## Statement of Qualifications to the CITY OF KEY WEST



for Design of Tarpon Pier Replacement for City Marina at Garrison Bight RFQ #11-002

May 18, 2011

Submitted by:











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May 17, 2011

City of Key West Office of the City Clerk 525 Angela Street Key West, FL33040

RE: RFQ No. 11-002: Design of Tarpon Pier Replacement for City Marina at Garrison Bight

**Applied Technology and Management, Inc. (ATM)** is pleased to submit this response to the City of Key West for the Tarpon Pier replacement project. ATM is a Florida-based engineering consulting firm specializing in unique waterfront projects in Florida, the Southeastern United States, and internationally. As you review our response to the RFQ, please consider the following:

Complete In-House Marina Design Capabilities – ATM is an internationally recognized industry leader in the field of marina design and planning. We maintain full, in-house expertise covering crucial areas of marina development including planning, design, permitting, and construction administration. We have worked on well over 500 marina projects worldwide including over 150 projects in Florida, and understand the complexities of each individual project.

Municipal Marina Focus – We understand the unique character of municipal marinas and have developed specific capabilities and experience to support these programs. Within our Municipal Marina focus, we specialize in municipal waterfront revitalization and renovation, public marina development, public access infrastructure development, and existing facility redevelopment. We have conducted successful public workshops, education programs, web-based information and participation services, and community involvement programs in support of our municipal marina projects. We have substantial experience with marina renovation/revitalization projects and maintain strong, ongoing relationships with marina/dock suppliers that help us develop unique engineering solutions. Many of our marina projects entail specialized needs and requirements that only years of experience can provide.

For this project we have teamed with **The Weiler Engineering Corporation (WEC).** WEC serves their Key West clients from offices in Marathon and Key West. The firm has specific local experience in marina, dock, and boat ramp design, permitting and construction throughout the Florida Keys and will provide local representation and engineering services. **Epic Engineering**, a key partner of ATM on marina projects for over 10 years will supply electrical engineering and **Universal Engineering Sciences (UES)** will provided all geotechnical work required of the project. UES has worked with both ATM and WEC on several projects over the years.

Please do not hesitate to contact me at (843) 414-1040 or <a href="mailto:sphlegar@appliedtm.com">sphlegar@appliedtm.com</a> or Pete Peterson at <a href="mailto:sphlegar@appliedtm.com">ppeterson@appliedtm.com</a> if you have any questions or would like any further information.

Sincerely,

W. Samuel Phlegar, P.

President



**Project Name** 

Statement of Qualifications to the

CITY OF KEY WEST for

**Design of Tarpon Pier Replacement for** 

**City Marina at Garrison Bight** 

RFQ #11-002 **May 18, 2011** 

Name of Firm

**Applied Technology & Management, Inc.** 

**Project Manager** 

Peter C. Peterson, M.S., P.E.

Senior Coastal Engineer – Project Manager Applied Technology & Management, Inc.

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Authorized Representative W. Samuel Phlegar, III, M.S., P.E.

President & Director, Coastal-Marina Division

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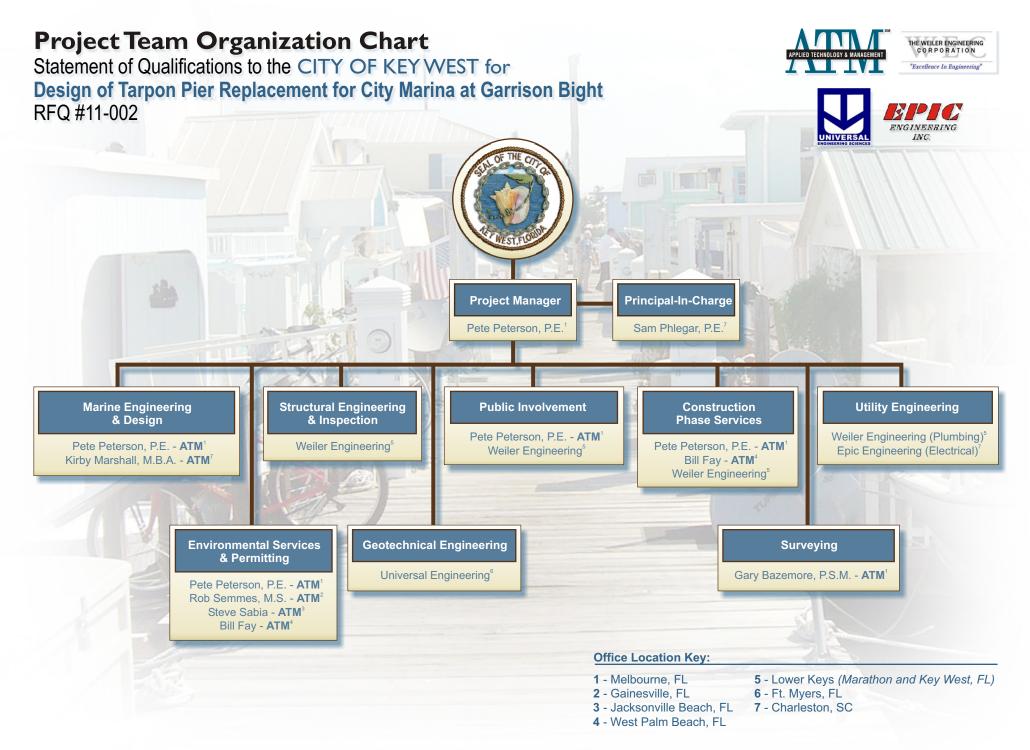
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#### 4. COMPANY INFORMATION

