November 14, 2008, Coastal Planning & Engineering, Inc. (CPE) held a teleconference call with Mark Peterson, a biologist with the

USACE Jacksonville District office, Mr. Peterson indicated he would likely be responsible for processing the permit application for this project. On November 19, 2008, CPE held a teleconference call with Allyson Minick (Environmental Specialist III) and Doug Hyman (Stormwater Engineer), from FDEP Southwest District office. A third call was held on November 21, 2008 with Dr. Muthuswamy Subbuswamy to discuss FDEP Coastal Construction Control Line (CCCL) permitting issues. The purpose of each teleconference call was to determine if the project could be permitted, and to address any permitting issues the agencies could foresee associated with the proposed Marine Rescue Headquarters, in particular, any potential project modifications or mitigation that could be required to receive permits.

Comments from both agencies regarding project modifications, mitigation and permitting details are summarized, and detailed summaries of the USACE and FDEP pre-application meetings are attached, as are the observation reports. Emails from Martin Seeling, FDEP, and Ed Craig, Southwest Florida Water Management District (SWFWMD), are also attached, indicating that a CCCL permit will be required by the Bureau of Beaches & Coastal Systems (BBCS) and that an Environmental Resource Permit (ERP) will be required by the FDEP's Southwest District Office, but will not involve SWFWMD permits or coordination.

The following specific permitting issues were addressed during the calls as follows:

A. Seagrass Resources

The dock is proposed to be built over existing seagrass resources, therefore its design and construction must comply to the greatest extent possible with the requirements and recommendations of the Dock Construction Guidelines (USACE/NMFS, August 2001). One issue addressed during agency discussions was that the guidelines normally limit the dock width to four feet, as opposed to the proposed six feet dock width. However, since the project is a public safety facility and requires a wider dock, both the USACE and FDEP believe that utilizing a grated material in place of dock planks would support permitting a wider deck. The grated material will allow greater light transmittal, reducing shading effects to seagrass, and would be viewed as a positive effort to minimize impacts to seagrasses. However, it will be important to adhere to the five feet above Mean High Water (MHW) dock elevation requirement of the Dock Construction Guidelines. Any proposed deviations from the Dock Construction Guidelines will require appropriate justification, and should be documented in the permit application.

Based on the October 15 site visit, and on the aerial photograph of the site plan, the dock as proposed will terminate over seagrass resources. In order to avoid shading and scouring impacts to seagrass, the terminal platform and boat lifts of the proposed dock facility should be extended an estimated 50 feet further into Anna Maria Sound, based on the extent of seagrass growth shown in the site plan aerial. Extending the length of the dock will place the terminal platform in deeper water beyond the seagrass beds, thus reducing potential seagrass impacts. In addition to using a grated material, maintaining a five feet dock elevation above MHW and extending the dock for minimization/avoidance of seagrass impacts, FDEP suggested that either handrails or educational signage be placed along the perimeter of the dock to prevent vessel mooring over the seagrass. The

handrails or signs would be required in areas outside of the normal boat mooring sites on the dock.

In order to determine the location of the terminal platform to avoid seagrass impacts, a comprehensive seagrass survey will be required. The National Marine Fisheries Service (NMFS) typically requires that the seagrass survey be conducted in the summer growing season, which is June 1 through September 30 in Manatee County. The summer survey is conducted in order to determine the greatest extent of seagrass coverage. During the conference calls, we explained that the County wished to expedite the construction of the facility. In lieu of a summer survey, we suggested that a comprehensive seagrass survey be conducted in early 2009, but that it be supplemented with historical aerial photography obtained in the summer months (if available). The aerial photography would be used to determine the extent of seagrass coverage during the summer. The FDEP and USACE indicated a willingness to consider this approach, but cautioned that the NMFS must agree to this approach in order to avoid the requirement for a summer survey.

B. Mangrove/Wetland Resources

A formal jurisdictional wetland delineation of the site will be required to determine the boundaries of any wetland habitats. This will include survey of the area proposed for building and parking development. These boundaries must be added to project plans in order to determine any potential impacts to wetlands. A small segment of mangroves will be cleared for construction of the proposed dock facility, and some high salt marsh may be impacted for construction of the boat house building.

