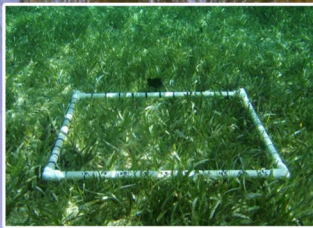




"Venice of America"

Statement of Qualifications to the
CITY OF FORT LAUDERDALE for
CIVIL/ENVIRONMENTAL ENGINEERING SERVICES
Intracoastal Waterway -
Las Olas Marina Dredging Project



September 29, 2014

Submitted by:



Applied Technology & Management, Inc.
2047 Vista Parkway, Ste. 201
West Palm Beach, FL 33411
www.appliedtm.com
Celebrating 30 years -1984 - 2014



Qualifications for CIVIL/ENVIRONMENTAL ENGINEERING SERVICES -
City of Fort Lauderdale Intracoastal Waterway -
Las Olas Marina Dredging Project
September 29, 2014

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Submitted by:

Applied Technology & Management, Inc.

2047 Vista Parkway, Suite 201

West Palm Beach, FL 33411

www.appliedtm.com



2047 Vista Parkway, Suite 201
WEST PALM BEACH, FL 33411
TEL: 561-659-0041
FAX: 561-659-3733

www.appliedtm.com

September 25, 2014

City of Fort Lauderdale
City Hall
Division of Procurement Services
100 N. Andrews Avenue, Room 619
Fort Lauderdale, FL 33301

Re: Qualifications for Civil/Environmental Engineering for Las Olas Marina Dredging Project

Applied Technology & Management, Inc. (ATM) is pleased to submit the enclosed response to the referenced solicitation. Established in 1984, **ATM** is one of the leading coastal, environmental, marine and water resources engineering firms in Florida. The ATM staff members identified to support this project have extensive, direct experience in dredge maintenance projects within the region and can fully support the needs of the City of Fort Lauderdale under this solicitation.

Please consider the following when reviewing our submittal:

- **Florida Dredging Experience:** Dredging of estuarine waterways is a major issue throughout Florida, and one that ATM has been dealing with for 30 years. ATM has worked on similar dredging projects throughout Florida, including recent projects for the Sebastian Inlet District, Indian River, Brevard, Martin, and Palm Beach Counties.
- **Seagrass Mapping, Avoidance, Minimization and Mitigation Planning:** The ATM project team has extensive experience in the assessment, design and construction of dredging projects in the vicinity of benthic resources. We feel our team is unparalleled in resource impact avoidance, minimization, and when necessary, mitigation design and planning.
- **FIND Coordination:** ATM staff have direct experience coordinating dredging projects with the Florida Inland Navigation District (FIND), as well as assisting municipalities with obtaining FIND grants for waterway related projects. This has included the design and use of DMMA facilities and the implementation and assessment of innovative technologies for spoil management.
- **Environmentally Sensitive Construction:** ATM staff have direct expertise in enhancing estuarine habitats. ATM recently provided construction support to the Manatee Pocket Dredging project in Martin County, and is internationally respected for environmentally sensitive marina and mega-yacht facilities.

- **Local Availability and Capability:** Project Manager Joseph Chaison, P.E., has extensive experience with estuarine dredging and is based in West Palm Beach, a short distance from the project site and making him accessible to the site on a daily basis.
- **Local, In-house Surveying Team:** Gary Bazemore, PSM, is ATM's lead surveyor and is based in Cocoa Beach, with extensive experience performing hydrographic surveys and field assessments for a wide variety of projects including marina and waterway dredging.
- **Extensive Permitting Experience:** ATM team members have extensive experience in permitting of dredging and coastal engineering projects with local, state and federal agencies including FIND, the USACE, NMFS, FDEP, BCEPGMD, FWCC, etc.

Based on our qualifications, past record of accomplishments, reputation for performance, and our ability to serve you, we believe that we are the most qualified and well-positioned firm to support this project.

ATM's authorized contact for this project is Michael Jenkins, Ph.D., P.E. He can be reached by phone at 561-659-0041, fax – 561-659-3733 or email mjenkins@appliedtm.com.

Sincerely,
Applied Technology & Management, Inc.



Michael Jenkins, Ph.D., P.E.
Coastal Engineering Principal

BID/PROPOSAL SIGNATURE PAGE

How to submit bids/proposals: Proposals must be submitted by hard copy only. It will be the sole responsibility of the Bidder to ensure that the bid reaches the City of Fort Lauderdale, City Hall, Procurement Services Division, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the bid opening date and time listed. Bids/proposals submitted by fax or email will NOT be accepted.

The below signed hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the CITY and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

Please Note: All fields below **must** be completed. If the field does not apply to you, please note N/A in that field.

Submitted by:  September 26, 2014
(signature) (date)

Name (printed) Michael Jenkins, PhD. PE Title: Coastal Engineering Principal

Company: (Legal Registration) Applied Technology & Management, Inc.

CONTRACTOR, IF FOREIGN CORPORATION, MAY BE REQUIRED TO OBTAIN A CERTIFICATE OF AUTHORITY FROM THE DEPARTMENT OF STATE, IN ACCORDANCE WITH FLORIDA STATUTE §607.1501 (visit <http://www.dos.state.fl.us/>).

Address: 2047 Vista Parkway, Suite 201

City West Palm Beach State: FL Zip 33411

Telephone No. 561-656-0041 FAX No. 561-659-3733 Email: mjenkins@appliedtm.com

Delivery: Calendar days after receipt of Purchase Order (section 1.02 of General Conditions): net 30

Payment Terms (section 1.04): net 30 Total Bid Discount (section 1.05): N/A

Does your firm qualify for MBE or WBE status (section 1.09): MBE WBE N/A

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

<u>Addendum No.</u>	<u>Date Issued</u>
Q&A 1	

VARIANCES: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. **HAVE YOU STATED ANY VARIANCES OR EXCEPTIONS BELOW? BIDDER MUST CLICK THE EXCEPTION LINK IF ANY VARIATION OR EXCEPTION IS TAKEN TO THE SPECIFICATIONS, TERMS AND CONDITIONS.** If this section does not apply to your bid, simply mark N/A in the section below.

Variances: N/A

revised 11-29-11

ARCHITECT - ENGINEER QUALIFICATIONS



PART 1 - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (*City and State*)

City of Fort Lauderdale Civil/Environmental Engineering Svcs for ICWW Las Olas Marina Dredging, Fort Lauderdale, FL

2. PUBLIC NOTICE DATE
8-29-14

3. SOLICITATION OR PROJECT NUMBER
N/A

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Michael Jenkins, Ph.D., P.E., Coastal Team Principal

5. NAME OF FIRM

Applied Technology & Management, Inc.

6. TELEPHONE NUMBER
561-659-0041

7. FAX NUMBER
561-659-3733

8. E-MAIL ADDRESS
mjenkins@appliedtm.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

	(Check)			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUBCONTRACTOR			
a.	<input checked="" type="checkbox"/>			Applied Technology & Management, Inc. <small>X CHECK IF BRANCH OFFICE</small>	2047 Vista Parkway, Suite 201 West Palm Beach, FL 33411	Project Management, QA/QC, Engineering, Design, Permitting, CAD, Plans, Specs. Coordination
b.	<input checked="" type="checkbox"/>			Applied Technology & Management, Inc. <small>X CHECK IF BRANCH OFFICE</small>	305 Sixth Avenue Melbourne Beach, FL 32951	Dredging Design, Engineering
c.	<input checked="" type="checkbox"/>			Applied Technology & Management, Inc. <small>X CHECK IF BRANCH OFFICE</small>	5550 NW 111 th Blvd. Gainesville, FL 32653	Geotechnical Analysis
d.	<input checked="" type="checkbox"/>			Applied Technology & Management, Inc. <small>CHECK IF BRANCH OFFICE</small>	1435 E. Piedmont Drive, Suite 210 Tallahassee, FL32308	Modeling – Water Quality
e.	<input checked="" type="checkbox"/>			Applied Technology & Management, Inc. <small>CHECK IF BRANCH OFFICE</small>	1485 N. Atlantic Avenue Cocoa Beach, FL 32931	Hydrographic Surveying Services
f.			<input checked="" type="checkbox"/>	Miller Legg <small>CHECK IF BRANCH OFFICE</small>	5747 N Andrews Way Ft. Lauderdale, FL 33309-2364	Environmental Consulting Services
g.			<input checked="" type="checkbox"/>	CEG <small>CHECK IF BRANCH OFFICE</small>	665 SE 10 th St., Suite 104 Deerfield Beach, FL 33441	Environmental Support – Ecological Investigations, Seagrass Surveys, Natural Resource Mapping
h.			<input checked="" type="checkbox"/>	SEA <small>X CHECK IF BRANCH OFFICE</small>	6830 Sheridan Rd. Melbourne Village, FL 32904	Geotechnical Studies & Investigations

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

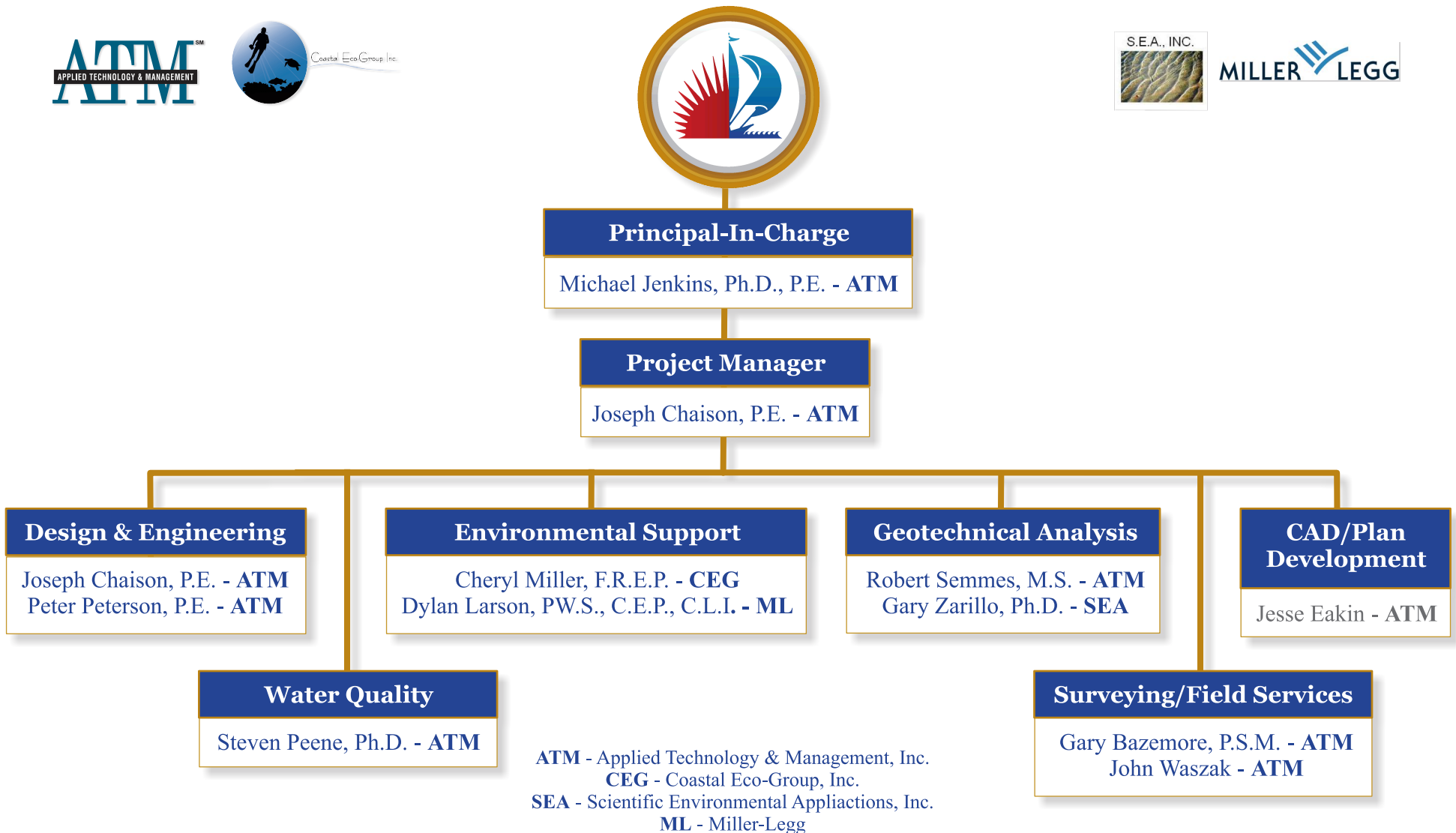
(Attached) **X**

AUTHORIZED FOR LOCAL REPRODUCTION
MANDATORY USE DATE OF FORM 6/2004

STANDARD FORM 330 (6/2004) PAGE #

Project Team Organizational Chart

Statement of Qualifications for CIVIL/ENVIRONMENTAL ENGINEERING SERVICES Intracoastal Waterway - Las Olas Marina Dredging Project to the City of Fort Lauderdale



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)



12. NAME Michael G. Jenkins, Ph.D., P.E.	13. ROLE IN THIS CONTRACT Project Principal	14. YEARS EXPERIENCE	
		a. TOTAL 22	b. WITH CURRENT FIRM 10

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., West Palm Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) Ph.D., Ocean Engineering, Florida Institute of Technology, 1998 M.S., Ocean Engineering, Florida Atlantic University, 1993 B.S., Ocean Engineering, Florida Atlantic University, 1991	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer, FL No. 58072
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Dr. Jenkins serves as head of ATM's Coastal Engineering Division. His expertise includes dredging design and habitat restoration with dredged materials. Dr. Jenkins' work includes the development of dredge fill disposal and environmental protection plans for the design of an improved navigation channel for North Bimini, Bahamas. Recent related work includes dredging projects in Martin, Indian River, and Palm Beach Counties as well as the 2012 and 2013 Sebastian Inlet Sand Trap Dredging. Dr. Jenkins maintains successful proactive relationships with multiple Federal, State, and International regulatory agencies. He served as the only outside team member on the FDEP's JCP Rapid Process Improvement (RPI) initiative. This effort was focused on identifying and implementing improvements to the Joint Coastal Permitting process.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) 2012 Mid-Town Project Design, Town of Palm Beach, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE a. Supported the re-design of the Mid-Town Nourishment Project based on long-term monitoring data and updated geotechnical information. This study was conducted in conjunction with the FDEP Beach Management Agreement (BMA) initiative. Work included project design optimization and minimization of hardbottom impact potential. The modified design includes an additional groin to optimize project performance. ATM Fees: \$114,000	Check if project performed with current firm <input type="checkbox"/>	
(1) TITLE AND LOCATION (City and State) Sebastian Inlet Maintenance and Sand Trap Expansion, Sebastian, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2014
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE b. Project Manager for the design, permitting and construction oversight of the Sebastian Inlet navigation channel and sand trap dredging. This project included both dredge maintenance and sand trap expansion to optimize project maintenance cycles. Total construction cost for all phases was \$6.1 million.	Check if project performed with current firm <input checked="" type="checkbox"/>	
(1) TITLE AND LOCATION (City and State) Martin County Dredging Projects, Martin Co., FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable) 2012
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE c. Project Manager for the design, permitting and construction oversight of the maintenance dredging of the Broward Street Boat Ramp. The project consisted of the mechanical excavation of approximately 3,500 cubic yards of highly organic 'muck' material. Project Manager for the feasibility study of dredging of the Manatee Pocket waterway to improve both navigation and estuarine habitat. The project consisted of the development of means and methods and probable costs. ATM Fees: N/A	Check if project performed with current firm <input checked="" type="checkbox"/>	
(1) TITLE AND LOCATION (City and State) City of Boca Raton Coastal Engineering Services, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010-2013	CONSTRUCTION (If applicable) 2010-2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE d. Currently serving as Project Principal for coastal support under a continuing services contract. Work includes three beach nourishment projects (one of which is a Federal project), including construction phase services and post construction biological and physical monitoring services, inlet management, and work on several coastal park projects including permitting and design of dune overwalks. ATM Fees: \$1,309,545 to date	Check if project performed with current firm <input checked="" type="checkbox"/>	
(1) TITLE AND LOCATION (City and State) Manatee Pocket Dredging, Martin County, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE e. Project Manager for the feasibility study and construction oversight management of dredging of the Manatee Pocket waterway to improve both navigation and estuarine habitat. The project consisted of the development of means and methods and probable costs. ATM Fees: \$51,674	Check if project performed with current firm <input checked="" type="checkbox"/>	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Joseph Chaison, P.E.	13. ROLE IN THIS CONTRACT Project Manager	14. YEARS EXPERIENCE	
		a. TOTAL 13	b. WITH CURRENT FIRM 1

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., West Palm Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. Ocean Engineering, Florida Atlantic University, 2001	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer, FL No. 64831, MD No. 34748
--	---

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Chaison has designed and overseen the construction of beach nourishment, coastal structure, dike, spillway, and dredging projects. He has participated in all phases of coastal engineering projects, from feasibility studies, numerical modeling, environmental impact statements, local, state, and federal permitting, grant funding application, design, plan and specification development, bid form preparation, procurement, award, construction inspection, survey, acceptance, payment review, and monitoring. Affiliations: ASCE, FES, FSBPA/ Certifications include OSHA 40-Hr HAZWOPER; PADI Open Water Diver; Certified Emergency First Responder. Mr. Chaison also took the Dredging Short Course at Texas A&M University, 2007

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Jupiter Inlet Sand Trap Dredging and Beach Nourishment, Jupiter, FL	2014	2014
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input type="checkbox"/>		
a. Project Engineer for annual sand trap excavation and beach placement. Handled all aspects of project creation, bid preparation and review, award, submittal verification, construction administration, permit compliance and reporting, and payment request verification. Total construction cost for all phases was \$6.1 million.		
Harvest Caye Cruise Ship Channel Dredging Design, Placencia, Belize	2014	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
b. Project Engineer for design of dredging of new cruise ship channel to -33'. Reviewed geotechnical data and developed dredge design and associated volumes for creation of navigation access channel to private island. ATM Fees: \$29,415		
Hillsboro Canal Maintenance Dredging Project, Boca Raton, FL	Ongoing	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
c. Project Engineer for maintenance dredging of flood control and recreational usage canal. Oversaw bathymetric survey, physical and chemical sediment analysis, environmental resource survey, navigation analysis, dredge template design and associated volumes and state and federal permitting. The project is ongoing. ATM Fees: \$98,640		
Waterway Dredging, Town of Palm Beach, FL	Ongoing	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
d. Project Engineer for maintenance dredging of recreational usage canal. Oversaw bathymetric survey, physical and chemical sediment analysis, environmental resource survey, navigation analysis, dredge template design and associated volumes and state and federal permitting. Project involves usage of dredged materials for ecosystem restoration. The project is ongoing. ATM Fees: \$159,493		
Boca Raton - Northern Beach Nourishment - Plans and Specifications, FL	Ongoing	CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
e. Engineer involved with the preparation of construction plans and specifications for beach nourishment project for North Segment of Boca Raton beaches. Project involves the dredging of approximately 700,000 cy of beach compatible material from offshore source and performing beach nourishment. Additional work will include surveying, construction administration, monitoring. ATM Fee: \$24,327		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Steven J. Peene, Ph.D.	13. ROLE IN THIS CONTRACT Water Quality, Inlet & Estuarine Hydrodynamics	14. YEARS EXPERIENCE	
		a. TOTAL 30	b. WITH CURRENT FIRM 19