**Founded in 1984, Applied Technology & Management** has over 26 years of experience in providing *marine, coastal, environmental, and water resources engineering services* to public and private clients. **ATM** currently has a staff of 60 in nine strategically located offices in the eastern United States, including: West Palm Beach, Melbourne Beach, Gainesville, St. Augustine, Jacksonville Beach, and Tallahassee, Florida, as well as in Charleston and Hilton Head, South Carolina.

**ATM** employs more than 20 Registered Professional Engineers, 1 EIT, Professional Ecologists, Environmental Scientists, Modelers, CAD and GIS Specialists, and a Professional Surveyor/Mapper. Our services are grouped into six principal disciplines:

- Marina & Waterfront Development
- Coastal Engineering
- Civil Engineering
- Environmental Engineering
- Environmental Sciences
- Water Resources

# Is authorized under the provisions of Section 71.213. Italian Statutes, to offer engineering services to the public through a Professional Engineer Authorized under Chapter 471, Florida Statutes. Certificate of Authorization EXPIRATION: 2/28/2013 AUDIT NO: 228201301938 CA. LIC. NO: 4669

#### WATERFRONT REVITALIZATION

A primary element of our business is a specialization in waterfront development projects. We have a full-service marine group with comprehensive experience in <u>all phases</u> of waterfront development. Our staff recognizes the importance of water access by all citizens and has worked with municipalities throughout the United States on a variety of projects ranging in size from <u>small boat ramps and fishing piers to municipal marinas</u> and megayacht facilities. Sites range from small, environmentally sensitive locations to urban, heavy-use, and congested facilities.

Our Marina Team is experienced in all facets of marina design and development, including preliminary planning, cost estimating, business pro forma preparation, environmental permitting, detailed plans and specifications, bidding, and construction oversight.



Our approach to every project focuses on 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 controls.

ATM engineers have planned, permitted, and/or designed over 500 public and private boating access sites throughout the U.S. and abroad, including over 150 projects in Florida alone as shown on the map to the left. Many of these projects have included the full range of our services beginning with thorough initial planning and feasibility studies and proceeding to permitting, design, and finally construction.



#### **SUBCONSULTANTS**

In an effort to facilitate our clients' needs on projects such as this, ATM routinely partners with select sub-contractors to provide specialty consulting solutions. For this project we have teamed with local engineering firm, **The Weiler Engineering Corporation**. Founded in 1993, the Weiler Engineering Corporation (WEC) has 30 employees working from three South Florida offices: Marathon, Key West, and Port Charlotte. WEC's staff consists of licensed Professional Engineers proficient in structural, coastal, environmental, hydraulic, and civil disciplines. The firm specializes in the planning, design, permitting, and construction engineering and inspection for small projects to projects exceeding \$100 million in construction costs. WEC has local experience in marina, dock, and boat ramp design services for a long list of clients including the City of Marathon, the Village of Islamorada, and many private clients from Key West to Key Largo.