C. UMAM/Mitigation

Once the seagrass survey and jurisdictional wetland delineations are completed and each habitat type is mapped, the data will be used to conduct a Unified Mitigation Assessment Methodology (UMAM) evaluation to determine impacts and appropriate mitigation. The agencies believe it is not likely that seagrass mitigation will be required due to the minimal impacts, however, impacts to mangroves and other potential wetlands will likely require mitigation. The FDEP suggested that exotic species removal (e.g. Brazilian peppers) will be considered and credit may be granted which will reduce mitigation requirements. If removal of exotic species does not entirely offset the need for mitigation, it may be combined with wetland creation outside of the construction area (e. g. planting of mangroves or other wetland vegetation along the shoreline).

D. Manatees

Manatees are recognized as protected species, and may be found in the Bay. However, it is recognized that this facility will be utilized by law enforcement personnel familiar with Manatee protection measures. As a result, the USACE does not foresee any problems with adhering to Manatee protection guidelines such as reduced speed limits. The USACE will likely make a determination of "May Affect, Not Likely to Adversely Affect" (MANLAA) related to Manatees.

E. Sea Turtles and Smalltooth Sawfish

Sea Turtles and Smalltooth Sawfish are also protected species but are unlikely to be found in the vicinity of the project area. The NMFS will require some level of consultation, but will likely concur with the USACE on a MANLAA determination. The NMFS Protected Resources Division will review potential impacts to threatened and endangered (T&E) species such as smalltooth sawfish and sea turtles. Adherence to the Sea Turtle and Smalltooth Sawfish Construction Conditions will be a permit requirement. Additionally, completion and submittal of the newly required NMFS/Section 7 checklist along with the permit application was requested by the USACE.

F. Bathymetric Survey

In addition to the seagrass survey, a detailed bathymetric survey of the proposed site will be required. The bathymetric survey is to include the project area and must extend eastward to the navigation channel in order to demonstrate that vessels will have adequate navigable water depth between the channel and dock facility. This survey should be conducted and the results included with the permit application.

Protective construction methods must be used to minimize sedimentation impacts to seagrass during installation of the dock. The FDEP stated a combination of pile driving and light flow (low pressure) jetting, if needed, should be used to install the dock pilings. Sediment accumulation on the adjacent seagrasses must be removed as it accumulates during construction.

G. Best Management Practice

The FDEP also noted that the permit application must have a plan outlining Best Management Practices (BMP's) to be used during construction, as well as an approved staging area prior to construction of the project. Appropriate BMP's may include such measures as silt screens and debris fences (placement of these should be included on construction drawings). The permit application will also include information about the boats that will be using the dock facility, including such information as the size of the boat and the amount of water each vessel draws in order to determine the vessel clearance over the seagrass areas.

H. Stormwater Treatment

The FDEP stated that a detailed stormwater plan will be required for this project. Because the project is adjacent to Anna Maria Sound which is an Outstanding Florida Water (OFW), the plan should include measures to allow proper percolation of stormwater and the immobilization of pollutants from stormwater before it enters groundwater and returns to Anna Maria Sound. This plan should include an operation and maintenance plan that will detail how trapped sediment/pollutants would be cleaned/inspected/removed from treatment areas. We explained that the parking lot will likely be constructed from pavers or crushed rock (a CCCL permit requirement) with small basins adjacent to the lot to handle excess runoff. Also, because this project involves the OFW, it must be demonstrated that the project is serving the public interest. Since this is a marine rescue building, the application should address this fact in order to demonstrate public interest. The FDEP said that both a sediment control fence and a

construction debris fence will be required adjacent to the wetland area during project construction.

I. Historic Resources

It is likely that an archeological/historic resource survey will be required by the State Division of Historical Resources (DHR) to determine if any significant historic resources are located in the project vicinity, and to determine if the project will impact those resources. The presence of the "shell mound" shown in the site plan documents was discussed with both agencies. We explained that the shell mound located next to the proposed building is actually composed of dredge spoil from Leffis Key and should not contain any significant findings. The language on the site plan and in the submittal will be modified, changing "shell mound" to the description of a "dredge spoil mound" to avoid confusion.