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., Tallahassee, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) Ph.D., Coastal and Oceanographic Engineering M.S., Coastal and Oceanographic Engineering B.S., Civil Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Dr. Peene has over 20 years of experience in water resources analysis, including watershed planning, evaluation of non-point and point source pollution in surface water systems, hydrologic and water quality modeling for lakes, rivers, estuaries, coastal embayments and offshore, evaluation of impacts to ecological resources in surface waters, and design and implementation of hydrodynamic and water quality monitoring in surface water systems. He has been involved in the national and local evaluation of impacts to surface waters including development of Total Maximum Daily Loads (TMDL), Environmental Impact Assessments (EIA), and Ecosystem Restoration Projects.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Big Pass Inlet Management Plan Technical Peer Review Sarasota, FL	2008	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Provided Technical Peer review for multi-dimensional modeling of Sarasota Bay and Little Sarasota Bay utilized in the development of the Inlet Management Plan for Big Pass and New Pass. Provided review of hydrodynamic, wave, and shoreline models as part of a technical peer review committee requested by the Florida Department of Environmental Management (FDEP). ATM Fees: \$46,201	Check if project performed with current firm <input checked="" type="checkbox"/>	
Gulfport Marina, Clearwater, FL	2007	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE In support of permitting, worked on development of a hydrodynamic and water quality model (EFDC and WASP7) to determine the potential effects (to hydrodynamic flushing and dissolved oxygen) of a proposed marina expansion project near Clearwater, FL. ATM Fees: \$80,000	Check if project performed with current firm <input checked="" type="checkbox"/>	
Old Tampa Bay Hydrodynamic Model Development Project, FL	2014	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager in charge of the development of a hydrodynamic model of Tampa Bay with specific focus on Old Tampa Bay (OTB). The hydrodynamic model is part of an overall modeling system which includes a watershed model, receiving water quality model, and ecological resource assessment models. The modeling system will be utilized to assess the potential impacts of projects to restore seagrasses within OTB. ATM Fees to date: \$95,000	Check if project performed with current firm <input checked="" type="checkbox"/>	
Hydrodynamic Modeling of Opening of Midnight Pass Sarasota, FL	2008	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Served as primary technical QA/QC for 2-D hydrodynamic model of Little Sarasota Bay, Big Sarasota Bay and Blackburn Bay. The hydrodynamic model was utilized to project the physical and water quality changes within Little Sarasota Bay based upon the projected re-opening of Midnight Pass. The model was also utilized to define the stable hydraulics within the newly cut inlet. ATM Fees: \$112,855	Check if project performed with current firm <input checked="" type="checkbox"/>	
TraPac Sedimentation Study, Port of Jacksonville, FL	2010	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Principal in Charge for the development of a 3-D sedimentation model as well as design and implementation of a monitoring program to collect data in support of the model development. Multiple ADCP instruments were deployed in a side-looking configuration (20 foot depth, 24-day data collection) to quantify currents (speed and direction), as well as suspended sediment inputs. Field data collection included bottom sediment sampling and sampling for suspended particulates in the water column. The resulting particle size distribution data was used as input to a 3-D numerical model simulating sedimentation patterns and rates. This sedimentation analysis allowed a dredging template with a minimum shoaling rate to be identified. The model results were subsequently used to develop a new entrance channel design and more effective maintenance dredging protocols. Total ATM Project Fees: \$242,658	Check if project performed with current firm <input checked="" type="checkbox"/>	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Peter C. Peterson, P.E.	13. ROLE IN THIS CONTRACT Civil Engineer	14. YEARS EXPERIENCE	
		a. TOTAL 22	b. WITH CURRENT FIRM 19

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., Melbourne, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) M.S., Ocean Engineering B.S., Mechanical Engineering	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Civil Engineer, Florida, No. 49294, 1995 Professional Engineer, Wisconsin, No. 31639, 1996 Prof. Engineer, Virginia, No. 0402 037891, 2002 Professional Engineer, Texas, No. 98182, 2006
--	---

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Peterson has over 20 years of experience with coastal structures, tidal and current studies, and marine construction. Affiliations include: American Society of Civil Engineers, Marine Technology Society, Searle Consortium - Worldwide Maritime Consultancy, States Organization for Boating Access, Bahamas Engineering Society

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) TraPac Terminal Container Terminal sedimentation Reduction Dredging Project Jacksonville, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable) 2011

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE
Check if project performed with current firm

a. Project Engineer for oversight of all plans and specifications for a maintenance dredging and expansion of a container berth on the St. Johns River in Jacksonville. The expanded dredging template was designed to reduce shoaling and improve navigation in the vicinity of the container berth so as to reduce future maintenance dredging costs. The project was conducted in association with the Jax Port Authority expansion plans. ATM Fees: \$242,658

(1) TITLE AND LOCATION (City and State) Sebastian Inlet Sand Trap Phases 2 & 3 Construction Services, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2014

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE
Check if project performed with current firm

b. Project Engineer overseeing all dredging and coastal work for the dredging of the Sebastian Inlet and subsequent placement of sand on down drift shorelines. The navigation project was designed to improve navigation and nourish the beaches south of the inlet, and improve sediment transfer to down drift coastal areas. Total construction cost for all phases was \$6.1 million.

(1) TITLE AND LOCATION (City and State) Treasure Beach Canal Dredging, St. Johns County, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2014

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE
Check if project performed with current firm

c. Project Engineer responsible for developing feasibility study for maintenance dredging of residential canals controlled by the County. Investigated environmental concerns, funding opportunities and alternative construction techniques. Subsequent work included development of a conceptual design for a temporary dredge sediment holding facility at the Florida Inland Navigation District's (FIND) Dredge Material Management Area SJ-20A for the 120,000 CY Treasure Beach navigational canal dredging project. This effort required field and data review, coordination with the County, FIND, and FDEP. Dredging is currently going on and should be completed in 2014. ATM Fees: \$35,000

(1) TITLE AND LOCATION (City and State) St. Augustine Marina Dredging and Breakwater Permitting, St. Augustine, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable) 2010

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE
Check if project performed with current firm

d. Engineer of Record for the St. Augustine Municipal Marina maintenance dredging project. The project included removal of 12,000 cubic yards of material from the marina basin and transport to an offsite disposal facility. Tasks included permitting, plans and specifications. ATM Fees: \$82,115

(1) TITLE AND LOCATION (City and State) Marina Wave Wall Design and Construction, Loggerhead Marina, Stuart, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2013	CONSTRUCTION (If applicable) 2014

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE
Check if project performed with current firm

e. Project Manager and engineer for the design and construction of a fixed barrier wave wall to protect an existing marina. The concrete panel wall required extensive permits from USACE, SFWMD and NMFS and was designed to reduce wave agitation within the basin, and improve navigation within the entrance approaches to the marina. ATM: \$89,200

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Gary W. Bazemore, PSM	13. ROLE IN THIS CONTRACT Surveying & Field Support Services	14. YEARS EXPERIENCE	
		a. TOTAL 26	b. WITH CURRENT FIRM 15

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Cocoa Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Ocean Engineering, Florida Institute of Technology, 1987	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Surveyor and Mapper, Florida, No. LS5697
---	---

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Bazemore directs all surveying services conducted within the firm and has over 20 years experience with both land based and hydrographic surveying. His hydrographic surveying experience includes bathymetric surveys, tide studies and navigational support for side scan sonar, sub-bottom sonar, and magnetometer surveys. He has extensive experience with post processed and real time kinematic, static, and differential GPS surveying, tidal studies, coastal engineering project construction surveys and contract administration services related to beach nourishment and inlet dredging.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Boca Raton Inlet Sand Bypassing, Boca Raton, FL	PROFESSIONAL SERVICES 2010-2012	CONSTRUCTION (If applicable)
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Lead surveyor for annual bathymetric surveys of Boca Inlet in support of FDEP Inlet Sand bypassing permit renewal. Survey area includes the channel from the bridge eastward and the ebb shoal area. ATM Fees: 37,310	Check if project performed with current firm <input checked="" type="checkbox"/>	
Town of Palm Beach, FL	PROFESSIONAL SERVICES 2011	CONSTRUCTION (If applicable)
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Conducted surveys for sand search for beach nourishment material. Performed bathymetric, magnetometer, side scan sonar and sub-bottom seismic sonar surveys of two areas near the Lake Worth Inlet. Also did jet probes in these areas and collected sand samples for analysis. ATM Fees including subcontractors: \$95,717	Check if project performed with current firm <input checked="" type="checkbox"/>	
South Lake Worth Inlet Pre-Dredge Environmental Mapping, FL	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If applicable)
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mapped sea grass beds within the South Lake Worth Inlet sand trap, adjacent the Intracoastal Waterway and Boynton Beach Boat Club Channel. ATM Fees: \$25,067	Check if project performed with current firm <input checked="" type="checkbox"/>	
Residential Canal Surveys, Cocoa Beach, FL	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable)
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Performed a bathymetric survey of the residential canals that tie into the Banana River, part of the Indian River Lagoon system. ATM Fees: \$15,960	Check if project performed with current firm <input checked="" type="checkbox"/>	
West Coast Inland Navigation District, FL	PROFESSIONAL SERVICES 2005	CONSTRUCTION (If applicable)
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Under ATM's continuing services contract, performed hydrographic survey services for 7 project/study navigation areas in SW Florida from Tampa to Naples. Areas included Jaffa Canal/Philippi River in Sarasota Co., Powel-Crosley Museum waterfront on Sarasota Bay, Longboat Pass, Coast Guard Station Cortez, Turtle Beach channel in Siesta Key, Hatchett Creek in Venice, and Skyway Bridge Channel in Pinellas County. The Survey data was reduced and dredge volume estimates were made to maintain the design navigation depth. ATM Fees: \$60,223	Check if project performed with current firm <input checked="" type="checkbox"/>	

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Robert H. Semmes, M.S.	13. ROLE IN THIS CONTRACT Sediment Planning	14. YEARS EXPERIENCE	
		a. TOTAL 25	b. WITH CURRENT FIRM 25

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., Gainesville, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) M.S., Agricultural Engineering, University of Florida, 1988	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Semmes has 25 years of experience with dredging, dredging feasibility, dredged material management and sedimentation reduction projects in the southeastern United States and internationally. He has a keen understanding of the specific coastal processes that create sedimentation problems and the related regional environmental and regulatory issues that narrow the range of solutions available in coastal zone.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
TraPac Container Terminal Sedimentation Analysis, Jacksonville, FL	2011	2011
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
a. Assisted ATM engineers with study to evaluate solutions for unexpectedly high sedimentation rates at newly constructed TraPac Container Terminal on the St Johns River in the Jacksonville Port. Performed field data collection (current and sediment measurements) using acoustic doppler current profiler technology and sediment and water grab samples. Study analyzed sedimentation history and developed a 3-D model study to evaluate alternatives to reduce maintenance dredging at the terminal. The study provided detailed recommendations for TraPac to reduce maintenance dredging costs. ATM Fees: \$242,658		
Fernandina Harbor Marina Dredging Feasibility Study, FL	2011	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
b. Completed an alternatives assessment of three potential alternatives to the maintenance dredging regime for the City of Fernandina Beach, Florida's municipal marina. Current maintenance is conducted using mechanical dredge technology with disposal in a distant CDF (via barge) or landfill (via truck haul). Both alternatives are expensive and unsustainable. Alternatives evaluated included development of a new nearby CDF, use of rapid dewatering technology, and implementation of water injection dredging (WID). ATM Fees: \$30,000		
Research Vessel Marina, Port Everglades, Nova SE University, Dania Beach, FL	2010	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
c. Project Manager and lead consultant for specialized permit support for redevelopment of NSU's marina near the entrance to Port Everglades. Plans include dredging, new seawalls, new floating docks and marina basin expansion. Issues included seagrass avoidance and minimization, coordination with the USACE for Port Expansion plans and the plans' impact on NSU's facility. Coordinated with local surveyor/ engineering consultant, NSU environmental counsel, NSU staff, CESAJ Navigation and Regulatory, Broward County Environmental, and the FDEP. Evaluated and revised dredging plans, evaluated sediment and water chemistry results, developed responses to a series of requests for additional information from the agencies. ATM Fees: \$71,450		
CDF Feasibility services, Windmill Harbour Marina, Hilton Head, SC	2011	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
d. Completed feasibility study related to the construction and operation of a new confined disposal facility (CDF) intended for the management of maintenance dredged material from the entrance channel to a popular locked harbor development on Hilton Head, SC. Work included review of land usage rights, regulatory and environmental feasibility, and development of a path forward for implementation of the plan. ATM Fees: \$12,200		
Permit Appeal, Carteret Municipal Marina, NJ	2014	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Check if project performed with current firm <input checked="" type="checkbox"/>		
e. Consulted with local engineer, Borough, and other consultants to compile and appeal US Army Corps of Engineers denial for recreational marina permit. Compiled and assessed case studies where navigational safety and wake wash effects were also issues and permits were granted with special conditions. Corps granted appeal. ATM Fees: \$138,758		

RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME John T. Waszak	13. ROLE IN THIS CONTRACT Field Support Services & Surveying	14. YEARS EXPERIENCE	
		a. TOTAL 14	b. WITH CURRENT FIRM 10

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., West Palm Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) SACE Construction Quality Management Certified, 2009, First Aid and CPR Certified 2009, PADI Advanced Open Water SCUBA Diver 2002, PADI Open Water SCUBA Diver, 2000
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Waszak provides support for engineering and environmental projects. He has more than ten years of experience working as a surveyor, boat operator, and field diver. He provides support to coastal projects for hardbottom assessments & mapping, sea grass mitigation & monitoring, sand compaction testing, wet & dry sand sample collection, jet probes, vibrocore retrieval and cataloging as well as assisting with shoreline stabilization. Member: Hydrographic Society of America, DAN Member

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Town of Palm Beach, FL	2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE a. Compiled data into AutoCAD drawings and figures for annual monitoring reports for Mid-Town, Phipps, and Town wide. Used data provided to calculate volume changes and shoreline position changes from various data sets. For 2011 dune project, supervised the receipt of over 6000 trucks delivering sand to three locations along the Town of Palm Beach. Acted as the liaison between the Town, the Engineer, and the Contractor. Physically and visually checked the color and grain size of all of the material being brought into the project area for quality assurance. ATM Fees: \$538,000 Check if project performed with current firm <input checked="" type="checkbox"/>		
Indian River County, FL	2012	2003
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE b. Conducted an evaluation of pre-construction and post-construction surveys for Post-Construction Monitoring Report for Sectors 1 & 2, and Sector 7. Analysis of dredge and fill volumes and shoreline and berm position to evaluate stability of renourished beach. ATM Fees: \$5.5M (several projects since 1998) Check if project performed with current firm <input checked="" type="checkbox"/>		
Hollywood Waterway Master Plan, FL	2013	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE c. Assisted with the following tasks: inventory analysis of boating infrastructure, identification of resources which could be highlighted as destinations for boaters, maps and presentations for public meetings, site visits to assess potential boating destinations. ATM Fees: \$48,920 Check if project performed with current firm <input checked="" type="checkbox"/>		
South Lake Worth Inlet, Boynton Beach, FL	2014	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE d. Conducted annual seagrass monitoring of shoals surrounding the intracoastal waterway, sand trap, and boat channel to boat ramp facility. Includes pre and post dredging surveys for maintenance dredging projects. ATM Fees: \$123,790 Check if project performed with current firm <input checked="" type="checkbox"/>		
Hillsboro Canal Maintenance Dredging, Boca Raton, FL	2014	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE e. Provided a bathymetric survey with a tide gauge deployed during the survey. ATM Fees: \$98,640 Check if project performed with current firm <input checked="" type="checkbox"/>		
Juno Beach Renourishment Project, FL	2007-2012	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE f. Prepared JCP application, created technical drawing, calculated volumes for beach evaluation, redesigned borrow area, native beach and borrow area material analysis. Coordinated with Palm Beach County to provide responses for RAI from the State. Analyzed annual data sets for the preparation of monitoring reports. ATM Fees: \$225,450 Check if project performed with current firm <input checked="" type="checkbox"/>		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)



12. NAME Jesse Eakin	13. ROLE IN THIS CONTRACT CADD Technician	14. YEARS EXPERIENCE	
		a. TOTAL 6	b. WITH CURRENT FIRM 2

15. FIRM NAME AND LOCATION (City and State)
Applied Technology & Management, Inc., West Palm Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) Drafting Technology Diploma – West Georgia Technical College	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Mr. Eakin spent two years at West Georgia Technical College where he graduated dean's list with a diploma in Drafting. Mr. Eakin's experience includes preparation of engineering drawings for permitting, planning, and construction. Mr. Eakin regularly works with the ATM coastal engineering team and has developed AutoCAD drawings for a wide variety of project work.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Hillsborough Canal Dredging Project, FL	2014	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Built Triangulated irregular network models to calculate dredge volumes for removal of material within canal. Also, I produced conceptual drawings of the dredging areas. ATM Fees: \$98,640	Check if project performed with current firm	<input checked="" type="checkbox"/>
Waterway Dredging, Lake Worth Lagoon, FL	2014	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Built Triangulated irregular network models to calculate dredge volumes for removal of material within canal. Also, I produced conceptual drawings of the dredging areas. ATM Fees: \$159,493	Check if project performed with current firm	<input checked="" type="checkbox"/>
Treasure Beach Dredging Project, St. Johns Co., FL	2014	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Built triangulated irregular network models to calculate dredge volumes for removal of material within canal. Also, I produced conceptual drawings of the dredging areas. ATM Fees: \$35,000	Check if project performed with current firm	<input checked="" type="checkbox"/>
Town of Palm Beach FY 2014 Nourishment Project, FL	2014	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Calculated necessary sand renourishment volumes based on surveyed beach profiles. Also, Calculated necessary sand volume removal from established borrow areas for beach placement based on created TIN models. With this collected data, I created federal and state permit drawing along with construction drawings. ATM Fees: \$117,723	Check if project performed with current firm	<input checked="" type="checkbox"/>
North Boca Raton Nourishment Project, FL	2014	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Calculated necessary sand renourishment volumes based on surveyed beach profiles. Also, Calculated necessary sand volume removal from established borrow areas for beach placement based off created TIN model. With this collected data, I created federal and state permit drawing along with construction drawings. ATM Fee: \$24,327	Check if project performed with current firm	<input checked="" type="checkbox"/>

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME Dylan Larson, PWS, CEP, CLI	13. ROLE IN THIS CONTRACT Principal (Environmental)	14. YEARS EXPERIENCE	
		a. TOTAL 21	b. WITH CURRENT FIRM 20
15. FIRM NAME AND LOCATION <i>(City and State)</i> Miller Legg, Ft. Lauderdale, FL			
16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Science, Biology and Business Administration Master of Business Administration,		17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Professional Wetland Scientist FL, Certified Landscape Inspector FL, Authorized Gopher Tortoise Agent Wetland Delineation Certification Certified Environmental Professional PADI Certified Rescue Diver	
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Mr. Larson has significant experience in environmental consulting in Florida and is responsible for overseeing and performing studies and investigations on biological and ecological impacts affecting the firm's projects. This includes field evaluations, assessments, recommendations and report writing. Dylan has established himself as a valuable leader and team member on a variety of the firm's projects that have involved environmental issues. Specific responsibilities include: wetland jurisdictional determination, dredge and fill permitting, wetland mitigation design, mitigation monitoring, recommendations for maintenance procedures, coordination and oversight of environmental GIS applications, and assistance with plan preparations and mitigation.			