WEC will provide local representation, knowledge, and key engineering services on this project. Specific services will include:



"Excellence In Engineering"

- Structural Engineering/Inspection of existing marine elements
- Coordination with ATM and geotechnical engineers regarding soils investigations and floating
- dock piling design reviewAssistance with public meetings/workshops
- Plumbing design (potable water, wastewater) and associated/local permitting for service connections
- Construction phase services

In addition to WEC, **Epic Engineering** will provide *marina electrical design*. A key partner of ATM for the past 10 years on a multitude of marina projects worldwide, Epic Engineering is among the world's foremost authorities on marina electrical design with specific knowledge and experience on Florida marina projects.



Lastly, ATM will rely on **Universal Engineering Sciences** to provide *geotechnical investigation services* to facilitate new floating dock anchor piling design. Universal <u>has been a regular partner with ATM and Weiler</u> on a variety of projects over the past several years.



Universal is a registered consulting engineering firm specializing in *geotechnical engineering* and construction material testing services, with over 500 employees in 16 regional offices strategically located throughout Florida. Universal has provided professional engineering services to both the public and private entities throughout Florida for the past 45 years.

Although operating almost exclusively in the State of Florida, Universal has been listed by Engineering News Record for 12 consecutive years as a Top 500 Design firm. Work for this project will be directed through Universal's Fort Myers office.

ATM has utilized Universal's geotechnical expertise and assistance on several recent marina projects, including the City of Titusville's mooring field which will begin construction this summer. Universal's inwater capabilities and ability to work in any site conditions make them a key component to the ATM team. Their local presence and knowledge of the geotechnical properties of the surrounding conditions make Universal invaluable for this project.



#### 5. METHODOLOGY & APPROACH

**Applied Technology & Management** has a time-proven approach to marina and waterfront projects that enables the Owner and Project Team to identify goals and objectives as well as potential pitfalls early in the project life. This approach is tailored for each project, but follows the steps identified below in a concise, efficient manner. Some of the Tasks within different phases will occur concurrently as the project allows.

#### **PLANNING PHASE:**

During the Planning phase, project objectives, budgets and schedules are determined.

- **Task 1:** Project kickoff meeting with ATM Project Team and City to review project goals, timeline, budget, lines of communication, etc.
- Task 2: Compile available information on project site and create base maps with all information:
  - a. Existing permits/regulatory authorizations
  - b. Identify utility connection points
  - c. Bathymetry and other survey data
  - d. Geotechnical information
    - Identify needs for additional information if necessary (i.e. updated surveys, etc.)
- **Task 3:** Meeting with slipholders/stakeholders and City to identify expectations, needs, and appropriate path forward for schedule, demo, construction staging, etc.
- Task 4: Using stakeholder input, develop Design Basis Document for the project that includes:
  - a. Summary of Physical Conditions including: tides, bathymetry, currents, wind, waves, extreme water levels, vessel characteristics, geotechnical information, harbor characteristics, and design storm conditions
  - b. Summary of Pier Characteristics including: general description, design life, design criteria, materials, load designations, freeboard, utilities, and deflections
- **Task 5:** Conduct evaluation on existing structures/utilities to determine suitability for re-use in re-development plan
- **Task 6:** Develop Conceptual Pier Design and review with City and stakeholders. Revise plan and initiate next phase.





#### **PERMITTING AND INITIAL DESIGN PHASE:**

The permitting and initial design phase allows the Owner to see the proposed final product in plan form. Permit application requirements in Florida require fairly substantial plans, which will be used later in the full design process.

- **Task 1:** Develop basic project figures and schedule a pre-application meeting with FDEP and the USACE
- **Task 2:** Utilizing the results of the pre-application meeting, coordinate with City to perform required studies as indicated by the agencies
- **Task 3:** Develop Marina Demolition and Replacement Plan (including vessel staging plan for construction), considering feedback from studies, pre-application meeting, stakeholder meetings, and meetings with City personnel
- Task 4: Finalize project plan with City and prepare/submit joint permit application to FDEP/USACE
- Task 5: Initiate other required investigations to facilitate design
  - a. Additional Geotechnical investigations (if necessary)
  - b. Additional Wind/Wave studies (if required)
  - c. Refine Utility Demand requirements
- **Task 6:** Monitor permit review process and coordinate with City to respond to agency inquiries as necessary

#### **DESIGN PHASE:**

Using initial design layouts and plans, the final design can be completed incorporating changes due to permit requirements, stakeholder input, and City requirements.