J. Sovereign Submerged Land Ownership

The FDEP discussed the requirement to provide the total linear feet of shoreline that Manatee County owns on this parcel of land compared to the square footage of the dock over the water. Typically, as a guideline to avoid a state lease requirement, a ten square feet area of dock over submerged land is allowed for each linear foot of shoreline. Based on the estimated dock area of about 1500 square feet, approximately 150 ft of shoreline is required to avoid the lease requirement. Also, a legal description for submerged lands may be necessary. The FDEP indicated that Division of State Lands would likely issue a letter providing "Consent of Use" rather than a public use easement if a lease is not required.

K. Coastal Construction Control Line

Doug Mann contacted Dr. Subbuswamy at FDEP Bureau of Beaches and Coastal Systems November 21, 2008, to discuss Coastal Construction Control Line (CCCL) permitting for this project. Dr. Subbuswamy stated that Manatee County should provide a letter stating that the project is consistent with setback, ordinances, and comprehensive plan requirements of Manatee County. Dr. Subbuswamy said that crushed shell or pavers would be required for the parking lot and typical building features will be required such as frangible lower walls. A letter from the FDEP Southwest District office approving the stormwater treatment under the ERP permit would be required prior to CCCL approval. Coordination for obtaining storm water approval and providing it to Dr. Subbuswamy would be the responsibility of the applicant.

Project Requirements for Successful Permitting

Based on the teleconference calls with both the FDEP (ERP and CCCL permits) and the USACE, the following informational requirements, and project modification elements, will be required to secure the appropriate state and federal permits:

- A modified project design consistent with Dock Construction Guidelines or justification for differences.

- Formal seagrass survey likely required to occur in the summer. However, the agencies may accept a winter/spring survey with historic summer aerial photography of the seagrass extent.
- Jurisdictional delineation of wetland resources.
- Detailed bathymetry survey of the project area eastward to the navigation channel.
- UMAM evaluation.
- Details concerning the boats to be docked at the facility.
- Probable study or survey for historic resources at the project site.
- Permit sketch revisions should eliminate the term "shell mound" and indicate "dredge spoil mound"
- All utilities, placement of silt screens, and other project features should be shown on permit sketches.
- Local government letter indicating concurrence with the County Comp Plan.
- Detailed stormwater plan, approved by FDEP Southwest District
- Joint ERP Application and NMFS project form.

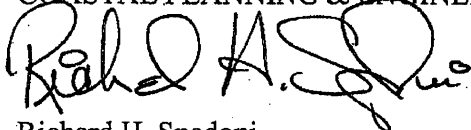
Conclusion

Based on detailed conversations with both the FDEP and the USACE, the proposed Marine Rescue Headquarters can receive permits with some modification of the project.

We recommend that Manatee County consider modifying the design and proceed forward with the permitting process. We hope to continue to assist you in seeing this project through to successful construction.

Sincerely,

COASTAL PLANNING & ENGINEERING, INC.



Richard H. Spadoni
Senior Vice President
Enclosures

cc: Tom Pierro, CPE
Lauren Floyd, CPE
Doug Mann, CPE
Jessica Craft, CPE

SITE VISIT & PRELIMINARY HABITAT CHARACTERIZATION OBSERVATION REPORT

Date: October 17, 2008
Project: Coquina Beach Proposed Marine Rescue Headquarters
Location: Anna Maria Island, Manatee County, FL
CPE Commission No.: 8466.60
CPE Representatives: Jessica Craft, Marine Biologist, & Doug Mann, Senior Coastal Engineer

1.0 INTRODUCTION

This field observation report was prepared according to the Scope of Work (SOW) to investigate the feasibility of permitting a sheriff/marine rescue station, including installation of a dock facility, at Coquina Beach on Anna Maria Island. The facility will be located east of Gulf Drive and south of Leftis Key, with the proposed dock extending over 200 feet from the boat house into the Sound. The SOW calls for a site visit to investigate the potential environmental concerns of the regulatory agencies including, but not limited to, mangroves and seagrasses present within the proposed construction footprint. This observation report summarizes the results of the investigation.

2.0 METHODS

At approximately 4:00 p.m. on October 15, 2008, CPE marine biologist Jessica Craft accompanied senior coastal engineer Doug Mann to the project site, and conducted a qualitative habitat assessment. Ms. Craft walked the premise, recording habitat types and vegetation present. Photographs of representative vegetation were taken. The area of proposed dock placement was then investigated, using snorkel, for the presence and approximate extent of seagrass. A single underwater video transect was recorded to document the existing seagrass.