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION <i>(If Applicable)</i>
a.	(1) TITLE AND LOCATION <i>(City and State)</i> City of Fort Lauderdale General Environmental Engineering Services Fort Lauderdale, FL		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE [X] Check if project performed with current firm Principal (Environmental): Principal-In-Charge Miller Legg has been providing continuing environmental services since 2007 and currently holds a General Environmental Engineering Services Contract through 2015. Services provided include threatened and endangered species assessments, environmental permitting compliance, consent order coordination, bid preparation, environmental construction observation, certified arborist services and Phase I and Phase II Environmental Site Assessments. Services also include indoor air quality/asbestos and lead-based paint evaluations.		
b.	(1) TITLE AND LOCATION <i>(City and State)</i> Port Everglades Turning Notch Mangrove Wetland Creation Project Fort Lauderdale, FL		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE [X] Check if project performed with current firm Project Manager: Miller Legg is a subconsultant to Bergeron Land Development for this Port Everglades Turning Notch Mangrove Wetland Creation Project. The firm is providing field support services for environmental and engineering permit compliance, protected species observation, including mangroves and manatees, water quality monitoring, turbidity monitoring, erosion control inspection, plan review and environmental administration and reporting.		
c.	(1) TITLE AND LOCATION <i>(City and State)</i> Port Everglades Turning Notch Mitigation Area Construction Management @ Risk Fort Lauderdale, FL		
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE [X] Check if project performed with current firm Project Manager: Miller Legg is a subconsultant to Bergeron Land Development for this Port Everglades environmental construction improvement project. The firm is providing constructability review services including cost estimates for nursery selection, prequalification of nursery subconsultants, prequalification and identification of plant installation, selection of mitigation maintenance subconsultants, and quality control observation and reports.		
d.	(1) TITLE AND LOCATION <i>(City and State)</i> Broward County Parks and Recreation West Lake Park II - Environmental Services Hollywood, FL	PROFESSIONAL SERVICES 2011	CONSTRUCTION <i>(If Applicable)</i>
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE [X] Check if project performed with current firm Project Manager: Miller Legg is the prime consultant for the permitting and design of enhancements for the second phase of this 1,500-acre estuarine wetland. Services provided included: paving and drainage improvements for the nature center and associated parking lot, design of three sewage pump stations, water distribution system design, sanitary sewage collection and transmission system design, off-site force main, traffic engineering, surveying, water quality data analysis, hypothesis development and review, sediment analysis, fishery analysis, rip-rap design, benthic macro-invertebrate identification, seagrass survey, mitigation credit determination, and permitting. The seagrass survey was conducted using scuba diving and digital global positioning satellite equipment and included transect/quadrant measurements of seagrass density, abundance, and frequency of occurrence.		
e.	(1) TITLE AND LOCATION <i>(City and State)</i> Florida Department of Transportation (FDOT) District 4 SL-15 Mitigation Area and SR 732/Jensen Beach Causeway Improvements St. Lucie County, FL	PROFESSIONAL SERVICES 2004	CONSTRUCTION <i>(If Applicable)</i> 2004
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE [X] Check if project performed with current firm Project Biologist: Miller Legg was responsible for the identification and survey of proposed seagrass creation area consisting of a ten-acre island within Indian River Lagoon on FDEP land under a Florida Inland Navigational District easement. Miller Legg coordinated restoration efforts through FDEP, SFWMD and USACOE. This included field evaluation, ranking and prioritization of suitable areas to mitigate. Field evaluations were done to classify the island vegetation and use as well as a seagrass survey in the island vicinity. Services provided included: jurisdictional determination, mitigation design, permitting, Essential Fish Habitat Assessment, construction plan development, public involvement and agency coordination. Performed seagrass surveys, jurisdictional determinations, mitigation design, permitting, essential Fish Habitat Assessment, construction plan development and public involvement.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME Jennifer Shipley	13. ROLE IN THIS CONTRACT Project Biologist	14. YEARS EXPERIENCE	
		a. TOTAL 12	b. WITH CURRENT FIRM 11
15. FIRM NAME AND LOCATION <i>(City and State)</i> Miller Legg, Ft. Lauderdale, FL			
16. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> Bachelor of Arts, Geology		17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> FL, FDEP Qualified Stormwater Management Inspector	
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> Ms. Shipley is a Project Biologist in the firm's South Florida Office, where she is responsible for wetland determination and delineation, wetland mitigation design and monitoring, environmental permitting, threatened and endangered species surveys and assessments, benthic surveys, coral, seagrass, and mangrove surveys and monitoring.			

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If Applicable)</i>
a. (1) Broward County Parks and Recreation West Lake Park II - Environmental Services Hollywood, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Biologist/Assistant Project Manager: Miller Legg is the prime consultant for the permitting and design of enhancements for the second phase of this 1,500-acre estuarine wetland. Services provided included: paving and drainage improvements for the nature center and associated parking lot, design of three sewage pump stations, water distribution system design, sanitary sewage collection and transmission system design, off-site force main, traffic engineering, surveying, water quality data analysis, hypothesis development and review, sediment analysis, fishery analysis, rip-rap design, benthic macro-invertebrate identification, seagrass survey, mitigation credit determination, and permitting. The seagrass survey was conducted using scuba diving and digital global positioning satellite equipment and included transect/quadrant measurements of seagrass density, abundance, and frequency of occurrence.	2011	
[X] Check if project performed with current firm		
b. (1) Miami-Dade County Department of Environmental Resources Management Virginia Key Wetland Restoration Virginia Key, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Biologist: A wetland restoration project located in Miami-Dade County for the Miami-Dade Department of Environmental Risk Management. The project consists of approximately 52 acres of existing lakes, ditches, and proposed interconnected channels which have been designed to hydrate and restore the existing wetlands within the project boundary close to the historical condition. Miller Legg performed habitat evaluations and mapped existing vegetative communities and identified proposed restoration objectives.	2007	
[X] Check if project performed with current firm		
c. (1) Port Everglades Turning Notch Mangrove Wetland Creation Project Fort Lauderdale, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Biologist: Miller Legg is a subconsultant to Bergeron Land Development for this Port Everglades Turning Notch Mangrove Wetland Creation Project. The firm is providing field support services for environmental and engineering permit compliance, protected species observation, including mangroves and manatees, water quality monitoring, turbidity monitoring, erosion control inspection, plan review and environmental administration and reporting.		
[X] Check if project performed with current firm		
d. (1) Port Everglades Turning Notch Mitigation Area Construction Management @ Risk Fort Lauderdale, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Biologist: Miller Legg is a subconsultant to Bergeron Land Development for this Port Everglades environmental construction improvement project. The firm is providing constructability review services including cost estimates for nursery selection, prequalification of nursery subconsultants, prequalification and identification of plant installation, selection of mitigation maintenance subconsultants, and quality control observation and reports.		
[X] Check if project performed with current firm		
e. (1) St. Lucie County River Park Marina Port St. Lucie, FL (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Biologist: Miller Legg provided mitigation monitoring services at the preserve area along the North Fork of the St. Lucie River for a period of five years. Our biologists also provided vegetation clearing oversight for removal of exotics. The project also included 0.32 acres of shoreline rip rap protection, fishing platform, and fixed and floating dock components. Approximately five acres of mixed hardwood wetlands were placed under a conservation easement and the shoreline was planted with native vegetation such as mangroves and leather fern.	2013	
[X] Check if project performed with current firm		



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME Cheryl L. Miller	13. ROLE IN THIS CONTRACT Regulatory Permitting, Impact Assessment, and Seagrass Mitigation Development	14. YEARS EXPERIENCE a. Total: 19 b. With Current Firm: 9	
15. FIRM NAME AND LOCATON (City and State) Coastal Eco-Group Inc., Deerfield Beach, FL			
16. EDUCATION (Degree and Specialization) Master of Science, Biological Sciences, Marine Ecology Specialization		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) Florida Registered Environmental Professional #245	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) 2005 FSBPA Environmental Award; AAUS Scientific Diver; International Coral Reef Society; Southeast Florida Coral Reef Initiative Team Member (SEFCRI), 2003-2012, Vice-Chair (present) South Florida Water Management District Water Resources Advisory Commission 2011-2013			

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Rybovich Riviera Beach Marine Facility Project and Rybovich West Palm Beach Marina Expansion, Palm Beach County, FL	PROFESSIONAL SERVICES 2010-2014; Ongoing	CONSTRUCTION (if applicable)
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firms CEG is the agent responsible for obtaining state and federal permits for the proposed marine facility project at Riviera Beach and expansion of the Rybovich Marina at West Palm Beach. Services include ERP permit application development; responding to agency RAIs and agency coordination during permit application review; demonstration of avoidance/minimization of impacts to submerged resources; UMAM mitigation and impact evaluation; and development and agency approval of a seagrass mitigation plan for the cumulative impacts resulting from both projects. Federal agency approval of the combined mitigation plan for both projects was received in September 2014. Ms. Miller serves as Principal Scientist and Project Manager, coordinating the team of coastal engineers and geologists in project development and permitting needs.		
Riviera Beach Municipal Marina Seagrass and Benthic Habitat Survey and Map Development, Palm Beach County, FL	PROFESSIONAL SERVICES 2009	CONSTRUCTION (if applicable)
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firms CEG scientists conducted a comprehensive benthic habitat mapping survey of the Riviera Beach Municipal Marina between June 11 and July 1, 2009. The mapping effort delineated percent cover, density and species composition of seagrass and macroalgal beds, and mapping and characterization of rock rubble communities. Survey followed NMFS protocol for the federally listed species <i>Halophila johnsonii</i> . Maps of seagrass distribution were prepared in AutoCad and a written report was produced for submittal to the state and federal regulatory agencies. Ms. Miller served as Principal Scientist and Project Manager.		
Lake Worth Lagoon 2013 Seagrass Mapping Survey and 2011-2014 Fixed Seagrass Transect Monitoring, Palm Beach County, FL	PROFESSIONAL SERVICES 2011-2014	CONSTRUCTION (if applicable)
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firms The general objective of the PBC fixed seagrass transect monitoring program is to document annual changes in seagrass abundance and distribution as an indicator of seagrass ecosystem health in the Lake Worth Lagoon. CEG conducted the annual surveys of 9 the 9 permanent transects between 2011 and 2014 and prepared annual monitoring reports for PBCERM. In June 2013, CEG was contracted by PBCERM to conduct the 2013 LWL Seagrass Mapping Project. The 4 main tasks were: (1) development and approval of a Final Field Study Plan; (2) 33 days of ground-truthing field work consisting field verification of a minimum of 1,000 locations in LWL and ICW areas of interest, followed by mapping of outer edges of large beds; (3) revisions to the 2007 seagrass shapefiles in ArcGIS and production of draft and final maps; and (4) production of a Final Report including a narrative and tabular summary of findings by sub-basin reach, and an analysis of change in seagrass cover/extent compared to 2007. In total, 1,508 sites were sampled, and the 2013 maps have been used to examine changes in seagrass areal extent and cumulative impacts to seagrasses in the LWL. Ms. Miller served as Principal Scientist and Project Manager for both projects.		
Nova Southeastern University Oceanographic Center Basin Realignment and Maintenance Dredging Project, Dania Beach, FL	PROFESSIONAL SERVICES 2013-2014	CONSTRUCTION (if applicable)
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firms Conducted seagrass surveys of dredge areas to map and quantify seagrass impacts following the NMFS protocol for the federally listed species <i>Halophila johnsonii</i> ; Performed UMAM impact and mitigation assessment and developed on-site mitigation plan involving fill placement to create suitable elevations for seagrass establishment. Coordinated seagrass mitigation plan with regulatory agencies and received agency approval of proposed mitigation activities and monitoring plan. Contract value: \$14,690. Ms. Miler served as Principal Scientist and Project Manager for the project.		



E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME Adrienne Carter	13. ROLE IN THIS CONTRACT Environmental Permitting, Benthic Habitat Mapping, Seagrass Mitigation	14. YEARS EXPERIENCE a. Total 11		b. With Current Firm 5
15. FIRM NAME AND LOCATON (City and State) Coastal Eco-Group Inc., Deerfield Beach, FL				
16. EDUCATION (Degree and Specialization) Master of Science in Marine Biology & Remote Sensing			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Academy of Underwater Scientists (AAUS), International Society for Reef Studies (ISRS), Florida Association of Environmental Professionals (FAEP), Trained in Uniform Mitigation Assessment Method (UMAM), SDI OW Instructor				

1
9. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Rybovich Riviera Beach Marine Facility Project and Rybovich West Palm Beach Marina Expansion, Palm Beach County, FL	PROFESSIONAL SERVICES 2010 - 2014	CONSTRUCTION (if applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE X Check if project performed with current firms a. Work performed as a Senior Marine Scientist with Coastal Eco-Group Inc. Conducted comprehensive benthic habitat mapping and SAV characterization surveys for the Rybovich Riviera Beach Marine Facility Project and Riviera Beach Municipal Marina and seagrass mitigation sites including Little Munyon Island. Line-intercept and point quadrat samples were assessed along transects to qualitatively describe bottom type and quantitatively assess percent cover of seagrass and species composition. Evaluated species cover using Braun-Blanquet method. DGPS mapping of seagrass beds was performed using a Trimble GeoXT DGPS. Co-authored Biological Assessments and Essential Fish Habitat Assessment. Assisted with preparation of technical responses to Requests for Additional Information (RAI) from the U.S. Army Corps of Engineers and NMFS. Assisted with preparation FDEP and USACE permit applications, Uniform Mitigation Assessment Method (UMAM) documentation and mitigation development. Co-authored technical reports in compliance with FDEP and USACE permit requirements.		
Port Everglades Sand Bypass Project, Broward County, Florida	PROFESSIONAL SERVICES 2010 – 2014	CONSTRUCTION (if applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE X Check if project performed with current firms b. Work performed as a Senior Marine Scientist with Coastal Eco-Group, Inc. Co-authored NEPA documentation including Biological Assessment (BA) and Environmental Assessment (EA) in compliance with federal requirements under Section 7(c) of the Endangered Species Act. Assisted with preparation of technical responses to Requests for Additional Information (RAI) from the U.S. Army Corps of Engineers (USACE) and NMFS. Co-authored technical reports in compliance with FDEP and USACE permit requirements.		
Lake Worth Lagoon Annual Seagrass Transect Monitoring Program, Palm Beach County, FL	PROFESSIONAL SERVICES 2011 – 2014	CONSTRUCTION (if applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE X Check if project performed with current firms c. Work performed as a Senior Marine Scientist with Coastal Eco-Group, Inc. Conducted annual seagrass surveys of 9 permanent transects utilizing <i>in situ</i> quadrats, digital video transect data, and delineation of sediment and seagrass cover changes along permanent transects. Evaluated species cover via frequency of occurrence in quadrats and Braun-Blanquet method. Co-authored annual reports to examine long-term trends in seagrass distribution and cover in the Lake Worth Lagoon.		
2010 and 2014 North & South Boca Raton Beach Renourishment Projects, Palm Beach County, Florida –Biological Monitoring of Natural Hardbottom & Mitigation Artificial Reef , Boca Raton, Florida	PROFESSIONAL SERVICES 2006 - 2014	CONSTRUCTION (if applicable) 2010 and 2014
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE X Check if project performed with current firms d. Work performed as a Marine Scientist with Coastal Eco-Group, Inc. and previous employment with Coastal Planning & Engineering, Inc. Environmental monitoring of hardbottom habitats, data analyses, project documentation, and pipeline corridor benthic habitat mapping; biological community monitoring of natural and artificial reefs; nearshore hardbottom edge delineation and benthic habitat characterization; digital video transect and still photography documentation; and interpretation of aerial photography. Prepared technical reports in compliance with FDEP and USACE permit requirements.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Gary A. Zarillo, Ph.D., PG	13. ROLE IN THIS CONTRACT Geologist/Oceanographer	14. YEARS EXPERIENCE	
		a. TOTAL 34	b. WITH CURRENT FIRM 24

15. FIRM NAME AND LOCATION (City and State)
Scientific Environmental Applications, Inc., Melbourne, Florida

16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. 1970. Geology, University of Rhode Island M.S. 1975. Geology, University of Rhode Island Ph.D. 1979. Geology, University of Georgia	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Geologist, North Carolina & Florida
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Excellence in Research, College of Engineering, Florida Institute of Technology, 2002
35 Publications refereed and technical
Organizations-American Geophysical Union, Society for Sedimentary Geology

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
Geotechnical Investigation of the Ocean Ridge Borrow Area for Palm Beach County, Florida	2011-12	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Core borings collected in 1992, 1993 and 2011 were analyzed to characterize potential sand sources in the Ocean Ridge Borrow areas offshore of south Palm Beach County. Potentially up to 6.1 million yds ³ of sand may be available in two areas. Screening of material and strategic dredging may be necessary to avoid scattered rock rubble found at shallow depths	<input checked="" type="checkbox"/> Check if project performed with current firm	
Geotechnical Investigation for the City of Hillsboro Beach, Florida Renourishment Project	2008-2011	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE A literature research was conducted prior to a geologic seismic study to determine the availability of beach quality sand. Data from core borings collected in 2009 were analyzed with data of cores collected (1996-2001) and a 2009 sub-bottom seismic survey to characterize sand resources in Borrow Area 1 at the north end of Broward County. An estimated 1.12 million yds ³ of beach quality material weredepicted in a geologic model of Borrow Area 1.	<input checked="" type="checkbox"/> Check if project performed with current firm	
Geomorphic Investigation of Tidal Inlets: Applications in Coastal Engineering	2001-2011	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Data post processing and analysis of coastal geomorphic data in GIS software platforms. He developed a public domain ArcView™ extension to automatically map shorelines by extracting a polygon representation of the beach. ArcView™3.x extension termed BEACHTOOLS, calculates transects from a baseline at any user defined interval, allowing for high frequency, shore perpendicular measurement of the wet/dry and vegetation lines. Updated BEACHTOOLS 9.1 and developed INLETGIS9.1 in 2007.	<input type="checkbox"/> Check if project performed with current firm	
CT-39054 Biological Characterization/Numerical Wave Model Analysis within Identified Borrow Sites Offshore the West Coast of Florida	2005-10	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Conducted literature research on geological and physical resources to determine the potential impacts of dredging to shoals and near shore beaches. Applied numerical model simulations to test the potential impacts that excavating various volumes of sand may have on 3 sand shoal sites and the beaches nearshore to the sites. The project study area is offshore in Federal waters of west Florida from Sarasota to Lee Counties.	<input checked="" type="checkbox"/> Check if project performed with current firm	
Palm Beach County, FL- Coastal Sediment Sampling and Analysis 2003-2005	2003-11	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Supervised offshore vibracoring operations to obtain (56) cores. Logged cores, photographed, and conducted analyses for grain size, carbonate, organic content, and fines for 350 sediment samples. Provided final report of computer-generated grain size data, classifications, and plots in ASTM format using gINT™. Core samples based on sub-surface investigation 125 miles of survey lines using a high resolution CHIRP sub-bottom profiler and side-scan sonar coincident with a	<input checked="" type="checkbox"/> Check if project performed with current firm	

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

1

21. TITLE AND LOCATION (City and State)

TraPac Container Terminal Sedimentation Reduction Dredging Project, Jacksonville, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2012

CONSTRUCTION (If applicable)

2012

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

TraPac, Inc.

b. POINT OF CONTACT

Dennis Kelly, Vice President

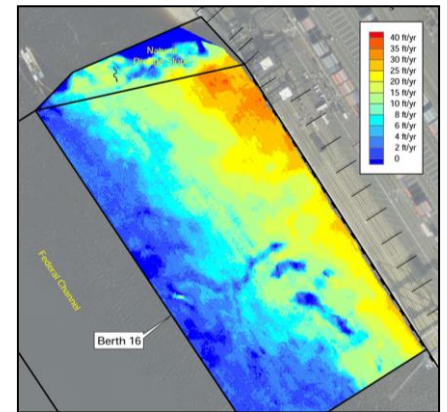
c. POINT OF CONTACT TELEPHONE NUMBER

904-696-4901

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

The TraPac container ship has been experiencing high rates of shoaling at both Berths 16 & 17 since initial construction in 2008, primarily due to eddy formation at Berth 16. Approximately 468,000 CY of sediment was deposited in the two berths between August 2008 and August 2010.