- **Task 1:** Initiate development of bid plans and specifications as any permit restrictions (i.e. potential impacts to concept plan) become lucid
- Task 2: Complete 60%, 90% and 100% design plans to be reviewed by City

#### **BIDDING PHASE:**

Upon completion of the final design and receipt of the required permits, the bidding phase can commence in an efficient manner. The bid package must be very specific and allow for direct comparison of competitive bidders.

**Task 1:** Coordinate with City to identify City bidding protocols, standard form of contract, bonding requirements, etc. Identify date of receipt of permit/receive permit authorizations

- Task 2: Develop bid package and coordinate with City to distribute to potential bidders
- **Task 3:** Establish bidding and construction timeline in coordination with City and based upon anticipated receipt of permits.
- **Task 4:** Host pre-bid conference on-site with prospective bidders; issue addenda as appropriate
- **Task 5:** Review bids and make recommendation for award to City. Support City review of contract for construction



#### **CONSTRUCTION PHASE:**

Once the Contractor has been selected, the Construction Phase can begin in earnest.

- **Task 1:** Host pre-construction meeting with selected contractor, identify roles, lines of communication, and review submittal requirements/expectations
- Task 2: Compile bonding information and coordinate with City to issue NTP
- Task 3: Provide construction phase services, including:
  - a. Submittal/shop drawing review
  - b. Response to contractor inquiries
  - c. Periodic construction observation
  - d. Review/certification of contractor payment applications
  - e. Change order management
  - f. Progress reports to Owner and project stakeholders (i.e. resident boaters)
  - g. Coordination with regulatory agencies as required by permit conditions
  - h. Ensure contractor compliance with permit conditions
  - i. Conduct substantial completion inspection of dock installation for compliance with project intent/specifications
  - j. Develop punch list for contractor attention
  - k. Conduct final walk through with Owner to ensure proper completion of work
  - I. Provide notification to permitting agencies of completion of project per permit conditions/requirements
  - m. Provide comprehensive binder of project information to Owner for record
  - n. Participate in ribbon cutting ceremony for new floating dock





#### **6. KEY PERSONNEL**

ATM has assembled a team with the specialized experience, qualifications, and availability to effectively serve the City on this project. Pete Peterson will serve as Project Manager and direct contact with the City of Key West. ATM's President, Sam Phlegar, P.E. will act as project Principal, ensuring the overall quality and timeliness of ATM efforts. Additional senior and support staff will assist on an as-needed basis as determined by the Project Manager. A summary of key staff of note includes:

Pete Peterson, P.E. has served as ATM Project Manager on over 100 marina and waterfront development projects thorough the U.S. and abroad. He has recently worked closely with several municipalities as Project Manager, including the Cities of St. Augustine, Titusville and Madeira Beach. He is a Senior Engineer registered in Florida and several other states and has extensive experience in permitting, design and construction. His diverse technical experience allows him to manage projects efficiently and understand all facets of the project. As a technical lead as well as Project Manager, he is able to lead the project as well as be an integral part of the design and construction process. This role has proved to be instrumental in making sure that projects are completed on time and on budget by being able to foresee shortfalls and potential issues prior to them becoming a problem. Mr. Peterson's resume is included at the end of this section.

**W. Sam Phlegar, P.E.** has more than 24 years of experience and has managed multiple coastal, marina, and waterfront projects across the United States and throughout the Bahamas, Caribbean, and worldwide. Mr. Phlegar has led or participated in more than 400 coastal and marina projects for public and private clients, and frequently manages multidisciplinary engineering and environmental study teams on comprehensive waterfront development programs. With a reputation of excellence in waterfront development and facility planning, as well as infrastructure evaluation and engineering, Mr. Phlegar is regarded as a leader in the marine industry and is frequently called upon to serve as an expert witness or guest speaker at industry forums. Mr. Phlegar has a M.S. in Coastal Engineering from the University of Florida.

Steve Sabia is ATM's lead marina permitting agent in Florida. Having worked for the Florida Department of Environmental Protection (FDEP) for over 10 years in marina permitting, Mr. Sabia has a unique, detailed knowledge-base of Florida marina permitting strategy and law, and is well-schooled on interaction with the USACE and local water management districts. He has specialized experience for projects involving activities on state-owned sovereign submerged lands including state Aquatic Preserves requiring leases, public and private easements and letters of consent. He has reviewed and prepared applications requiring approval by the Florida Governor and Cabinet sitting as the Board of Trustees of the Internal Improvement Trust Fund for projects located on state-owned submerged lands.