3.0 RESULTS

Mangrove, saltmarsh and seagrass communities were observed. Existing mangrove habitat consists of primarily white mangroves (*Laguncularia racemosa*), with a few black mangroves (*Avicennia germinans*) (Photograph 1), in two separate fringes north and south of the shell mound near the center of the site (Figure 1). Salt marsh vegetation is present throughout the site and includes species such as salt grass (*Distichlis spicata*), railroad vine (*Ipomoea pes-caprae*), and seaside purslane (*Sesuvium portulacastrum*).

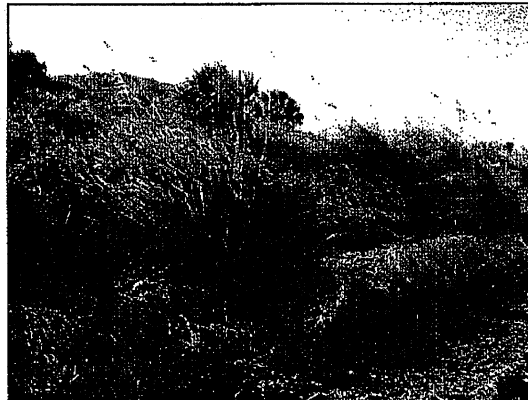


Photograph 1. White mangroves (*L. racemosa*) and small black mangroves (*A. germinans*) observed along the shoreline.

A pronounced scarp is present along the shoreline (Photograph 2), limiting the width of the actual beach, since the water line comes up to the escarpment in the northern half of the area. A dense wrack line consisting of various sea grasses covers much of the shoreline below the escarpment. Dune vegetation, including sea grape (*Cocoloba uvifera*), saltmeadow cordgrass (*Spartina patens*), and sea oats (*Uniola paniculata*), is present along the top of the scarp (Photograph 3).

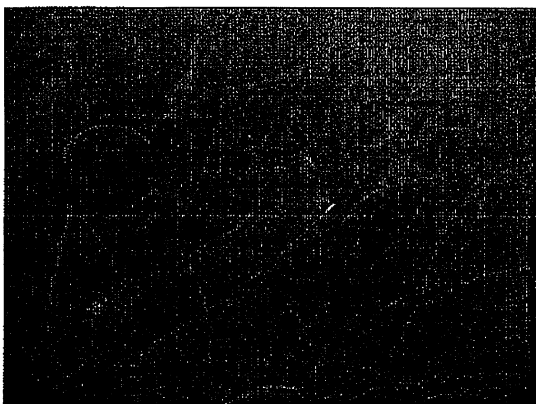


Photograph 2. Scarp running along the shoreline of the project area.

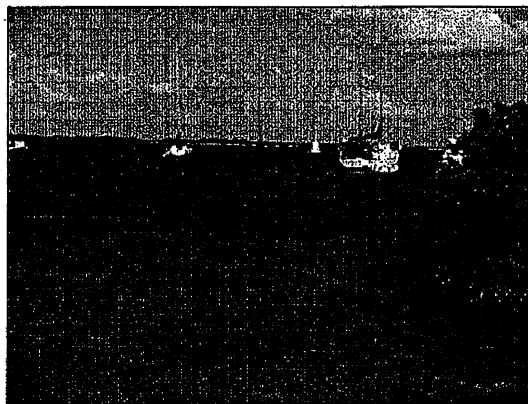


Photograph 3. Dune vegetation including sea oats (*U. paniculata*) and saltmeadow cordgrass (*S. patens*).

In the vicinity of the proposed dock, dense beds of seagrass grow very close to the shoreline (within ~10 ft. of the existing scarp). Shoal grass (*Halodule wrightii*) is present closest to the shoreline, and is replaced by dense manatee grass (*Syringodium filiform*) with scattered blades of turtle grass (*Thalassia testudinum*) farther out (Photograph 4). A small sand patch was intersected approximately 50-60 ft. from shore, and the manatee grass bed appears to end approximately 100 ft. from shore. Water depth at the offshore edge of the seagrass bed during the time of the investigation was approximately 8-10 ft; several small boats were moored in the embayment, indicating appropriate depths for boat dockage within the project area (Photograph 5). It appeared that the water depth decreased again over an offshore shoal toward the mouth of the embayment, and dark patches may indicate existing seagrass there.