Utilizing the collected data, ATM set up a 3-D curvilinear orthogonal finite difference grid of this region of the river and adapted it to the existing SJRWMD EFDC TMDL model. ATM used the sediment transport components of EFDC to evaluate potential solutions for minimizing the shoaling rates in the berths.



ATM performed a hydrodynamic and sedimentation study to evaluate the problem and identify potential solutions to reduce the sedimentation rate. Current measurements were made with a towed ADCP to obtain both neap and spring tide condition data across a number of transects. A fixed HADCP was mounted on the bulkhead to obtain continuous data to document eddy formation at Berth 16. Bottom sediments were collected at multiple locations and analyzed for grain size distribution and percent organic material. Water samples were also collected at multiple depths concurrent with the ADCP transects to determine TSS and salinity for use in sediment transport modeling.

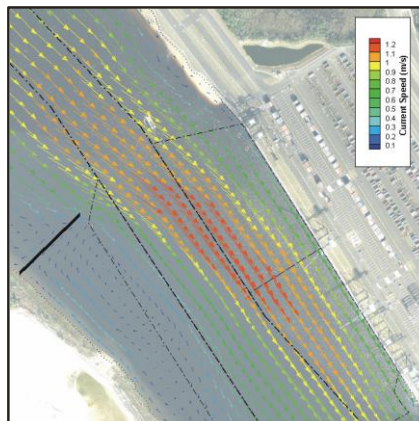
The study identified modifications to the entrance channel and berth design that decreases sedimentation rates substantially. Work included modification to the existing UACE & FDEP permits to include the designed modifications to the entrance channel.

ATM developed construction drawings and specifications, provided bid support and construction administration for the modified entrance channel. Approximately 220,000 CY of material was removed to complete the berth modifications. Total ATM Fees: \$242,658

Relevance:

- Navigation
- Hydraulics & Hydrodynamics
- 3-D Flow & Integrated Surface Water Modeling
- Sediment Transport
- Water Quality Analyses
- Analytical & Statistical Data Evaluation
- Design, Bid & Construction Administration Services

The TSS sampling data indicated a lognormal distribution, suggesting sufficient data was collected to be representative. The highest TSS values were generally found near the beginning of the flood tidal phase and were more pronounced during spring tides, suggesting tidal pumping as the dominant transport mechanism. TSS vs salinity plots indicated a dominant role of re-suspension at the beginning of the flood tidal phase.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION(City and State) Jacksonville, FL	(3) ROLE Permitting, Design, Field Data Collection, Construction Services
(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION(City and State) St. Augustine, FL	(3) ROLE Bid Documents and Technical Specifications
(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION(City and State) Melbourne Beach, FL	(3) ROLE Dredge Area Modification Design
(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION(City and State) Gainesville, FL	(3) ROLE Quality Assurance/Quality Control
(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION(City and State) Charleston, SC	(3) ROLE Field Data Collection, Modeling

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

2

21. TITLE AND LOCATION *(City and State)*
Sand Trap Dredging and Expansion, Sebastian Inlet, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
2014	2012/2014

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Sebastian Inlet District	b. POINT OF CONTACT Martin Smithson, Administrator	c. POINT OF CONTACT TELEPHONE NUMBER 321-724-5175
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24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

ATM is supporting the District in the re-design (expansion), permitting and maintenance dredging of the inlet sand trap. This project includes the maintenance dredging of the currently full sand trap and the expansion of the trap to increase both the efficiency and capacity of the structure. Beach compatible sand will be placed on the downdrift beaches. In addition to the sand trap excavation the permitting effort will address potentially direct and secondary impacts to nearshore hardbottom.

This project was constructed in two phases. Phase 1 consisted of the excavation of beach compatible material within the trap and channel under existing permits. This effort was completed in 2012. ATM provided construction administration support for this effort. Phase 2 consisted of expansion of the sand trap including excavation of rock material in addition to sand. ATM supported the permitting of the trap expansion in addition to the development of an updated inlet maintenance program.

In addition to these services, ATM is supporting the District in consultation with State and Federal regulatory agencies with regard to extensive nearshore hardbottom and seagrass resources in the vicinity of the inlet and is conducting both physical and biological monitoring of the 2012 inlet maintenance dredging effort.

ATM also supported the construction of a post-hurricane Sandy emergency dune project to restore dunes downdrift of the inlet. This project utilized a combination of inlet maintenance material and sand from an upland source.

Sand trap maintenance dredging and expansion was completed in July of 2014. A total of approximately 300,000 cy of sand have been bypassed to downdrift beaches.

Total construction cost for all phases was \$6.1 million.



Beach placement of inlet trap sand

Services:

- Coastal Engineering design
- Permitting
- Navigation
- Ecosystem Restoration
- Bathymetric Surveying
- Construction Administration
- Physical and Biological Monitoring

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION <i>(City and State)</i> West Palm Beach, FL	(3) ROLE Project Management, Engineering, Permitting
b.	(1) FIRM NAME Applied Technology & Management, Inc.	(2) FIRM LOCATION <i>(City and State)</i> Melbourne Beach, FL	(3) ROLE Construction oversight and management
c.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

3

21. TITLE AND LOCATION (City and State)

St. Augustine Marina Dredging, City of St. Augustine, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2013

CONSTRUCTION (If applicable)

2013

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of St. Augustine

b. POINT OF CONTACT

Jim Piggott, Director General Services

c. POINT OF CONTACT TELEPHONE NUMBER

904-825-1010

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

ATM provided engineering services for the Environmental Resource Permitting and design of a new breakwater and marina expansion of 50 additional boat slips.

The project also included **dredging of 12,000 cubic yards** of accumulated material from the marina basin and transport to an offsite disposal facility. *The permits for dredging and the breakwater were secured in less than 6 months time in early 2011.*

ATM provided construction documents, bid support and construction oversight. *The dredging was completed in 2012, and the dock expansion was completed in early 2013. Permit modifications for the dredging included the use of Lighthouse Boat Ramp as an alternative offload area site for the dredged material to expedite the dredging.*

In addition, ATM provided design and construction administration for installation of the City's 178 slip mooring field project. The project design addressed variable subsurface geology, unique current and wind combinations, and construction within an area actively used for mooring private vessels. The mooring field was completed in 2010.



Services Rendered:

- Engineering
- Permitting
- Construction Bid Documents
- Construction Oversight

ATM Fees: Dredging Plans & Specs:
\$82,115

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE
a.	Applied Technology & Management, Inc.	Melbourne Beach, FL	Engineering, Permitting, Construction Services
b.	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION(City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

4

21. TITLE AND LOCATION *(City and State)*

Martin County Dredging Feasibility Studies, Martin County, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2012

CONSTRUCTION *(If applicable)*

2008/2012

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Martin County, FL

b. POINT OF CONTACT

Kathy Fitzpatrick, P.E.

c. POINT OF CONTACT TELEPHONE NUMBER

772-288-5429

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

ATM has performed a number of feasibility, permitting, design and construction services related to dredging within the Manatee Pocket area in Martin County. The Manatee Pocket is comprised of publicly maintained water access/drainage and privately-owned residential properties with limited navigation access.

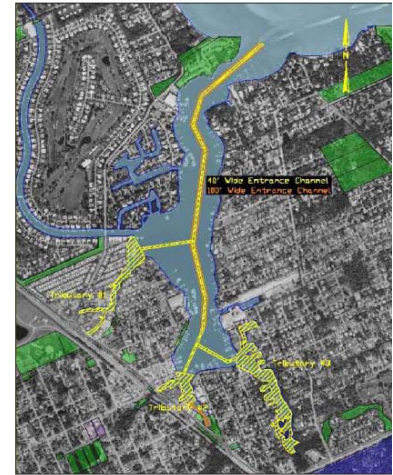
As part of the **Broward Street boat ramp** maintenance dredging project, ATM performed a feasibility study, cost analysis, sediment testing, and permit and submerged lands lease applications. The project removed approximately 2,500 cubic yards of muck over 30,000 square feet of public navigation channel accessing boat ramp and immediately adjacent to privately-owned residential slips in Stuart, FL. ATM's Environmental Resource Application was deemed complete in February 2006 by the DEP. In addition to identifying potential hurdles prior to permitting the removal of material with elevated levels of copper, mercury, and arsenic, ATM also created the construction documents, drawings, and specifications for the bidding and construction of the project. This project was bid and constructed with oversight by ATM during the summer of 2008.

In 2007, ATM performed additional dredge feasibility studies and reports, and coordinated the sample acquisitions and analyses of sediments from multiple locations within three water bodies in Martin County. Samples were taken at the mouth

and from an internal location within **Warner Creek, Danforth Creek, and Hidden River.**

ATM identified potential permitting hurdles, generated preliminary designs, identified upland disposal sites, and generated initial cost estimates for the removal of muck and sediment in **Manatee Pocket**. In addition to the feasibility study and report, ATM outlined a post-project monitoring plan designed to quantify the environmental benefits gained from the removal of muck from the existing system. ATM analyzed the project and determined its eligibility to receive cost sharing grants and funding from local agencies. The initial study was expanded to include the engineering feasibility and initial cost estimates of dredging nearby Warner Creek.

From 2011 through 2012, ATM provided construction observation and administration support for the Manatee Pocket Dredging Project, which involved the hydraulic and mechanical excavation of over 250,000 cubic yards of primarily muck material. The project involved the removal of material from both the public waterway and adjacent private parcels.



Services Rendered:

- Project Feasibility
- Alternatives Analysis
- Cost Analysis
- Sediment Testing
- Permitting
- Bidding
- Construction Management

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Applied Technology and Management, Inc.	West Palm Beach, FL	Project Management, Engineering, Feasibility Studies, Design, Bid, Construction Management
b.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

5

21. TITLE AND LOCATION *(City and State)*

Lake Worth Lagoon Waterway Dredging, Town of Palm Beach, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

Ongoing

CONSTRUCTION *(If applicable)*

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Town of Palm Beach, FL

b. POINT OF CONTACT

Rob Weber – Coastal Coordinator

c. POINT OF CONTACT TELEPHONE NUMBER

561-838-5440

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

The Town of Palm Beach is performing maintenance dredging of existing legacy navigation channels and access spurs to existing residential docks east of the Atlantic Intracoastal Waterway in the Lake Worth Lagoon.

An innovative and cost-effective plan for dredged sediment placement is being permitted for the project, wherein the sediments will be placed in an existing anoxic deep dredge hole near the project area. This approach will perform the environmental enhancement of bringing the dredge hole into the photic zone, while also providing an economically viable material placement plan.

Currently in the permitting stage, the project will result in both navigational and environmental benefits for the Town of Palm Beach and its residents. The project proximity to the C-51 canal discharge has contributed to the canal sedimentation. The maintenance dredging of these canals will; increase the flushing and circulation in the project areas, remove muck sediments from portions of the project areas, improve residential recreational navigation, and reduce the amount of vessel groundings.

The project has involved significant public outreach and public involvement. Affected residents formed an association and entered into an agreement with the Town for funding assistance, with the Town as the permittee. This arrangement was extremely beneficial to the permitting process.

The total sediment to be removed is estimated at 55,200 cy at a cost of \$1,380,000. ATM Fees: \$160,000






Relevance:

- Navigation
- Waterway Engineering & Analysis
- Ecosystem Restoration
- Bathymetric Surveying
- Sediment Sampling/Testing
- Environmental Survey
- Permitting
- Dredged Material Management
- Public Outreach

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Applied Technology & Management, Inc.	West Palm Beach, FL	Project Management and Engineering, Seagass Surveying
b.	Applied Technology & Management, Inc.	Cocoa Beach, FL	Surveying Services
c.	SEA	Melbourne, FL	Geotechnical Services
d.			

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		20. EXAMPLE PROJECT KEY NUMBER	
		 6	
21. TITLE AND LOCATION <i>(City and State)</i>		22. YEAR COMPLETED	
Treasure Beach Canal Dredging Projects, St. Johns County, FL		PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
		2013	2014
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER	b. POINT OF CONTACT	c. POINT OF CONTACT TELEPHONE NUMBER	
St. Johns County Board of County Commissioners	Michael B. Rubin	904-209-0190	
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT			
<p>ATM performed a feasibility analysis of dredging over five miles of residential canals in the Treasure Beach subdivision. The canal system includes an access channel to the canals from the Intracoastal Waterway. The canals were last dredged in 1994 after being constructed over a period of time starting in the 1950s. ATM's analysis included an estimate of the amount of dredged material, a comparison of dredging methods, a summary of permitting requirements, an assessment of funding opportunities and mechanisms, an opinion of cost, and our recommendations. The project culminated with a Final Report and presentation to the homeowners association in 2008.</p> <p>The project required coordination with County Staff and local homeowners through on site meetings and presentation to the general public. Due to the sensitive nature of this project, ATM assisted the County with the public relations efforts to ensure approval by all stakeholders.</p> <p>In 2013, with the project formally approved by the Board of County Commissioners, Applied Technology and Management was part of the team that won a competitive bid to design, permit and manage the dredging project.</p> <p>ATM provided engineering planning, design, and technical support for dredging and disposal of ~86,000 cy of maintenance material from the County-maintained canals.</p>			
<p>ATM focused on development of conceptual design for a temporary dredge materials management area (DMMA) at the Florida Inland Navigation District's (FIND) SJ-20A site. This effort required field and data review, close coordination with the County, FIND, USACE, and FDEP. ATM also supported permitting with technical input and documentation related to the DMMA.</p> <p>At the County's request, ATM also developed bid drawings for improvements to the Butler Park boat ramp as part of the project</p>			
<p>Services Rendered in 2008:</p> <ul style="list-style-type: none"> ▪ Engineering Feasibility Study ▪ Assessment of Funding Opportunities ▪ Opinion of Cost & Recommendations ▪ Dredging Method Comparisons ▪ Public Liason 			
<p>2013 Activities</p> <ul style="list-style-type: none"> ▪ Permitting ▪ DMMA Engineering Design ▪ Coordination ▪ Boat Ramp Improvements Design Plans & Specs 			
<p>ATM Fees: \$35,000</p>			
 			
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
1.	(1) FIRM NAME Applied Technology and Management, Inc.	(2) FIRM LOCATION <i>(City and State)</i> Melbourne Beach, FL Cocoa Beach, FL	(3) ROLE Project Engineer Surveying
2.	(1) FIRM NAME Applied Technology and Management, Inc.	(2) FIRM LOCATION <i>(City and State)</i> Jacksonville Beach, FL	(3) ROLE Engineering Support, CAD
3.	(1) FIRM NAME Applied Technology and Management, Inc.	(2) FIRM LOCATION <i>(City and State)</i> West Palm Beach, FL	(3) ROLE Environmental Support

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

7

21. TITLE AND LOCATION *(City and State)*

City of Fernandina Beach Marina Dredging Feasibility Study

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2011

CONSTRUCTION *(If applicable)*

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of Fernandina Beach, FL

b. POINT OF CONTACT

Mr. Lynn Williams, Nassau Co. FIND Commissioner

c. POINT OF CONTACT TELEPHONE NUMBER

904-491-0059

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

ATM completed an alternatives assessment of three potential alternatives to the maintenance dredging regime for the City of Fernandina Beach, Florida's municipal marina. Current maintenance is conducted using mechanical dredge technology with disposal in a distant CDF (via barge) or landfill (via truck haul). Both alternatives are expensive and unsustainable. Alternatives evaluated included development of a new nearby CDF, use of rapid dewatering technology and implementation of water injection dredging (WID).

Previous to this recent alternatives analysis, ATM planned and designed marina improvements to reduce marina sedimentation. Services included hydrodynamic modeling, sediment and water chemistry analysis, marsh creation design, and dredge planning and design.



Services Rendered:

- Alternatives Assessment
- Modeling
- Chemistry Analysis
- Marsh creation Design
- Dredge Planning & Design

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Applied Technology & Management, Inc.	Gainesville, FL	Alternatives Assessment
b.	Applied Technology & Management, Inc.	Melbourne Beach, FL	Engineering Consultant
c.			
d.			
e.			
f.			

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)



20. EXAMPLE PROJECT KEY NUMBER

8

21. TITLE AND LOCATION *(City and State)*

Hillsboro Canal Dredging Project, Boca Raton, FL

22. YEAR COMPLETED

PROFESSIONAL SERVICES

Ongoing

CONSTRUCTION *(If applicable)*

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

City of Boca Raton, FL

b. POINT OF CONTACT

Jennifer Bistyga – Coastal Coordinator

c. POINT OF CONTACT TELEPHONE NUMBER

561- 416-3397

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT

The City of Boca Raton is conducting the Phase I project in coordination with an FIND grant for performing maintenance dredging of the Hillsboro Canal, servicing residential boating, as well as public and private marinas. The project length is from the confluence with the El Rio Canal to the west, extending to Deerfield Island Park to the east.