Mr. Sabia was the lead permit team member responsible for obtaining a Joint Environmental Resources Permit (ERP) in 11 months for Stock Island to redevelop an existing open water basin into an upscale 285-slip marina, 362-slip dry stack barn, upland support facilities and excavation of upland piers. Sewage pumpout and fueling facilities were included in the redevelopment. The Stock Island permit process required extensive contact with FDEP's Marathon Office. Other recent permitting projects include the Key West NAS Permitting support, mooring fields for the Cities of St. Augustine and Titusville, and Vilano Pier in St. Johns County. In addition, Mr. Sabia has performed regulatory permitting, environmental review and due diligence for a long list of marinas in Florida.



William Fay has over 25 years of experience in marine construction projects including onsite inspection and administration. In addition he has developed and implemented Environmental Protection plans, constructed artificial reefs for mitigation and recreation, performed construction and monitoring of concrete artificial reef modules, and *performed coral reef restoration*. He helped develop and implement coral transplanting techniques, short and long-term environmental monitoring, seagrass surveys, seagrass restoration, and performed many projects in environmentally sensitive areas while managing construction techniques for minimal impact. In 2009 he led a team for FDEP to relocate and transplant damaged coral on Breakers Reef off of Palm Beach. He has performed similar efforts in the Bahamas and the Florida Keys.

**Gary Bazemore, P.S.M.** 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, multi-disciplinary field investigations including topographic, boundary, control, route, utility, and hydrographic surveys and routinely works on ATM's coastal and marina projects. His *hydrographic surveying experience* includes bathymetric, side scan sonar, sub-bottom sonar, magnetometer, navigation, current measurements, and tide studies.

**Kirby Marshall, M.B.A.** serves as Market Sector Leader for ATM and has worked on and/or led a multitude of marina and waterfront development projects throughout the U.S. and Caribbean. This work has included several facility redevelopment projects including, among others, New Port Cove Marine Center in Florida, Cypress Landing Marina in North Carolina, Yacht Haven Grande in St. Thomas, Rodney Bay Marina in St. Lucia, and currently the Bay Bridge Marina in Maryland. Mr. Marshall has led a number of municipal marina projects throughout the United States and Florida. To capitalize on his experience in complex marina redevelopment and history of success in the municipal sector, Mr. Marshall will lend support on the Tarpon Pier redevelopment project with regard to demolition planning, construction planning to accommodate houseboats during redevelopment work, and related support as required.

Robert Semmes, M.S. has over 22 years of experience working on waterfront planning and design projects. He has been part of multi-disciplinary planning teams for waterfront developments that have included land planners, golf course architects, engineers, and waterfront planning experts. He has worked on a variety of projects throughout the world including: the Florida Keys, the Bahamas, the Caribbean, the Middle East, Europe, and Asia. Recently, he led ATM's efforts in Dubai where he was responsible for the planning and design of over 10,000 berths, 1,000 drystack storage racks, and several boatyard facilities. He has extensive permit preparation and negotiation experience for projects with complex environmental issues and led the team on the Stock Island project that was permitted in a very tight timeframe.

Greg Braun's expertise includes over 20 years of work in the delineation and assessment of nearshore and estuarine habitats. He has developed Manatee Protection Plans for two Florida counties. His experience includes estuarine and marine ecosystems, where he has conducted numerous assessments of benthic conditions. These assessments have included mapping and evaluation of seagrasses, macroalgae, and coral communities including significant efforts within the Lake Worth Lagoon estuary for Palm Beach County. He will be available to assist with environmental issues related to the marina redevelopment.

Additional ATM resources and expertise from ATM's West Palm Beach and Charleston marina and coastal engineering team are available on an as-needed basis. Our team members can respond to multiple project requests simultaneously, and can complete large tasks quickly by directing as many staff to the project as needed. Distance has never been an issue in the timely completion of our clients' projects.