Photograph 4. Dense beds of manatee grass (*S. filiforme*) were observed immediately offshore of the project area.



Photograph 5. Numerous small boats were moored in the embayment offshore of the project site.

Wildlife observed include an actively fishing osprey (*Pandion haliaetus*), and observed fish species include juvenile mojarras (*Eucinostomus* spp.) and schooling jacks (*Caranx* spp.)

4.0 SUMMARY

The terminal platform of the proposed dock facility appears to be located at the offshore edge of the existing sea grass bed, and that the landward end of the facility crosses the northern mangrove fringe. It is suggested that a more thorough wetland delineation and seagrass mapping effort be conducted prior to final design of the project, to ensure avoidance and/or minimization of any impacts to resources.

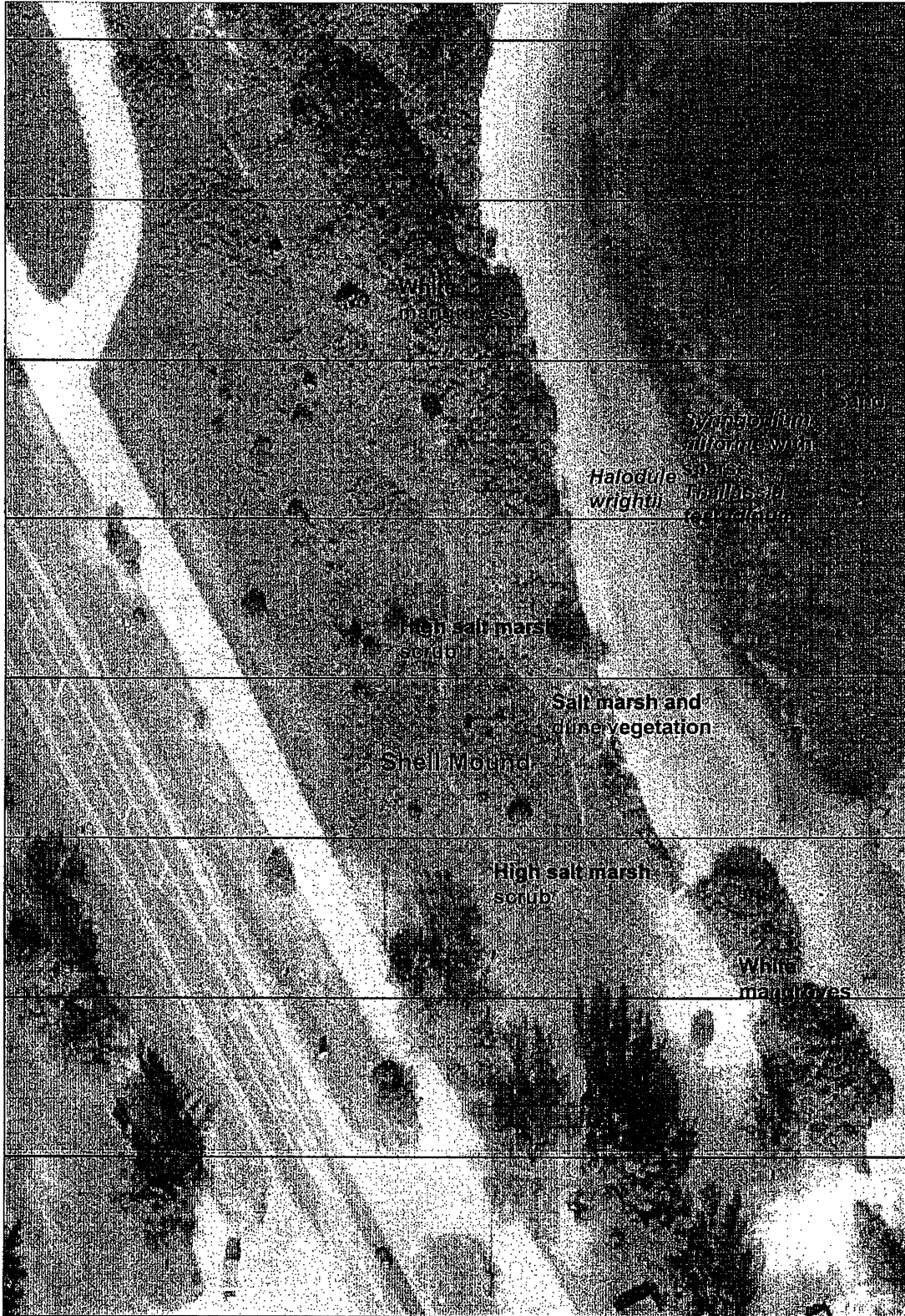


Figure 1. Seagrass and wetland habitats.