Bathymetric survey and analysis have located the shoaled areas and allowed for a calculation of existing dredge volumes. Both physical and chemical analyses have been performed on project area sediment samples, and a seagrass survey has been conducted for all proposed dredging locations.

When completed, the project will result in navigational benefits for the City of Boca Raton and its residents. The Hillsboro Canal was initially excavated by the USACE and has been used for flood control, commerce, and recreational boating. The maintenance dredging of the canals will improve navigation and reduce the amount of vessel groundings. The project is ongoing in 2014.

As part of a maintenance dredging, ATM provided outreach and education by holding several public forum meetings. The meetings were held to inform, educate and solicit feedback from public and private stake holders as well as adjacent municipalities. ATM incorporated the stakeholder comments and feedback into a revised dredging plan. ATM also presented the project to various municipal and marine advisory boards as project outreach and to garner support for the project. Progress meetings are being conducted throughout the regulatory permitting process of this project.

Services Rendered:

- Bathymetric Surveying
- Geotechnical/Sediment Analysis
- Disposal/Dewatering Site Selection
- Seagrass/Benthic Resource Survey
- Permitting
- Plans/Specs/Bid Assistance
- Meetings/ Coordination

ATM Fees: \$98,650

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Applied Technology & Management, Inc.	West Palm Beach, FL	Project Management, Engineering, Coordination
b.	Applied Technology & Management, Inc.	Cocoa Beach, FL	Surveying Services
c.	CEG	Deerfield Beach, FL	Seagrass Survey
d.	SEA	Melbourne, FL	Geotechnical Services
e.			

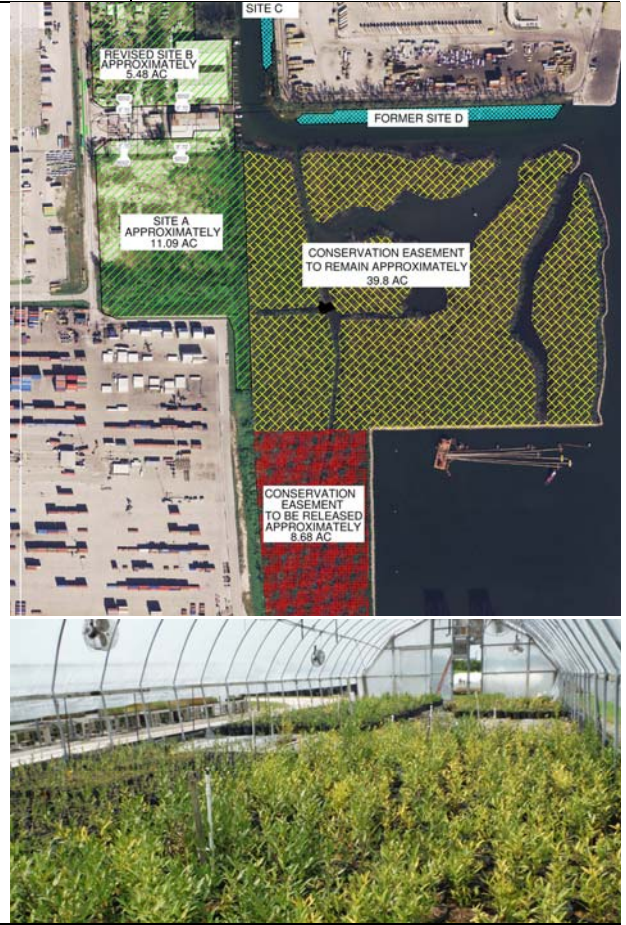
F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER 9
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21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
Port Everglades Turning Notch Mangrove Wetland Creation Project Fort Lauderdale, FL	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER Broward County Port Everglades	b. POINT OF CONTACT NAME Bob Musser	c. POINT OF CONTACT TELEPHONE NUMBER (954) 468-0158

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT
(Include scope, size, and cost)

Miller Legg is a subconsultant to Bergeron Land Development for this two-step Port Everglades Turning Notch Mangrove Wetland Creation Project. During pre-construction, the firm provided constructability review services including cost estimates for nursery selection, prequalification of nursery subconsultants, prequalification and identification of plant installation, selection of mitigation maintenance subconsultants, and quality control observation and reports. Currently during construction, the firm is providing field support services for environmental and engineering permit compliance, protected species observation, including mangroves and manatees, water quality monitoring, turbidity monitoring, erosion control inspection, plan review, environmental administration and reporting, and mangrove and upland planting oversight.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME Miller Legg	(2) FIRM LOCATION (City & State) Ft. Lauderdale, FL	(3) ROLE Subconsultant
b.	(1) FIRM NAME	(2) FIRM LOCATION (City & State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City & State)	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION (City & State)	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION (City & State)	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION (City & State)	(3) ROLE

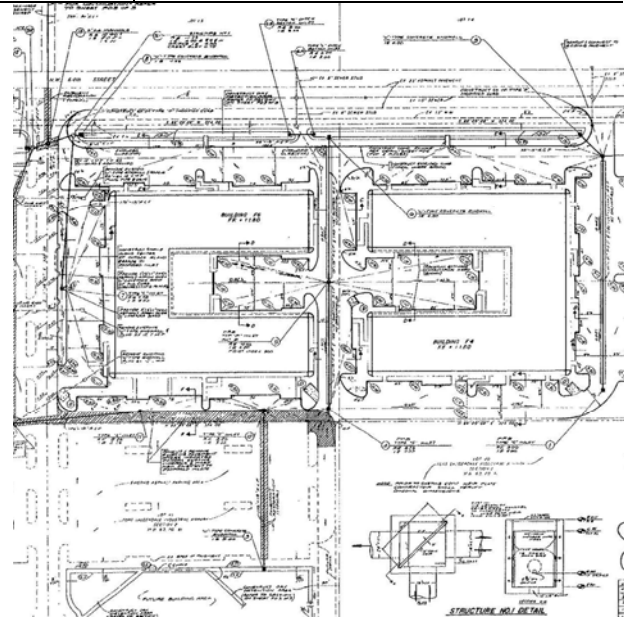
F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER 10
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21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
City of Fort Lauderdale Executive Airport (FXE) Parcels B, C & D Permitting Fort Lauderdale, FL	PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
	2014	

23. PROJECT OWNER'S INFORMATION		
d. PROJECT OWNER City of Fort Lauderdale	e. POINT OF CONTACT NAME Fernando Blanco	f. POINT OF CONTACT TELEPHONE NUMBER (954) 828-6536

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT
(Include scope, size, and cost)

Miller Legg modified/obtained permits, prepared specifications, plans, bidding services and provided construction administration and post construction services for cleaning and grubbing for the FXE Parcels B, C and D. Engineering services included the preparation of an earthwork estimate of quantities and probable cost report, which required coordination with various City departments and Geotechnical professionals. The report consisted of classifying existing soils, quantifying earthwork activities, estimating construction costs for City budgeting purposes, and preparation of earthwork plans for site filling and construction of berm. Services rendered also included the preparation of bid documents consisting of specifications, grading plans, and pollution prevention plans. In addition, Miller Legg prepared engineering plans for the installation of permanent and temporary fencing, requiring traffic engineering services and coordination with City surveyors, contractor, utility companies, and City of Ft. Lauderdale permitting officials. Miller Legg also performed compliance monitoring for fence installation, as well as for site plan clearing and environmental construction.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE
	Miller Legg	Ft. Lauderdale, FL	Prime
b.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City & State)</i>	(3) ROLE

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Michael Jenkins, PhD, PE	Principal/QA/CC		X		X	X			X		
Joseph Chaison, PE	Project Manager		X			X	X		X		
Steven Peene, Ph.D.	Water Quality	X									
Pete Peterson, P.E.	Engineering and Design	X	X	X			X	X			
Gary Bazemore, PSM	Hydrographic and Land Surveying		X			X	X		X		
Robert Semmes, MS	Sediment Planning	X				X		X			
John Wazak	Field Work				X	X			X		
Jesse Eakin	CAD Technician		X			X	X		X		
Dylan Larson, PWD, CEP, CLI	Upland Interface, Permitting									X	X
Jennifer Shipley	Biologist – Upland/Permitting									X	X
Cheryl Miller	Environmental Assessments		X								
Adrienne Carter	Environmental Assessments		X								
Gary Zarillo (SEA)	Sediment and Geotechnical Analysis		X			X					

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Trapac Container Terminal Sedimentation Reduction Dredging	6	Treasure Beach Canal Dredging
2	Sebastian Inlet District Sand Trap Dredging	7	City of Fernandina Beach Marina Dredging Feasibility
3	St. Augustine Marina Dredging & Breakwater	8	Hillsborough Canal Dredging
4	Manatee Pocket Dredging	9	Port Everglades Turning Notch Mangrove Wetland Creation
5	Waterway Dredging of Lake Worth Lagoon	10	Fort Lauderdale Executive Airport Parcels B, C, D Permitting

H. ADDITIONAL INFORMATION

29. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED:

A registered Florida Corporation, **Applied Technology & Management, Inc. (ATM)** has provided coastal, environmental, marine, and water resources engineering and science services to a vast array of public and private clients for over 30 years. Founded in 1984, ATM has eight offices located in the eastern United States (seven in Florida). Our staff of 50 includes Professional Engineers, Ecologists, Environmental Scientists, Modelers, Marina Consultants, a Professional Surveying Team, and CAD and GIS Specialists that work on projects throughout the United States and internationally.

ATM assists our clients with complex environmental and development issues in oceans, waterways, and along the shoreline. ATM's broad array of technical support includes assistance with assessment, planning, management, permitting, development, mitigation, and compliance.

Maintenance dredging of developed waterways and marinas as well as new-work deepening, widening, and establishment of new channels and basins are major issues throughout Florida, and ones that ATM has been dealing with for many years. **ATM's Coastal/Marine Engineering Division** has been the consultant engineer on dredging projects throughout the southeastern U.S. and abroad for well over two decades. Our projects have included port and harbor expansions, marina development, shoreline stabilization, maintenance dredging, dredged material management, channel and berth deepening/widening and inlet management planning. We have considerable experience and expertise in projects that involve the dredging of materials ranging from rock, to sand, to high silt "muck" material, including a range of available dredging, dewatering and disposal methods. Project sites range from small, environmentally sensitive locations to urban, heavy-use, and congested facilities. Issues considered throughout our projects have been minimization of impacts to environmental resources, implementation of recognized and advanced industry standards in design and construction techniques, and specific attention to scheduling and cost.



Our staff engineers and scientists are highly experienced with evaluating projects in terms of long-term management and sustainability within the complex regulatory framework of Florida and the southeastern U.S. Determining the best long-term solution for each project has given our staff varied project experience that includes: open-water disposal design, planning, and permitting; engineered confined disposal facilities for upland disposal; evaluation of a range of dredging techniques and alternatives to dredging; and development of beneficial use options for management of maintenance dredged material. The ATM Team is especially knowledgeable of the federal, state and local regulations that must be addressed to complete the permitting process.

In general, our dredging services include:

- Feasibility & Alternatives Studies
- Evaluation of Existing Conditions, Processes & Causes of Sedimentation
- Development and Permitting of Dredged Material Management Areas (DMMA's)
- Ocean Disposal Permitting, Design, & Environmental Studies
- State & Federal Permitting & Coordination
- Dredging Project Design & Specifications

- Dredging Project Management & Monitoring
- Hydrographic, Bathymetric & Upland Surveys
- Environmental Resource Surveys, Mitigation Strategies & Habitat Creation Plans
- Beneficial Uses for Dredged Material – including beach nourishment, sand bypassing, marsh & wetland creation, habitat islands, & geotubes)
- Public Coordination & Liason
- Construction Administration Services

Within the last 10 years alone, we have overseen the design and dredging of over 5 million cy of dredged material with aggregate construction costs exceeding \$50 million. An overview of relevant dredging projects and the range of services provided is presented within **Table 1 – Representative ATM Dredge Experience**, included at the end of this section.

ATM - SURVEYING CAPABILITIES

ATM is a Florida licensed survey company providing a wide range of land and hydrographic surveying services using in-house equipment. Key staff has over 35 years of combined surveying experience and utilizes state-of-the-art technology in conducting both nearshore hydrographic and upland surveys. ATM’s surveyor uses a 25' survey vessel capable of deploying a range of hydrographic survey equipment including side-scan sonar, sub-bottom seismic sonar, magnetometers, echosounder, Acoustic Doppler Current Profilers (ADCP), camera systems, water quality instruments, and tide gauges. These instruments are regularly used for the completion of inshore and nearshore survey tasks. Our GPS-based survey and mapping capabilities allow for rapid and flexible topographic surveys at remote locations. ATM's Trimble RTK GPS, which provides millimeter accuracy, is used to establish horizontal and vertical control networks for the variety of surveys required for coastal and environmental projects. In addition to the RTK survey-grade GPS, ATM maintains a Trimble marine DGPS with beacon, satellite, and OmniSTAR capabilities, as well as conventional survey equipment such as differential levels and total stations.

In addition to our GPS technology, ATM's equipment for hydrographic and bathymetric work includes an Odom Precision Fathometer, RDI Workhorse ADCP, water quality instruments, and the latest HYPACK 2014 software to provide real-time hydrographic data for mapping purposes. The equipment can be deployed either on ATM's 25' all-weather survey vessel or configured for other boats as required for remote locations.

PERMITTING – RAI

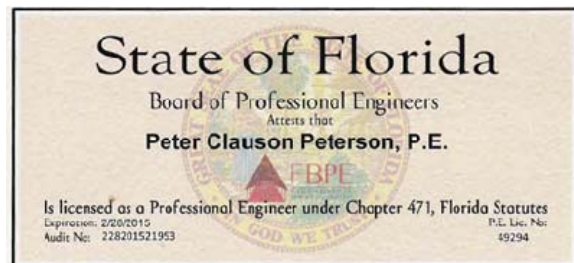
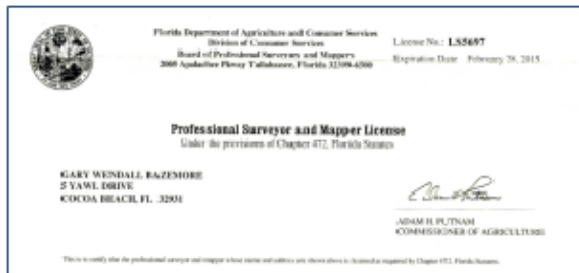
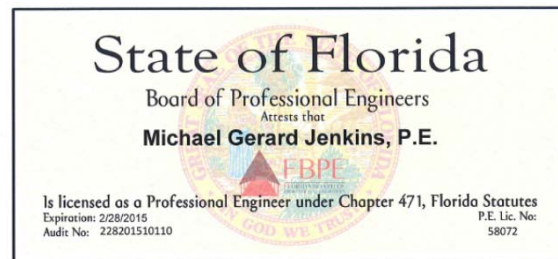
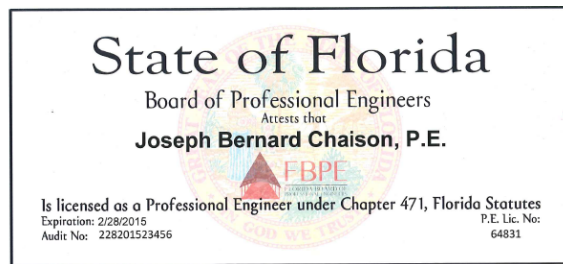
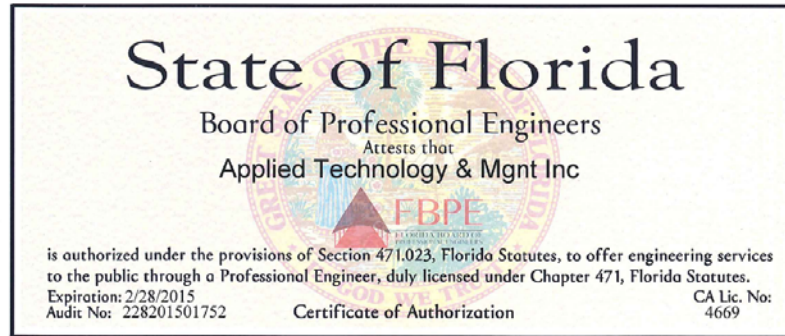
ATM’s staff has the necessary understanding of technical, environmental, legal and public awareness issues to deal with the permitting process. We have an on-going, cooperative relationship with the permitting agencies with whom we work on a daily basis. This enables both the regulator and the applicant to meet their goals without costly battles.

In addition to many state and local agencies, our project team members all have extensive and successful working relationships with:

- | | |
|---|--|
| ▪ Florida Department of Environmental Protection (FDEP) | ▪ Florida Fish and Wildlife Conservation Commission |
| ▪ Environmental Protection Agency (EPA) | ▪ U.S. Army Corps of Engineers (USACE) |
| ▪ South Florida Water Management District (SFWMD) | ▪ Southwest Florida Water Management District (SWFWMD) |
| ▪ Florida Inland Navigation District (FIND) | ▪ U.S. Geological Survey |

- Broward County Environmental Protection and Growth Management Department (BCEPGMD)
- West Coast Inland Navigation District (WCIND)
- Marine Industry Association of South Florida
- USACE Waterways Experiment Section
- Marine Industry Association (MIA) of Palm Beach County

LICENSES



Work for this project will come mainly from our West Palm Beach office. This office services as ATM's lead office for the Coastal Engineering Team. Both Principal, Michael Jenkins, Ph.D., P.E. and Project Manager, Joseph Chaison, P.E. and other support staff are located in this office. Contact information is:

Michael Jenkins, Ph.D, P.E. / Joseph Chaison, P.E.
Applied Technology & Management
2047 Vista Parkway, Suite 201
West Palm Beach, FL 33411
Ph: 561-659-0041 / Fax: 561-659-3733
Mjenkins@appliedtm.com / jchaison@appliedm.com
Website: www.appliedtmm.com

A breakout of our staff disciplines is shown in the SF330 Part II forms.