**R.** Jeff Weiler, P.E. is the President of The Weiler Engineering Corporation and is a Professional Engineer registered in the State of Florida. He has more than 20 years of experience working throughout South Florida and the Florida Keys. Mr. Weiler specializes in residential, commercial, and municipal engineering, construction, and surveying projects. His design, permitting, and construction management and administration expertise ranges from numerous waterfront residential, marina, and resort developments, marine facilities including docks, boat ramps, shelters, and accessory structures, and wastewater collection, transmission, and treatment systems. He is proficient in value engineering and cost estimating. The success of projects such as *Palm Island Marina in Placida*, *FL and Hawk's Cay Resort Marina in Duck Key, FL* are attributed to his professionalism as a businessman and his capabilities as an engineer.

**Michael Giardullo, P.E.** is Director of Civil Engineering at WEC. A Professional Engineer registered in the State of Florida, he is LEED Accredited with 7 years of experience in civil engineering. He has served as Project Manager on numerous marina design and renovations, waterfront resort developments, and municipal wastewater and stormwater projects. He has provided *design and construction administration services for onsite dock sewage pump out systems and floating and fixed docks, has conducted dock replacement reserve studies, and has presided over benthic, bathymetric, and seagrass studies. He has built a strong relationship with state and federal agencies through his extensive environmental permitting experience, and with local municipalities and residents through informative and interactive public meetings.* 

**Edward R. Castle, P.E.** is Vice President of WEC and Florida Professional Engineer with 24 years of experience. He is considered a wastewater expert and has extensive experience in residential, commercial, and municipal wastewater engineering projects throughout South Florida and the Florida Keys. He specializes in *planning, design, construction, and operation of utility projects* such as sewer collection, water, stormwater, treatment plants, and *marina pump-out stations*, and has worked locally with the *City of Key West, the City of Marathon, the Village of Islamorada*, the Key Largo Wastewater Treatment District, and the U.S. Department of Defense. Some of his most prominent successes include the City of Marathon Wastewater and Stormwater Project and the *City of Marathon Marina Improvements Project*.

**Serhiy Mashtakov, P.E.** is a Design Engineer/Structural Specialist at WEC and a LEED Accredited Florida P.E. He is an authority on reinforced concrete docks and piers, wood docks and piers, and reinforced concrete seawalls. With an enormous amount of experience and success on projects such as the *Islamorada Kayak Ramp Project, the City of Marathon Marina Improvements,* and the *33<sup>rd</sup> Street Boat Ramp Project in Marathon,* he is an integral part of the Weiler Engineering team.

**Stephen Markey, E.I.** is a Design Engineer/ Construction Services Manager for WEC. Through his five years of civil engineering experience, he has perfected such skills as utility design and hydraulic modeling, and works with clients, contractors, the public, and his inspection team. He has worked closely with local utilities to coordinate utility connections, and with the public through individual, personalized meetings. He has also conducted public informational and Q & A sessions on large projects such as Phase 1 through Phase 7 of the *City of Marathon WW and Stormwater Project*, which had a huge impact on residents during construction.

**Lindsey Weaver, P.E.**, a Senior Geotechnical Engineer with Universal, has over 31 years experience in geotechnical engineering and construction materials, including both public and private sector projects. He has completed the geotechnical exploration and engineering for both private and public works projects in *South Florida and the Florida Keys for the past 21 years* and is very familiar with local and regional soil conditions. His experience includes major projects in the areas of geotechnical engineering, aggregates, asphalt, concrete, and earthwork.



## PETER C. PETERSON, M.S., P.E. Project Manager



M.S., Ocean Engineering, Florida Institute of Technology B.S., Mechanical Engineering, West Virginia University Professional Engineer - FL No. 49294, VA No. 0402 037891, TX No. 98-182

Mr. Peterson has over 20 years of experience in marina and boat ramp facility planning, design and permitting. He has worked on and managed projects in the U.S., the Caribbean, Central America and China. He has been responsible for all facets of coastal and marine engineering and has worked on private marinas, large cruise ship siting studies, coastal processes and shoreline change analyses, coastal structure design, and due diligence investigations for marina and coastal developments. He completed an award winning marine facility siting study for St. Johns County and developed a Master Plan for all the City of Jacksonville's public boat ramps. At Great Guana Cay, Abaco, he developed a force analysis program in relation to large vessels and their effect on mooring and navigation within a confined basin. Mr. Peterson's wide range of marina expertise and strong history of work in South Florida position him well to lead this redevelopment project for the City of Key West. Relevant experience includes:

<u>Stock Island Marina, Florida Keys</u> – Project Engineer for design of marina planning and renovation at Stock Island. ATM assisted the Owner in obtaining the ERP permit. Work included dock layouts and initial planning, utility demands and public consensus. Project was put on hold until Owner could receive financial backing.