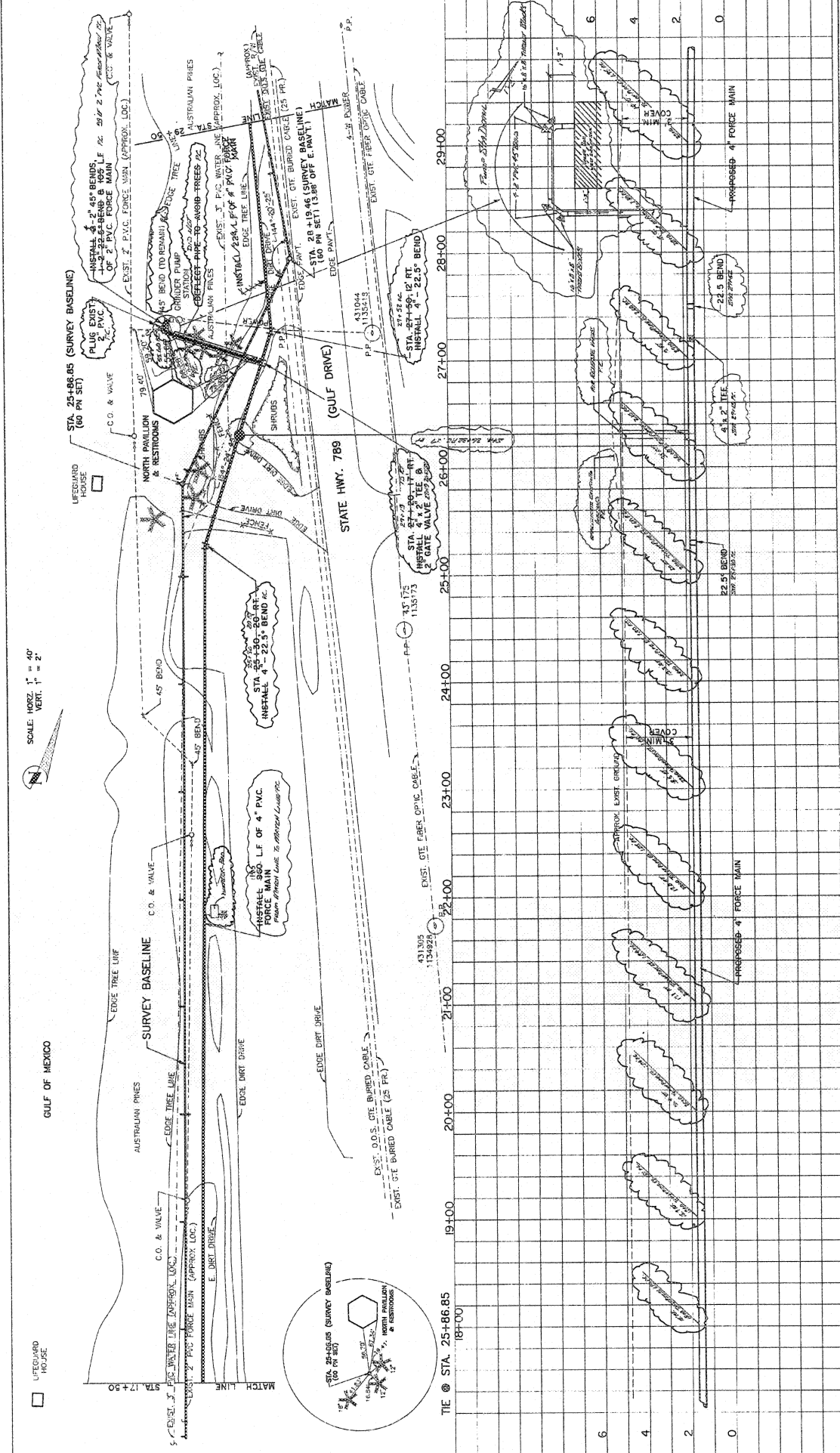
ATTACHMENT K

1 inch = 200 feet



Coquina Beach Park
03/20/2009

- | | | | | | | |
|---------------|-----------|-------------------|----------------|--------------|-----------------|-------------|
| ⊙ Air Release | ⊙ Hydrant | ⊙ Gate Valve | ⊙ Meter | ⊙ Potable | ⊙ Gravity Sewer | ⊙ Parcels |
| ⊙ Blow Off | ⊙ Cap | ⊙ Plug Valve | ⊙ Manhole | ⊙ Reclaim | ⊙ Force Main | ⊙ EOP |
| ⊙ BFP | ⊙ Reducer | ⊙ Butterfly Valve | ⊙ Drop Manhole | ⊙ Irrigation | ⊙ Centerline | ⊙ Buildings |