FIGURE I - SELECTED DREDGING EXPERIENCE



Project Name	Dredging & Disposal Design	Alternatives/ Feasibility Study	Environmental Studies – EIA/EIS	Financial/ Economic Analysis	Sediment Testing Plan/ Evaluation	Agency/ Public Coordination	Environmental Permitting
Treasure Beach Canal Dredging, St. Johns Co., FL	X	X		X		X	X
Sebastian Inlet Sand Trap Dredging, FL	X					X	X
South Lake Worth Inlet Sand Trap Expansion & Maintenance Dredging, Palm Beach Co., FL	X	X			X	X	X
St. Augustine Municipal Marina Dredging, FL	X		X		X		X
TraPac Dredging Project, Jax Port, Jacksonville, FL	X	X		X	X	X	X
Lighthouse Point Dredge & Bulkhead, Jacksonville, FL	X	X		X	X	X	X
Tampa Bay Canal Dredging, Tampa, FL	X		X				
Crab Cay Dredging, Great Exuma, Bahamas	X	X	X	X	X	X	X
CertainTeed Gypsum, Jacksonville, FL	X	X		X	X	X	X
Albemarle Point CDF Study, Charleston, SC	X	X		X	X	X	
Yacht Haven Grande, St. Thomas, USVI	X	X	X	X	X	X	X
Marsh Landing Marine Basin Excavation, Ponte Vedra, FL	X		X			X	X
Lake Park Marine Revitalization Dredging, FL	X	X	X	X	X	X	X
Marineland Marina Expansion, Marineland, FL	X		X		X	X	X
Village Creek Landing Dredge Disposal & Beneficial Uses Analysis, St. Simons Island, GA	X	X		X	X	X	
Beach Marine Maintenance Dredging, Jacksonville, FL	X		X		X	X	X
Broward Street Boat Ramp Maintenance Dredging, Martin Co., FL	X	X				X	X

Project Name	Dredging & Disposal Design	Alternatives/ Feasibility Study	Environmental Studies – EIA/EIS	Financial/ Economic Analysis	Sediment Testing Plan/ Evaluation	Agency/ Public Coordination	Environmental Permitting
Dredge Feasibility Studies – Warner, Danforth and Hidden River Creeks, Martin Co., FL		X	X	X	X	X	
Manatee Pocket Dredging Feasibility Study, Martin Co., FL		X	X	X			
Martin County Dredge Feasibility Study, FL	X	X	X	X	X	X	X
Grand Bahama Island Resort, Dredging Design	X	X	X	X	X	X	X
Bimini Inlet Dredge Design, Bahamas	X	X	X	X		X	X
Ambersand Beach Nourishment, Indian River Co., FL	X	X	X			X	X
Lake Osborne Feasibility Study & Muck Dredging Project, Palm Beach County, FL	X	X	X		X		
Georgetown Harborwalk Marina Dredging, SC	X	X	X	X	X	X	X
Indian River Marina Redevelopment, Rehoboth Beach, DE	X	X	X	X	X	X	X
New Turning Basin & Berth Facilities, Elba Island, SC		X	X	X	X	X	X
Long-Term Dredge Material Mgmt Strategy, South Island Dredging Association, Hilton Head, SC	X	X	X	X	X	X	X
GPA, Agitation Dredging, Savannah Harbor			X	X	X	X	X
Container Berth Expansion 7 & 8, Savannah Terminal, Garden City, GA		X	X	X	X	X	X
Hutchinson Island Slip 1, Savannah Harbor		X	X	X	X	X	X
Kiawah Island, Charleston, SC	X	X	X	X	X	X	X
Harbor Town Dredging and Disposal Plan, Hilton Head, SC	X	X	X	X	X	X	X
International Paper Maritime and Marina Center, Daufuskie Island, SC	X	X	X	X	X	X	X

Project Name	Dredging & Disposal Design	Alternatives/ Feasibility Study	Environmental Studies – EIA/EIS	Financial/ Economic Analysis	Sediment Testing Plan/ Evaluation	Agency/ Public Coordination	Environmental Permitting
Baynard and Braddock Cove, Hilton Head, SC	X	X	X	X	X	X	X
Patriots Point, Charleston, SC	X	X	X	X	X	X	X
Georgia Ports Authority, Savannah Harbor Expansion, Savannah, GA	X	X	X	X	X	X	
The Landings at Skidaway Island, GA	X	X	X	X	X	X	X
Vilano Boat Basin and Marina, St. Augustine, FL	X	X	X	X	X	X	X
Queens Harbor, Jacksonville, FL	X	X	X	X	X	X	X
St. George Island Canal and Marina, St. George Island, FL	X	X	X	X	X	X	X
Naples Landing Park, Naples, FL	X	X	X	X	X	X	X
Takeda Chemical USA, Wilmington, NC	X	X	X	X	X	X	X
Habert International Canal and Turning Basin, Theodore Industrial Park, Mobile Ship Channel, AL	X	X	X	X	X	X	X
Washesaw Marina, Pawleys Island, SC	X	X	X	X	X	X	X
Willbrook Plantation Canal/ Marina, Pawleys Island, SC	X	X	X	X	X	X	X
Briar Cliff Marina, Myrtle Beach, SC	X	X	X	X	X	X	X
HarbourGate Marina, Little River, SC	X	X	X	X	X	X	X
Shorefront Management Plan, Horry and Georgetown County, SC	X	X	X	X	X	X	X
Beach Nourishment, Horry/Georgetown County, SC	X	X	X	X	X	X	X

KEY STAFF OVERVIEWS – ATM

(Key subcontractor staff were discussed in Section 8. Subcontractors.)

Michael Jenkins, Ph.D., P.E., Principal-in-Charge – Dr. Jenkins’ expertise *includes dredging design and habitat restoration with dredged materials*. He will be responsible for technical overview and assuring project QA/QC. Dr. Jenkins’ work includes a range of dredging design, permitting and construction projects within Florida. Related work includes *dredging projects in Martin, Indian River, and Palm Beach counties and for the City of Tampa, as well as the ongoing Sebastian Inlet Sand Trap dredging*. Dr. Jenkins is well-versed in the regulatory requirements for dredge projects within Florida and maintains successful proactive relationships with multiple federal and state regulatory agencies involved in dredging within the region. Dr. Jenkins has led ATM’s Coastal Engineering Division for over 10 years.

Joseph Chaison, P.E., Project Manager – As discussed in Section 3. of this response, Mr. Chaison has designed and overseen the design, mitigation and construction of; navigation maintenance and new-work dredging, dike, spillway, beach nourishment, coastal structure, and seawall projects. He has participated in all phases of coastal engineering projects, from feasibility studies, numerical modeling, environmental impact statements, local, state, and federal permitting, grant funding application, design, plan and specification development, bid form preparation, procurement, award, construction inspection, survey, acceptance, payment review, and monitoring. Mr. Chaison is currently the Project manager of two municipal dredging projects which are coordinating with FIND; Hillboro Canal and Town of Palm Beach Waterways, and understands the needs of municipal dredging projects.

Pete Peterson, P.E., Project Manager – Mr. Peterson has 20+ years of experience in coastal and marine engineering. He has served as the *Engineer of Record on several dredging projects* within Florida and the Southeast Atlantic. He developed the plans, specifications and permit applications for the *maintenance dredging of several marinas and boat basins*. He routinely conducts site operations *inspections and as-built certifications for ongoing dredge projects*. He has a vast knowledge of *dredge disposal options and beneficial uses of dredge material*. Recent work has included the *Treasure Beach 5-mile canal dredging project and the Sebastian Inlet Sand Trap Dredging Project*.



Gary Bazemore, P.S.M. – Mr. Bazemore directs all surveying services conducted within the firm and has over 20 years’ experience with both land based and hydrographic surveying. He has served as Project Manager for large scale, multidisciplinary field investigations including topographic, boundary, control, route, utility, and hydrographic surveys. His hydrographic surveying experience includes bathymetric, side scan sonar, sub-bottom sonar, magnetometer, navigation, current measurements, and tide studies. Mr. Bazemore has extensive experience with post processed and real time kinematic, static, and differential GPS surveying, tidal studies, coastal engineering project construction surveys and contract administration services related to beach nourishment and inlet dredging.

Robert H. Semmes, M.S. – Geotechnical Analysis – Mr. Semmes has 25 years of experience with dredging and environmental issues related to port, navigation and marine infrastructure projects. *He has prepared numerous water and sediment quality assessments, sedimentation investigations, and plans and specifications for dredging, marina, and boat landing construction projects*. He has extensive permit preparation and negotiation experience for projects with complex environmental issues, *including confined*

disposal, open water and ocean disposal of dredged material. He is a valuable consultant because he works in all aspects of our projects including planning, siting, permitting, economic development and feasibility, environmental studies, mitigation, development of plans and specifications, construction supervision, permit compliance, modeling, and monitoring.

Steven Peene, Ph.D., Senior Scientist – Dr. Peene has over 26 years of experience in water resources analysis. He has been involved in the national and local evaluation of impacts to surface waters, including development of Total Maximum Daily Loads (TMDL), Environmental Impact Assessments, and Ecosystem Restoration Projects. Dr. Peene will assist with any water quality analyses or modeling requirements needed for the permitting or design of the project. His expertise in these subjects will allow for the avoidance of potential water quality issues.

ADDITIONAL RELEVANT EXPERIENCE

COASTAL ECO GROUP

LAKE WORTH LAGOON 2013 SEAGRASS MAPPING SURVEY

One of the important projects of the Lake Worth Lagoon Management Plan is mapping of seagrass cover and extent every 5 years using aerial photography. These maps serve as an important management tool in evaluating large-scale spatial and temporal trends in seagrass distribution in the lagoon. Seagrasses were mapped in 2001 and 2007 using color aerial photography interpreted with an analytical stereoplotter and limited field verification. However, water clarity conditions in 2012 and 2013 did not allow for aerial photography of sufficient quality for seagrass mapping.



In June 2013, CEG was contracted by PBCERM through Coast and Harbor Engineering Inc. to conduct the 2013 Seagrass Mapping. The four main tasks in the authorized scope of work were: (1) start-up conference and approval of a Final Field Study Plan; (2) 33 days of ground-truthing field work consisting of two phases: Phase 1) field verification of a minimum of 1,000 locations in LWL and ICW areas of interest, followed by: Phase 2) mapping of outer edges of large beds (>15 acres in size) which showed substantial changes in dense seagrass since 2007; (3) revisions to the 2007 seagrass shapefiles in ArcGIS and production of draft and final maps (County approved ArcGIS geodatabase); and (4) production of a Final Report including a narrative and tabular summary of findings by sub-basin reach, and an analysis of change in seagrass cover/extent compared to 2007.

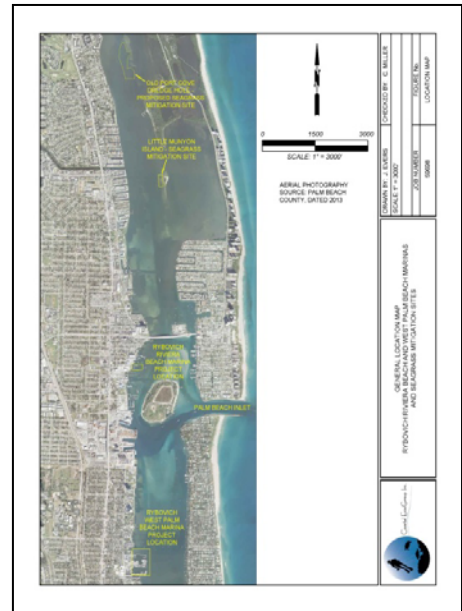
A total of 1,508 sites were sampled during the 2013 LWL Mapping Project: 1,000 sites were located along the perimeter or within the 2007 seagrass beds, and 508 sites were added in the field to document bed expansion or recession from the 2007 mapped bed edges. At each sampling location, a 1 m² quadrat was sampled for species composition and cover. Scientists then searched a 30-m transect line for bed recession or extension at each location and recorded the current bed edge with Differential GPS. Physical habitat data were also recorded including water depth, Secchi depth, temperature, salinity, and sediment type.

The survey data were evaluated by the creation of a project database in Microsoft Access database and comparative maps of seagrass cover/distribution ArcGIS maps to evaluate changes in seagrass areal extent since 2007.

RIBOVICH RIVIERA BEACH MARINE FACILITY

The Rybovich Riviera Beach Marine Facility is a 57-slip commercial marina containing 7.7 acre of uplands adjacent to the Intracoastal Waterway just north of Palm Beach Inlet. The existing dock configuration supports vessels up to 125 feet in length. The West Palm Beach Rybovich Marine Facility is a 59-slip commercial marina containing 11.2 acre of uplands adjacent to the Intracoastal Waterway. In May 2012, Coastal Eco-Group, serving as the environmental consultant to Rybovich, submitted an application for an Environmental Resource Permit for the construction of a vessel lift, access channel, and dock reconfiguration at the Riviera Beach Marine Facility. This original project design was projected to impact 7.88 acres of seagrass habitat.

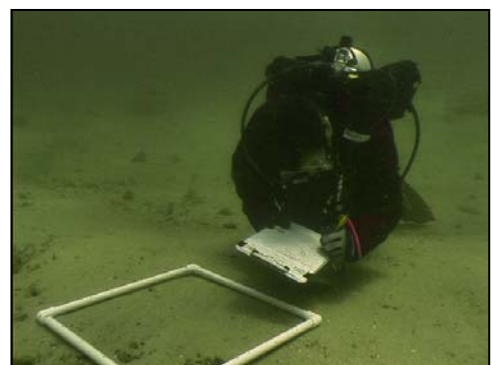
In coordination with the resource protection and regulatory agencies, the project was redesigned to avoid and minimize impacts to seagrass habitat to the greatest extent practicable while still meeting the objectives for the facility. Rybovich made several operational revisions to significantly reduce the overall dredge footprint and design depth. The current proposed project modifies the two existing marinas, Riviera Beach and West Palm Beach, to work in conjunction with one another to provide services and repairs to mega yachts. The vessels will check-in at the West Palm Beach Marina where they will be prepared for hauling out of the water. Once ready, the vessel will be towed approximately 3 miles north to the Riviera Beach Marina's facility haul-out slip. Upon completion of work at the Riviera Beach Marina, the vessel will be placed back into the water and returned to West Palm Beach for dockage until departure. The revised project design reduced seagrass impacts from 7.88 acres to 4.46 acres.



CEG was responsible for obtaining state and federal permits for the proposed marine facility project at Riviera Beach and expansion of the Rybovich Marina at West Palm Beach. Services include ERP permit application development; seagrass mapping surveys of the impact and mitigation areas, responding to agency RAIs and agency coordination during permit application review; demonstration of avoidance/minimization of impacts to submerged resources; UMAM mitigation and impact evaluation; and development and agency approval of a seagrass mitigation plan for the cumulative impacts resulting from both projects. Federal agency approval of the combined mitigation plan for both projects was received in September 2014.

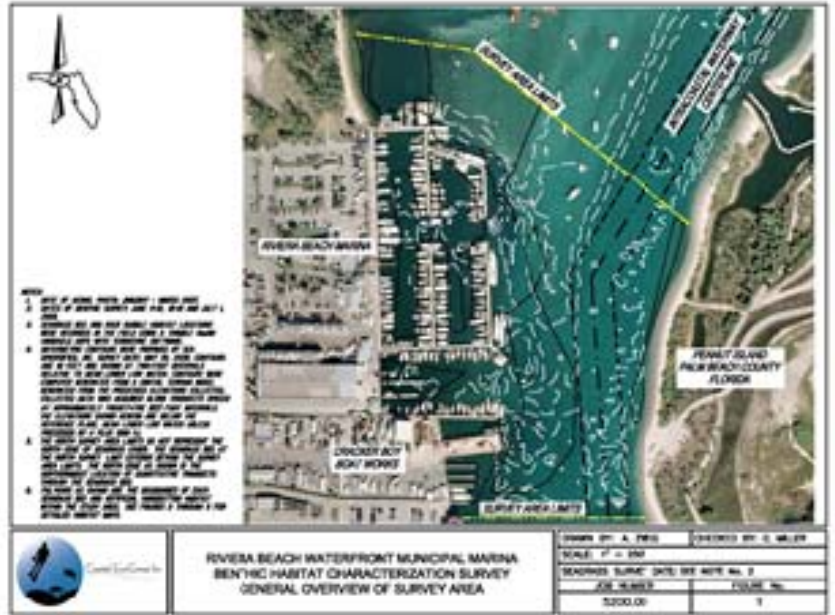
RIVIERA BEACH MUNICIPAL MARINA BENTHIC HABITAT AND SAV MAPPING & CHARACTERIZATION STUDY

CEG scientists conducted a comprehensive benthic habitat mapping and characterization survey in the vicinity of the Riviera Beach Municipal Marina between June 11 and July 1, 2009. The mapping effort involved a detailed submerged aquatic vegetation (SAV) survey to delineate percent cover, density and species composition of seagrass and macroalgal beds, and mapping and characterization of rock rubble communities located within the project area vicinity. Because the study area was known to support *Halophila johnsonii*, SAV survey protocol followed the recommended sampling at a project site according to the National Marine Fisheries Service (NMFS) Recovery Plan for *Halophila johnsonii*.



DGPS mapping of the seagrass bed edges and seagrass patches was performed using a Trimble GeoXM DGPS and TerraSync software. SCUBA was required to sample the study area due to water depths and water clarity constraints. Most of the study area could only be sampled during an incoming tide due to the poor water visibility associated with the outgoing tide.

A visual reconnaissance survey was performed prior to the collection of quantitative benthic data. Three marine scientists swam a series of shore-perpendicular and shore-parallel transects to survey for the presence of submerged aquatic vegetation and hardbottom habitat. Due to the patchy nature of *Halophila* spp., transects were closely spaced every 5 meters to ensure that no patches were missed due to poor underwater visibility. Line-intercept and point quadrat samples were assessed along the transects to qualitatively describe bottom type and quantitatively assess percent cover of seagrass and species composition. Within the vegetated areas, total percent cover of seagrass (all species combined and for each species separately) was quantitatively assessed approximately every 5 meters within 0.25 m² gridded quadrats. Visual assessment of cover within a 1-meter wide area centered on the transect lines was also performed using the Braun-Blanquet semi-quantitative abundance scale.



The high level of recreational and commercial boat traffic in the vicinity of the Riviera Beach Municipal Marina (RBMM) and Port of Palm Beach created logistical and safety problems during field sampling efforts. Repeated attempts were required to sample some of the areas due to limited access and safety constraints. A survey technician was positioned on the survey vessel at all times to provide navigational support and protect the divers from boat traffic.

Thank you for considering Applied Technology and Management for this solicitation. We look forward to hearing from you. Please do not hesitate to contact me at (561) 659-0041 if you have any questions or would like any further information. My e-mail is: mjenkins@appliedtm.com

-
- 1. **AUTHORIZED REPRESENTATIVE**
The foregoing is a statement of facts.
 - 30. SIGNATURE OF AUTHORIZED REPRESENTATIVE:
 - 31. DATE SIGNED: 12-6-07
 - 32. NAME AND TITLE OF SIGNER: Mike Jenkins, Ph.D., P.E.

ARCHITECT-ENGINEER QUALIFICATIONS 1. SOLICITATION NUMBER (If any)

PART II - GENERAL QUALIFICATIONS
(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME
Applied Technology & Management, Inc.

2b. STREET
2047 Vista Parkway, Suite 201

2c. CITY
West Palm Beach

2d. STATE
FL

2e. ZIP
33411

6a. POINT OF CONTACT NAME AND TITLE
Michael Jenkins, Ph.D., P.E., Coastal Team Leader

6b. TELEPHONE NUMBER
561-659-0041

6c. E-MAIL ADDRESS
MJenkins@appliedtm.com

3. YEAR ESTABLISHED
1984

4. DUNS NUMBER
14-704-7575

5. OWNERSHIP

a. TYPE
Corporation

b. SMALL BUSINESS STATUS
N/A

7. NAME OF FIRM (If block 2a is a branch office)
Applied Technology & Management, Inc.

8a. FORMER FIRM NAME(S)
N/A

8b. YR. ESTABLISHED
N/A

8c. DUNS NUMBER
N/A



9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number
		(1) FIRM	(2) BRANCH			
02	Administrative	11	1	C07	Coastal Engineering	5
08	CADD Technicians	3	1	C15	Construction Management	1
12	Civil Engineers	5		D08	Dredging Studies and Design	1
16	Construction Managers	1	1	E09	Environmental Studies (EIA, EIS)	4
19	Ecologists	1		E10	Env. and Natural Resource Mapping	1
23	Environmental Engineers	4		E11	Environmental Planning	2
33	Hydrographic Surveyor	1		H01	Harbors; Jetties; Piers; Ship Terminals	2
58	Technician/Analyst	2	1	H13	Hydrographic Surveying	1
62	Water Resources Engineer	2		I06	Irrigation and Drainage	1
				P06	Planning (Site, Installation, and Project)	3
				R04	Recreation Facilities (Marinas, etc.)	5
				S04	Sewage Collection, Treatment, Disposal	2
				S07	Solid Wastes, Landfills	1
	Coastal Engineers	8	3	S09	Structural Design; Special Structures	1
	Numerical Modelers	1		S10	Surveying	1
				S13	Storm Water Handling and Facilities	2
				W02	Water Resources; Groundwater; Hydrology	4
				W03	Water Supply, Treatment, Distribution	1
	Other Employees	6	1			
	Total	45	8			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	1	1. Less than \$100,000.	6. \$2 million to less than \$5 million
b. Non-Federal Work	7	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total	8	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.


a. SIGNATURE

b. DATE **September 1, 2014**

c. NAME AND TITLE
Stephen C. Swann, P.E., Vice President

ARCHITECT-ENGINEER QUALIFICATIONS	1. SOLICITATION NUMBER (If any)
--	---------------------------------

PART II - GENERAL QUALIFICATIONS
(If a firm has branch offices, complete for each specific branch office seeking work.)


2a. FIRM (OR BRANCH OFFICE) NAME Applied Technology & Management, Inc.		3. YEAR ESTABLISHED 1984		4. DUNS NUMBER 14-704-7575	
2b. STREET 305 Sixth Avenue					
2c. CITY Melbourne Beach		2d. STATE FL	2e. ZIP 32951		
6a. POINT OF CONTACT NAME AND TITLE Peter C. Peterson, P.E., Senior Coastal Engineer					
6b. TELEPHONE NUMBER 321-403-2163		6c. E-MAIL ADDRESS ppeterson@appliedtm.com			

5. OWNERSHIP		
a. TYPE Corporation		
b. SMALL BUSINESS STATUS N/A		
7. NAME OF FIRM (If block 2a is a branch office) Applied Technology & Management, Inc.		
8a. FORMER FIRM NAME(S)		
N/A		
8b. YR. ESTABLISHED		8c. DUNS NUMBER
N/A		N/A

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number
		(1) FIRM	(2) BRANCH			
02	Administrative	11		C07	Coastal Engineering	5
08	CADD Technicians	3		C15	Construction Management	1
12	Civil Engineers	5		D08	Dredging Studies and Design	1
16	Construction Managers	1		E09	Environmental Studies (EIA, EIS)	4
19	Ecologists	1		E10	Env. and Natural Resource Mapping	1
23	Environmental Engineers	4		E11	Environmental Planning	2
33	Hydrographic Surveyor	1		H01	Harbors; Jetties; Piers; Ship Terminals	2
58	Technician/Analyst	2		H13	Hydrographic Surveying	1
62	Water Resources Engineer	2		I06	Irrigation and Drainage	1
				P06	Planning (Site, Installation, and Project)	3
				R04	Recreation Facilities (Marinas, etc.)	5
				S04	Sewage Collection, Treatment, Disposal	2
				S07	Solid Wastes, Landfills	1
				S09	Structural Design; Special Structures	1
	Coastal Engineers	8	1	S10	Surveying	1
	Numerical Modelers	1		S13	Storm Water Handling and Facilities	2
	Marina Specialists			W02	Water Resources; Groundwater; Hydrology	4
				W03	Water Supply, Treatment, Distribution	1
	Other Employees	6				
	Total	45	1			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	1	1. Less than \$100,000.	6. \$2 million to less than \$5 million
b. Non-Federal Work	7	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total	8	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE September 1, 2014
c. NAME AND TITLE Stephen C. Swann, P.E., Vice President	

ARCHITECT-ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)


PART II - GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME Applied Technology & Management, Inc.			3. YEAR ESTABLISHED 1984		4. DUNS NUMBER 14-704-7575
2b. STREET 5550 NW 111th Blvd			5. OWNERSHIP		
2c. CITY Gainesville			2d. STATE FL	2e. ZIP 32653	
6a. POINT OF CONTACT NAME AND TITLE Robert H. Semmes, Vice President			a. TYPE Corporation		
6b. TELEPHONE NUMBER 386-418-6400			6c. E-MAIL ADDRESS rsemmes@appliedtm.com		
8a. FORMER FIRM NAME(S) N/A			8b. YR. ESTABLISHED N/A		8c. DUNS NUMBER N/A
6a. POINT OF CONTACT NAME AND TITLE Robert H. Semmes, Vice President			b. SMALL BUSINESS STATUS N/A		
7. NAME OF FIRM (If block 2a is a branch office)					

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number
		(1) FIRM	(2) BRANCH			
02	Administrative	11	6	C07	Coastal Engineering	5
08	CADD Technicians	3		C15	Construction Management	1
12	Civil Engineers	5	1	D08	Dredging Studies and Design	1
16	Construction Managers	1		E09	Environmental Studies (EIA, EIS)	4
19	Ecologists	1		E10	Env. and Natural Resource Mapping	1
23	Environmental Engineers	4		E11	Environmental Planning	2
33	Hydrographic Surveyor	1		H01	Harbors; Jetties; Piers; Ship Terminals	2
58	Technician/Analyst	2		H13	Hydrographic Surveying	1
62	Water Resources Engineer	2	2	I06	Irrigation and Drainage	1
				P06	Planning (Site, Installation, and Project)	3
				R04	Recreation Facilities (Marinas, etc.)	5
				S04	Sewage Collection, Treatment, Disposal	2
				S07	Solid Wastes, Landfills	1
				S09	Structural Design; Special Structures	1
	Coastal Engineers	8		S10	Surveying	1
	Numerical Modelers	1		S13	Storm Water Handling and Facilities	2
	Marina Specialists			W02	Water Resources; Groundwater; Hydrology	4
				W03	Water Supply, Treatment, Distribution	1
	Other Employees	6	3			
	Total	45	12			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER			
a. Federal Work	1	1. Less than \$100,000.	6. \$2 million to less than \$5 million	7. \$5 million to less than \$10 million	8. \$10 million to less than \$25 million
b. Non-Federal Work	7	2. \$100,000 to less than \$250,000	8. \$10 million to less than \$25 million	9. \$25 million to less than \$50 million	10. \$50 million or greater
c. Total	8	3. \$250,000 to less than \$500,000	4. \$500,000 to less than \$1 million	5. \$1 million to less than \$2 million	

12. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.	
a. SIGNATURE 	b. DATE September 1, 2014
c. NAME AND TITLE Stephen C. Swann, P.E., Vice President	

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)
N/A

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME Miller Legg			3. YEAR ESTABLISHED 1965	4. DUNS NUMBER 038700035
2b. STREET 5747 N Andrews Way			5. OWNERSHIP	
2c. CITY Ft. Lauderdale			2d. STATE FL	2e. ZIP CODE 33309-2364
6a. POINT OF CONTACT NAME AND TITLE Dylan Larson, PWS, CEP, CLI, Principal			a. TYPE Corporate	
6b. TELEPHONE NUMBER (561) 689-1138			6c. E-MAIL ADDRESS dlarson@millerlegg.com	
6a. POINT OF CONTACT NAME AND TITLE Dylan Larson, PWS, CEP, CLI, Principal			b. SMALL BUSINESS STATUS Yes	
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER
8a. FORMER FIRM NAME(S) (If any)			8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
02	Administrative	14	11	C02	Cemeteries (Planning & Relocation)	5
07	Biologist	5	5	C06	Churches; Chapels	2
08	CADD Technician	3	2	C10	Commercial Building; (low rise);	2
12	Civil Engineers	8	3	C14	Conservation and Resource	4
14	Computer Programmer	1	1	E01	Ecological & Archeological	4
16	Construction Manager	1	1	E02	Educational Facilities; Classrooms	4
19	Ecologists	1	1	H07	Highways; Streets; Airfield Paving;	2
21	Electrical Engineers	0	0	H09	Hospitals & Medical Facilities	3
23	Environmental Engineer	3	2	H11	Housing (Residential, Multifamily,	6
50	Environmental Risk Assessor	0	0	I06	Irrigation; Drainage	2
24	Environmental Scientist	1	1	L01	Laboratories; Medical Research	2
29	GIS Specialist	0	0	L03	Landscape Architecture	5
39b	Irrigation Designer	0	0	P04	Pipelines (Cross-country--Liquid &	2
38	Land Surveyor	3	1	P05	Planning (Community; Regional;	3
38a	Survey Crew Members	9	2	P06	Planning (Site, Installation and	3
39	Landscape Architects	6	5	R04	Recreational Facilities (Parks;	4
39a	Landscape Designers	5	4	S04	Sewage Collection, Treatment &	5
47	Planners: Urban/Regional	1	0	S13	Stormwater Handling & Facilities	5
51	Safety/Occupational Health	0	0	S10	Surveying; Platting; Mapping; Flood	2
60	Transportation Engineers	1	1	T03	Traffic & Transportation Engineering	2
	Other Employees	1	0	U02	Urban Renewals; Community	4
Total		63	40	W03	Water Supply; Treatment and	4


11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

(Insert revenue index number shown at right)		1. Less than \$100,000	6. \$2 million to less than \$5 million
a. Federal Work	4	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
b. Non-Federal Work	6	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
c. Total Work	6	4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE 9/24/2014
c. NAME AND TITLE Dylan Larson, PWS, CEP, CLI, Principal	

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME Coastal Eco-Group Inc.			3. YEAR ESTABLISHED 2005	4. DUNS NUMBER 619425080
2b. STREET 665 SE 10 th St Suite 104			5. OWNERSHIP	
2c. CITY Deerfield Beach			2d. STATE FL	2e. ZIP CODE 33441
6a. POINT OF CONTACT NAME AND TITLE Cheryl L. Miller, President, Principal Scientist			a. TYPE S-Corporation	
6b. TELEPHONE NUMBER 954-591-1219			6c. E-MAIL ADDRESS cmiller@coastaleco-group.com	
8a. FORMER FIRM NAME(S) (If any)			7. NAME OF FIRM (If block 2a is a branch office)	
			8b. YR. ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
07,19	Biologist, Ecologist	6		C14	Conservation & Resource Management	1
58	Survey Technician	1		E01	Ecological Investigations	2
08	Graphic Designer/CADD Tech	1		E09	Environmental Impact Studies	2
				E10	Environmental & Natural Resource Mapping	2
				E11	Environmental Planning	1
				G04	GIS System Services: Analysis & Data Collection	2
Total						

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER			
a. Federal Work	0	1. Less than \$100,000	6. \$2 million to less than \$5 million		
b. Non-Federal Work	4	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million		
c. Total Work	4	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million		
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million		
		5. \$1 million to less than \$2 million	10. \$50 million or greater		

12. AUTHORIZED REPRESENTATIVE	
The foregoing is a statement of facts.	
a. SIGNATURE 	B. DATE 9/24/14
c. NAME AND TITLE Cheryl L. Miller, President	

Proposed Project Manager, Joseph Chaison, P.E., is a Registered Florida Professional Engineer with 13 years of experience in the field of coastal engineering. He has designed and overseen the design, mitigation and construction of; navigation maintenance and new-work dredging, dike, spillway, beach nourishment, coastal structure, and seawall projects. He has participated in all phases of coastal engineering projects, from feasibility studies, numerical modeling, environmental impact statements, local, state, and federal permitting, grant funding application, design, plan and specification development, bid form preparation, procurement, award, construction inspection, survey, acceptance, payment review, and monitoring.

Specific dredging experience includes involvement with the design, and/or construction phase services for:

- ✓ Jupiter Inlet
- ✓ Dania Cutoff Canal
- ✓ South Locust Point Access Deepening
- ✓ Port Everglades Deepening Study
- ✓ Town of Palm Beach Waterways Dredging
- ✓ Hillsboro Canal Maintenance Dredging
- ✓ Baltimore Harbor 50-foot Deepening of Seagirt-Dundalk Access Loop;
- ✓ and numerous beach nourishment projects.

Dredged material management experience includes overseeing the placement and dewatering of millions of cubic yards of maintenance and new-work dredging materials for the Port of Baltimore as well as smaller scale dredged material management areas (DMMAs), such as the temporary site at the southwest corner of Port Everglades used for the Dania Cutoff Canal deepening project.

Mr. Chaison is familiar with mechanical and hydraulic dredging techniques as well as the dewatering and material management techniques required for both methodologies. Additionally, he is familiar with the in water resources common in south Florida as well as the minimization, avoidance, BMPs, and mitigation techniques related to dredge related environmental impacts.

Mr. Chaison is based in ATM's West Palm Beach office, the lead office of ATM's Coastal Engineering Team. Contact information is:

Joseph Chaison, P.E.
Applied Technology & Management
2047 Vista Parkway, Suite 201
West Palm Beach, FL 33411
Phone: 561-659-0041 / Fax: 561-659-3733
jchaison@appliedtm.com

UNDERSTANDING OF PROJECT

This project involves the permitting and development of plans and specifications for approximately 17.6 acres of dredging and associated mitigation for the Bahia Mar and Las Olas North and South Marinas. Additionally, this project will be tightly coordinated with the Florida Inland Navigation District (FIND) Intracoastal Waterway Deepening project proposed to occur adjacent to the City's marinas.

The most important elements of the project will be the evaluation and quantification of the materials to be dredged; assessment and mitigation planning for any unavoidable resource impacts; development and coordination of a materials management plan; and, establishing and accomplishing a schedule which will allow for synchronization with the FIND Intracoastal Waterway Deepening Project. The local, state and federal permitting of the above listed elements will require solid planning, intense coordination, unassailable data, and a clear vision for the project.

PROJECT APPROACH

ATM staff and team members dedicated to this project have extensive experience with similar projects including dredging and dredged materials management as well as resource impact minimization, avoidance and mitigation. The ATM team has been specifically selected to incorporate the exact capabilities needed for the successful delivery of the [City of Fort Lauderdale Intracoastal Waterway – Las Olas Marina Dredging Project](#).

PHASE 1 – Obtain Conceptual Mitigation and Dredging Permits

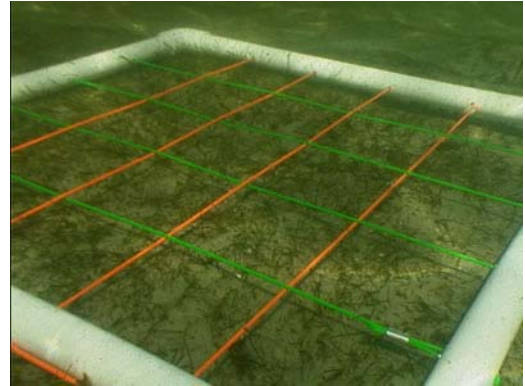
I. Review Existing Documentation and Obtain Required Data

The initial effort will necessarily be a review of the existing documentation and reports, specifically the January 2013 Conceptual Mitigation Plan and the associated informal comments provided to the City by the permitting agencies. A solid understanding of the needs of the regulatory agencies will guide the subsequent data collection efforts and should streamline the permitting. To this end, a meeting may be organized with the regulatory agencies to facilitate the review process.

Geotechnical soil investigations will be conducted to determine and quantify the extents, volumes and soil types present in the proposed dredging template. ATM will perform bathymetric surveys of the project area and adjacent areas. The bathymetric surveys must conform to accepted industry and regulatory standards and be conducted under the responsible charge of a registered professional surveyor. Field investigation services including surveying will be directed by ATM surveyor, Gary Bazemore, PSM, utilizing ATM's survey vessel. This survey, in conjunction with the geotechnical investigation will allow for precise calculation of dredging costs. It will also guide the dredged materials management plan to be developed in Phase II. Soil testing, both physical and chemical, will be performed in conjunction with the geotechnical investigation.

Existing seagrass and benthic resource surveys will be reviewed and supplemented as necessary. It is expected that a seagrass and benthic resource survey will be required to assess opportunities for minimization and avoidance, as well as to quantify and plan for the mitigation of unavoidable resource impacts. *Coastal Eco Group (CEG) and specifically, Ms. Cheryl Miller*, have extensive experience in South Florida and Broward County performing seagrass and benthic resource surveys. They understand the importance of providing cost-

effective and ecologically appropriate mitigation to compensate for impacts to natural communities resulting from coastal development projects and designing monitoring programs to evaluate mitigation success. Ms. Miller served as a member of the FDEP working group focusing on the development of appropriate indicators for the application of the Uniform Mitigation Assessment Method (UMAM) to seagrass communities in Florida. As such, Ms. Miller understands exactly what will be required to allow for a timely review of an acceptable Mitigation Plan.



If water testing and flushing analyses are required, *Steven Peene, Ph.D.*, will lead the efforts. Given the location of the project adjacent to the Intracoastal Waterway, the post-construction, dredged marina basins are expected to demonstrate suitable flushing.

II. Prepare Permit Applications – Inter-Governmental Coordination

Once the necessary data have been collected, and the required plans have been developed, the Environmental Resource Permit process will be initiated. This may follow additional pre-application meetings, as described above. Approval from the U.S. Army Corps of Engineers (USACE), Florida Department of Environmental Protection (FDEP), and Broward County Environmental Protection and Growth Management Department (BCEPGMD) will be required for project construction. Additionally, the USACE will coordinate with the National Marine Fisheries Service (NMFS), and the FDEP will coordinate with the Florida Fish and Wildlife Conservation Commission (FWCC). The review and approval of these permit applications will be critical path items for the project and will require intense preparation and coordination.

Each agency may generate a Request for Additional Information (RAI). Effort will be made to anticipate and minimize the number and magnitude of items included in the RAIs. Once received, prompt communication and response will be important to a timely issuance of the permits.