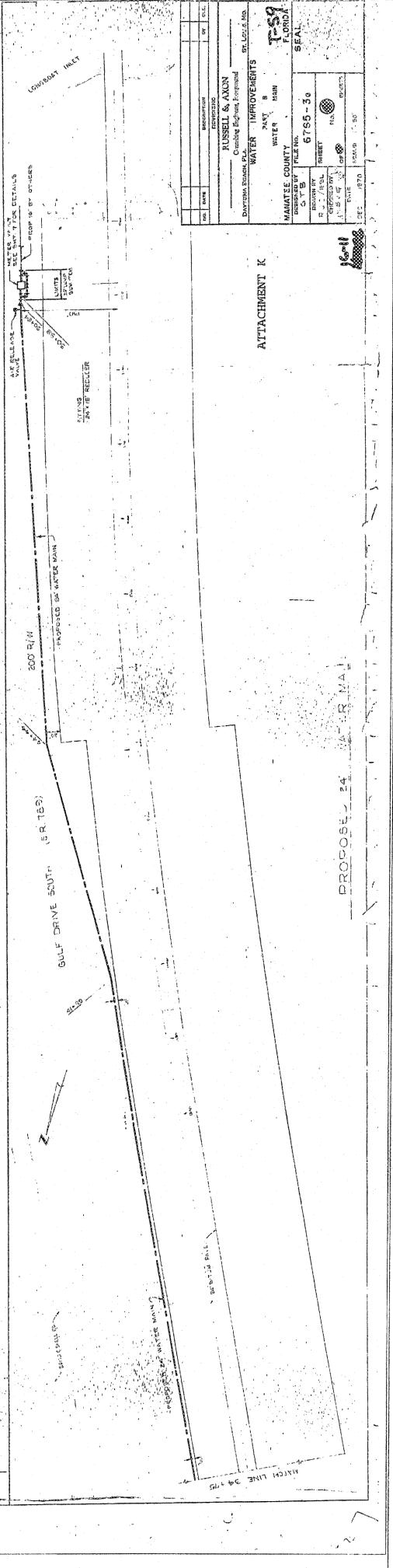
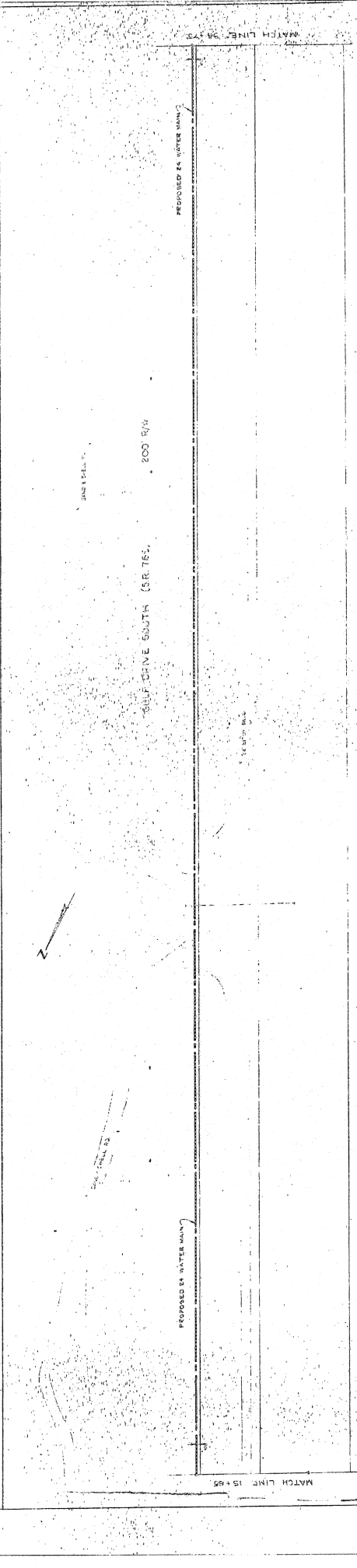
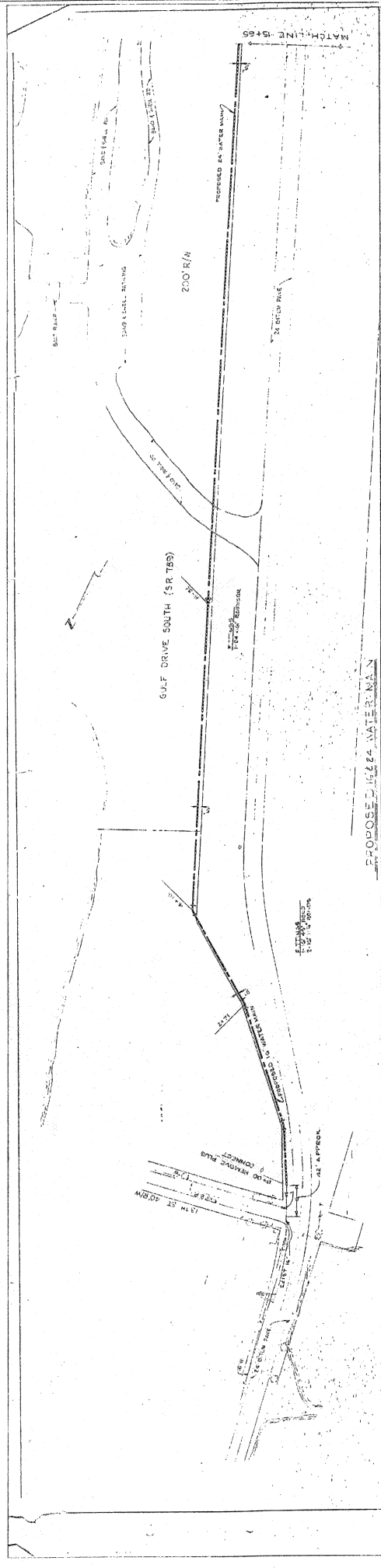
PLAN/PROFILE ~ BOOK NOS.		PUBLIC SERVICES DEPT.		ENGINEER		DATE		CHECKED		BY	
By	Date	Checked	Date	LLP	PC	LLP	PC	LLP	PC	LLP	PC
AT&T	1991		9/94	J.E.L.	7/94	J.E.L.	7/94	J.E.L.	7/94	J.E.L.	7/94
				LLP	PC	LLP	PC	LLP	PC	LLP	PC
Surveyed											
Plotted											
Alignment											
Right of Way											
Scale Horiz. 1"=40'	Scale Vert. 1"=2'										

**FORCE MAIN RELOCATION
@ COQUINA PUBLIC BEACH
PLAN & PROFILE**

ATTACHMENT K

REVISION DESCRIPTION & DATE		BY	NO.

07.38
PIECES 26 F 214



DATE	DESCRIPTION	BY	CHK.

RUSSELL & AXON
 Consulting Engineers, Incorporated
 WATER IMPROVEMENTS
 BY: L. J. AND
 MAMATEE COUNTY
 PROJECT FILE NO. 6755-30
 SHEET NO. 30 OF 30
 DATE: 12/10/09
 SCALE: AS SHOWN
 SEAL: [Professional Engineer Seal]

ATTACHMENT K

PROPOSED 14.24' WATER MAIN

MATCH LINE 15+95

MATCH LINE 34+75

MATCH LINE 15+65

MATCH LINE 34+75