FIND is preparing to perform a deepening project along the Intracoastal Waterway adjacent to the City's project. It is assumed that the City wants to investigate the opportunity to synchronize the two projects for the potential cost and placement benefits. It can be anticipated that FIND will perform their deepening project with mechanical, rather than hydraulic dredging techniques and will use the existing temporary Dredged Material Management Area located along the southwest corner of Port Everglades. This site may also be an important part of the City's Dredged Materials Management Plan and should be investigated and coordinated with FIND. As the USACE's local sponsor for maintenance of the Intracoastal Waterway, FIND is vested in supporting projects similar to the City of Fort Lauderdale Intracoastal Waterway – Las Olas Marina Dredging Project.

FIND will also represent a potential grant funding partner. ATM will assist City staff with the preparation of grant application requests and prepare support material as needed.

In addition to regulatory permit approvals, Phase I will also involve obtaining any and all legal approvals and/or easements required for the dredging and mitigation of the project area.

Phase II – Provide 100% Construction Plans & Specifications for 100% Construction Bid Documents

The permitted dredge template and conceptual mitigation plan will be developed into contract-level Construction Plans and Specifications. This will be phased as 30%, 60% and 100% submittals to the City for review and comment. Cost estimates and schedules will also be provided to the City during the development of the Construction Plans and Specifications.

Phase II will also include the continued grant assistance and finalization of the Mitigation Plan. The approved Mitigation Plan will include monitoring, management, adaptive management plan, and financial assurances for the selected mitigation, as needed. Construction of mitigation elements may be included in the Dredging Contract, or the City may choose a separate procurement method for the construction and monitoring of the approved mitigation.

ATM will provide the City with Technical Specifications for incorporation with the City's standard front-end contract documentation. The Construction Specifications will include and reference all permits, permit specific conditions, and will note all environmental protective measures to be employed by the contractor, including the approved Turbidity Control Plan which will describe turbidity control measures to be employed at the dredge and placement site. Dredge method may be specified, if materials, distances, or spoil site indicate that a particular dredging technique is economically or environmentally advantageous to the City. The finalized Spoil Management Plan will be included in the Contract Documents. This document will specify the location and protocol for dewatering and material handling including any required certifications and will have been coordinated with the FIND.


Following incorporation of the Construction Plans and Specifications and Permits with the City's standard contract documents, bid contract documents will be prepared. A mandatory or non-mandatory pre-bid meeting may be scheduled by the City either at City offices or on-site.


ATM will assist the City with the Contract bidding as necessary. This may include answering bidder questions and the preparation of addenda. ATM will also assist the City with reviewing submitted bids, confirming bidders' stated capabilities and references, if needed.


Project: PALM BEACH COUNTY COASTAL ENGINEERING SERVICES	
Project Owner	Palm Beach County, FL
Project Contact	Leann Welch, 2300 N. Jog Road, 4 th Floor, West Palm Beach, FL 33411 lwelch@pbcgov.org
Telephone	561-233-2434 Fax: 561-233-2414
Services Performed	ATM has supported various coastal engineering initiatives for Palm Beach County for over 19 years. Projects include beach nourishment, engineering, environmental and permitting tasks. ATM has supported two beach nourishment projects, one major habitat restoration project (Snook Islands), and the comprehensive seagrass mapping of the Lake Worth Lagoon. For the South Lake Worth Inlet Seagrass Monitoring and Maintenance Dredging project , ATM has provided seagrass mapping and monitoring services in support of regular inlet maintenance and channel dredging. ATM supported the design and permitting of the maintenance dredging, which includes an expansion of the existing sand trap capacity.
Start Date: 1995 – current – work is under continuing services contracts.	Completion Date: ongoing services
Estimated Costs: N/A	Actual Costs: On budget

Project: ST. AUGUSTINE MUNICIPAL MARINA DREDGING	
Project Owner	City of St. Augustine, FL
Project Contact	Jim Piggott, General Services Director, P.O. Box 210, St. Augustine, FL 32085-210 jpiggott@citystaug.com
Telephone	904-825-1010 Fax: 904-825-1051
Services Performed	ATM provided engineering services for the Environmental Resource Permitting and design of a new breakwater and marina expansion of 50 additional boat slips. The project also included <i>dredging of 12,000 cubic yards</i> of accumulated material from the marina basin and transport to an offsite disposal facility. ATM secured <i>the permits for dredging and the breakwater in less than 6 months' time in early 2011.</i> ATM provided construction documents, bid support & construction oversight. The dredging was completed in 2012, & the dock expansion was completed in early 2013. Permit modifications for the dredging included the use of Lighthouse Boat Ramp as an alternative offload area site for the dredged material to expedite the dredging.
Start Date: February 2009	Completion Date: Spring 2013
Estimated Costs:	Actual Costs:



Project: CITY OF BOCA RATON – HILLSBORO CANAL MAINTENANCE DREDGING	
Project Owner	City of Boca Raton
Project Contact	Jennifer Bistyga, Bch Mgmt. Coordinator, 2500 NW 1 st Ave., Boca Raton, FL 33431 jbistyga@ci.boca-raton.fl.us
Telephone	561-416-3397 Fax: 561-416-3343
Services Performed	<p>ATM designed this dredging project for the Hillsboro Canal in conjunction with a FIND grant program. The project involved the collection of hydrographic survey data, seagrass and benthic survey, sediment physical and chemical analysis, dredge volume computation, and dredged material management planning. This project required intense community stakeholder outreach to private, commercial, and municipal stakeholders.</p> 
Start Date: February 2014	Completion Date: ongoing
Estimated Costs: \$98,640	Actual Costs: N/A – project is ongoing

Project: TOWN OF PALM BEACH DREDGING	
Project Owner	Town of Palm Beach
Project Contact	Rob Weber, Coastal Coordinator, 951 Old Okeechobee Rd., West Palm Beach, FL 33401, rweber@townofpalmbeach.com
Telephone	561-838-5440 Fax: 561-835-4691
Services Performed	<p>Designed dredging project east of Intracoastal Waterway for access channels. Involved seagrass and benthic resource mapping and mitigation planning, sediment sampling; physical and chemical analysis, community stakeholder outreach, and dredged material management planning.</p> <p>The project involves an innovative dredged material management plan, using the materials generated from the project to bring a relict dredge-hole back into the photic zone, removing an anoxic location from within the Intracoastal and potentially allowing for natural recruitment of seagrass.</p> 
Start Date: March 2013	Completion Date: ongoing
Estimated Costs: \$159,493	Actual Costs: ongoing

Project: PALM COVE MARIINA, JACKSONVILLE, FL	
Project Owner	Palm Cove Marina
Project Contact	Skip Canfield, General Manager 14603 Beach Boulevard, Jacksonville, FL 32250 scanfield@palmcovemarina.com
Telephone	904-223-4757 Fax: 904-223-6601
Services Performed	<p>The entrance channel to Palm Cove Marina on the Atlantic Intracoastal Waterway is a natural channel on Sovereign Submerged Lands that requires periodic maintenance dredging to maintain adequate depth. ATM was hired by Palm Cove Marina to develop a long-term strategy that would allow them to dredge the channel on an as-needed basis.</p>  <p>To accomplish this task, ATM procured a bathymetric survey of the channel, conducted testing of the accumulated sediments, and prepared a request for exemption from permitting from the FDEP. ATM obtained the exemption from FDEP along with a letter of consent for use of state lands and a nationwide permit from the USACE. This solution achieved the long term goals of Palm Cove Marina to be able to dredge when needed both at present time and in the future.</p> <p>ATM is currently assisting Palm Cove Marina in the evaluation of expanding the existing dredge spoil area on the Palm Cove Marina property on the Intracoastal Waterway.</p>
Start Date: August 2012	Completion Date: March 2013
Estimated Costs: N/A – dredging was done by the marina using their own equipment	Actual Costs: N/A

Project: SEBASTIAN INLET TAX DISTRICT DREDGING	
Project Owner	Sebastian Inlet District
Project Contact	Martin Smithson, Administrator 114 Sixth Avenue, Indialantic, FL 32903 msmithson@sitd.us
Telephone	321-724-5175 Fax: 321-951-8182
Services Performed	<p>ATM has provided the Sebastian Inlet Taxing District with comprehensive coastal engineering services in support of inlet and navigational maintenance efforts. This has included support for two sand trap maintenance projects and the design permitting and bidding of the expansion of the existing sand trap which was done in 2014. A total of 300,000 cubic yards of sand have been bypassed to downdrift beaches.</p> <p><i>Maintenance dredging efforts have included both direct beach placement and confined placement of non-beach compatible material within the District's Dredge Material Management Area (DMMA). ATM has also supported excavation of material from the DMMA facility as well as a re-alignment of the existing navigation channel to promote boater safety. ATM recently supported the renewal and consolidation of both State and Federal permits resulting in a single, uniform 15 year permit for inlet, sand trap and navigation channel maintenance.</i></p>
Start Date: 2009	Completion Date: July 2014
Estimated Costs:	Actual Costs: total construction costs for all phases was \$6.1 million

ATM is *not* a Minority Business Enterprise.

Subconsultants, **Coastal Eco Group (CEG)** and **Scientific Environmental Applications, Inc. (SEA)** are both certified by the State of Florida as **Women-Owned Businesses**.



Client#: 12348 ISLANGLOBA

ACORD™ CERTIFICATE OF LIABILITY INSURANCE DATE (MM/DD/YYYY)
08/01/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Marsh & McLennan Agency LLC 521 Fifth Avenue New York, NY 10175	CONTACT NAME: PHONE (A/C No, Ext): E-MAIL ADDRESS: FAX (A/C, No):
INSURER(S) AFFORDING COVERAGE	
INSURER A: Lloyd's of London	
INSURER B: Hartford Casualty Insurance Co. 29424	
INSURER C: Twin City Fire Insurance Co. 28459	
INSURER D:	
INSURER E:	
INSURER F:	

INSURED
 Applied Technology & Management Inc.
 5550 N.W. 111th Blvd.
 Gainesville, FL 32606

NSR LTR	TYPE OF INSURANCE	ADDSUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> BI/PD Ded: 25000 <input type="checkbox"/> Craft Ded: \$5,000 GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		B0621M4KOR031401A	06/16/2014	06/16/2015	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) Excluded MED EXP (Any one person) Excluded PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE Excluded PRODUCTS - COMPIOP AGG \$1,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		10LIJNPP3807	07/23/2014	07/23/2015	COMBINED SINGLE LIMIT (Per accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED: <input type="checkbox"/> RETENTION \$		B0621M4KOR031401B	06/16/2014	06/16/2015	EACH OCCURRENCE \$4,000,000 AGGREGATE \$4,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N <input checked="" type="checkbox"/> N/A If yes, describe under DESCRIPTION OF OPERATIONS below		10WEAF6610	07/23/2014	07/23/2015	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A	Protection & Indemnity		B0621M4KOR031401A	06/16/2014	06/16/2015	Limit: \$1,000,000 Ded: \$20,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 Evidence of Insurance

CERTIFICATE HOLDER	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>John E. Adams</i>
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ACORD **CERTIFICATE OF LIABILITY INSURANCE** DATE (MM/DD/YYYY)
09/02/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis of Florida, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 37205191 USA	CONTACT NAME PHONE (AC No. Ext.): 677-945-7278 FAX (AC No.): 666-467-2378 E-MAIL ADDRESS: certificates@willis.com
INSURED Applied Technology & Management, Inc. 3550 SW 111th Blvd. Gainesville, FL 32653	INSURER(S) AFFORDING COVERAGE NAIC # 15427 INSURER A: Lexington Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER: 0554757** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

TYPE	TYPE OF INSURANCE	POLICY	POLICY	POLICY EFF.	POLICY EXP.	LIMITS
NO.	LTN	NO.	NO.	(MM/DD/YYYY)	(MM/DD/YYYY)	
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GENL. AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO. SECT. <input type="checkbox"/> LDC OTHER:					EACH OCCURRENCE \$ CAPABLE TO PAY FOR DEFENSE (EA Occurrence) \$ MGD EOP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (EA ACCIDENT) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE (ED) <input type="checkbox"/> RESTRICTIONS					EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe below: (EXEMPT FROM OPERATIONS below)					PER STATUTE <input type="checkbox"/> OTH. \$ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Lib/Contractors Pollution Liab Deductible			14017301	09/01/2014 09/01/2015	\$1,000,000 Per Claim \$2,000,000 Aggregate \$0,000 Each Claim
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)						

CERTIFICATE HOLDER Evidence of Insurance	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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ACORD 25 (2014/01)

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Coastal, Environmental, Marine and Water Resources Engineering

ATM is pleased to include the services of **Coastal Eco-Group, Inc. (CEG)** and **Scientific Environmental Applications, Inc. (SEA)** as part of its proposed project team. ATM has maintained a proactive relationship with CEG & SEA and regularly consults with both firms on coastal projects in South Florida. Both firms are Woman-Owned Minority firms registered as such with the state of Florida. CEG and SEA were selected to be part of our team as both firms provide specific, focused and cost effective capabilities that further enhance the capabilities of the ATM team. We have also included **Miller Legg** on the project team. Miller Legg is well known to the City and has provided a variety of environmental and engineering services to the City under its ongoing continuing services contract.

COASTAL ECO-GROUP, INC. (CEG) – ECOLOGICAL & ENVIRONMENTAL ASSISTANCE



Coastal Eco-Group is a woman-owned environmental consulting firm based in Deerfield Beach, FL, specializing in benthic habitat mapping and surveys, environmental impact assessment, environmental permitting, and hardbottom, seagrass and mangrove mapping and characterization surveys throughout Florida and the Caribbean. Coastal Eco-Group was established in 2005, and represents over 38 years of professional experience in NEPA assessments and document preparation; project management; environmental planning and permitting; and marine ecological surveys, including submerged aquatic vegetation mapping and characterization, benthic invertebrate monitoring, impact analysis and hardbottom and seagrass mitigation design.

Coastal Eco-Group (CEG) scientists are proficient in seagrass mapping and monitoring techniques used to provide information on seagrass and macroalgal areal cover, density, species composition, condition, and spatial and temporal variability of seagrass habitats. Assessments of areal cover, density and condition are carried out using a combination of aerial mapping, aerial photographic interpretation techniques and *in situ* verification. *In situ* assessment involves point quadrat samples using a gridded quadrat for the evaluation of percent cover and short shoot counts to quantitatively assess seagrass density and species composition. Our scientists are experienced in rapid visual assessment protocols for visual estimation of percent cover such as line-intercept transect sampling and the semi-quantitative Braun-Blanquet abundance scale, as well as the evaluation of seagrass population dynamics from the analysis of the age-frequency distribution of short shoots using leaf scar counting and leaf production rates.

CEG scientists have mapped seagrass and mangrove habitats, ground-truthed aerial photography, and field verified seagrass transplantation success for numerous projects within Escambia, Monroe, Collier, Pinellas, Broward, Palm Beach, St. Lucie and Indian River Counties. Representative seagrass mapping and monitoring projects include 2013 Lake Worth Lagoon Seagrass Mapping Project (2013-2014); Lake Worth Lagoon Annual SAV Monitoring, Palm Beach County (2011-2014); Quietwater Beach Restoration Project, Pensacola Beach, Escambia County (2011); Rybovich Riviera Beach Marine Facility Project, Palm Beach County (2010-14); Little Munyon Island Seagrass Mitigation Project, Palm Beach County (2011); Long Key State Park, Monroe County (2009, 2013), Riviera Beach Municipal Marina, Palm Beach County (2009), Nova Southeastern University Boat Basin, Broward County (2008, 2013, 2014), and St. Petersburg/Clearwater International Airport, Pinellas County (2007).

CEG's president and principal scientist, **Ms. Cheryl Miller**, has over 18 years of professional experience in environmental planning and permitting, including intimate working knowledge and experience with the regulatory environment in Florida. She served as the seagrass reviewer for the FDEP, Bureau of Beaches and Coastal Systems from 2004 through 2009, providing ecological expertise and environmental permitting

support for projects involving impacts to seagrass, nearshore hardbottom and reef habitats and recommendations for development and implementation of seagrass monitoring and mitigation programs. During her tenure as an Environmental Specialist with FDEP, BCS, in Tallahassee, Ms. Miller served as the FDEP representative for the *Halophila johnsonii* Implementation/Recovery Team.

S.E.A., INC. **SCIENTIFIC ENVIRONMENTAL APPLICATIONS, INC. (SEA) – GEOTECHNICAL & HYDROGEOLOGICAL SERVICES**



SEA will provide geotechnical support services for any geotechnical investigations. SEA has considerable experience in nearshore geotechnical investigations and sand search surveys for beach nourishment. SEA provides applied research and consulting services for physical, ecological and sedimentologic processes in freshwater and marine environments. Over the past two decades SEA scientists and researchers have completed more than 40 geologic and environmental projects in the U.S. and abroad. SEA has also conducted sedimentologic, geophysical and environmental investigations of potential sand borrow sites along many areas of the Florida Coast, the Gulf Coast of the U.S. and the U.S. Eastern Seaboard. They have conducted projects using three dimensional modeling for estuarine circulation, numerical modeling of sediment transport, and morphological dynamics. *SEA is a licensed Florida Geology Business and a state-certified minority business enterprise (MBE).*

Gary Zarillo, Ph.D., P.G. – Geologist/Oceanographer, Principal Scientist – Dr. Zarillo has more than 30 years of experience in coastal processes, marine geology and physical oceanography. During the past 23 years he has applied numerical models in the prediction of hydrodynamics, sediment transport, and water quality in shallow marine, estuarine and lacustrine environments. Dr. Zarillo also has extensive experience in the application of statistics and time-series analysis to environmental studies and the application of remote sensing methods in coastal and terrestrial environments.

MILLER LEGG

Miller Legg, established in 1965, employs a staff of 63 professionals and technicians and has locations in *Fort. Lauderdale*, Miami, Port St. Lucie and Winter Park.



Miller Legg has been working with the City of Fort Lauderdale since 2007 on a variety of environmental services and currently holds a General Environmental Engineering Services Contract through 2015. Services provided include threatened and endangered species assessments, environmental permitting compliance, consent order coordination, bid preparation, spec development, grading plans and pollution prevention plans, earthwork quantities, environmental construction observation, certified arborist services and Phase I and Phase II Environmental Site Assessments. Services also include indoor air quality/asbestos and lead-based paint evaluations. The firm has coordinated closely with City staff – acting as an extension of their office. Miller Legg will provide assistance with upland interface and local permitting for the Las Olas dredging project. Assigned staff are located in the local, Fort Lauderdale office.

AMERICAN VIBRACORE SERVICES (AVS)

If geotechnical vibracoring services are required, we will coordinate the sample collections with **American Vibracoring Services**. AVS is located in Delray Beach and has extensive experience in vibracore sampling both inshore and offshore. They have the equipment and professional staffing to quickly and efficiently collect vibracore samples in the proposed project area, if needed. ATM has also worked with AVS on a number of recent projects.



Coastal, Environmental, Marine and Water Resources Engineering

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>	<u>RELATIONSHIPS</u>
N/A	
	

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.