<u>Key West Naval Air Station, Key West</u> – Sr. Engineer overseeing shoreline stabilization. During construction, turbidity issues arose due to nature of work. ATM helped the Contractor improve construction techniques and provided monitoring to prevent damage to surrounding areas.

<u>City of Madeira Beach, FL</u> – Project Manager and Engineer for the complete renovation of the City Municipal Marina. Completed replacement of the existing boat ramp and constructed a new ship store/office and replaced the underground storage tanks. Future plans call for complete renovation of the existing wet slips, and creating a new dry stack facility.

<u>City of Cocoa Waterfront Municipal Redevelopment Project, FL</u> – Project Engineer / Lead Waterfront Designer for the waterfront portion of the master plan redevelopment. Prepared recommendations and conceptual layouts for new and updated marina and waterfront elements that included mooring field layout and planning, dock layouts, design and evaluation, and boardwalk structural elements. Evaluated potential future needs of the City's waterfront district and associated amenities.

<u>Old Port Cove Marina, North Palm Beach, FL</u> – Senior Engineer for review of shop drawings and calculations to ensure adherence to plans for major marina renovation. Facilitated upland re-programming of overall facility.

<u>Laishley Park Municipal Marina, City of Punta Gorda, FL</u> – Design engineer and reviewer for final project design on the City Marina. Developed design plans and specifications for the fixed and floating docks and utility replacement, oversaw contractor closeout.

<u>Fernandina Harbor Marina Redevelopment, Fernandina Beach, FL</u> – Design Engineer for marina modifications and permitting for renovations. Developed floating dock loads and provided recommendations for final dock selection and structural review.

<u>Marineland Marina, Flagler County, FL</u> – Project Engineer for securing new permits for expansion and re-development of the historic Marineland Marina. A detailed flushing analysis was performed to ensure that local shellfish beds were not affected by the addition of new slips. Developed plans and performance specifications, bid support and construction oversight for a fixed and floating dock system and dock utilities in support of Phase 1 construction.

Mooring Field, City of Titusville, FL – Project Manager/Engineer for the City's mooring field expansion. The mooring field was designed to accommodate up to 260 mooring field balls with associated upland amenities to handle the new slips.

Mooring Field & Breakwater/Dredging Permitting, City of St. Augustine, FL – Project Engineer for permitting and design of a new breakwater to protect the existing marina. Plans also call for dredging of the basin. Engineer of Record for installation of 178 mooring units for the City's municipal mooring field.

<u>Washington Sailing Marina, Alexandria, VA</u> – Project Engineer for redevelopment and renovation of this public marina owned by National Park Service. The existing marina was expanded and updated, including new shoreline protection, construction of a wave attenuator, and new ramp and boat lift facilities.

<u>Golfito, Costa Rica</u> – Project Engineer for design and development for a new sportfishing marina. The marina is the first in this area of the country, and required extensive coordination with local engineers and planners.

## KIRBY G. MARSHALL, M.B.A. Project Planning



M.B.A., The Citadel

B.S., Industrial Technology, Construction Management, University of North Florida

Mr. Marshall serves as Market Sector Leader for ATM and has worked on and/or led a multitude of marina and waterfront development projects throughout the U.S. and Caribbean. This work has included several facility redevelopment and municipal marina projects. Mr. Marshall will lend support on the Tarpon Pier redevelopment project with regard to demolition planning, construction planning to accommodate houseboats during redevelopment work, and related support as required. Relevant projects include:

<u>New Port Cove Marina</u>, <u>West Palm Beach</u>, <u>FL</u> - Developed staging plan for ongoing marina operations during demolition and redevelopment of marina facility in Palm Beach County. Assisted in facility layout and design, coordinated development of bid documents for drystack demolition and reconstruction. Oversaw bidding and construction process. Coordinated with local and state officials regarding project permitting. Coordinated 'Clean Marina' application process for facility and developed environmentally-friendly design.

Rodney Bay Marina, St. Lucia – Led international design and construction team for the \$25M redevelopment of the Rodney Bay Marina. Work included development of a detailed construction phasing plan to accommodate vessels during demolition and construction. This was a critical project element as the construction of the marina overlapped with the annual Atlantic Rally for Cruisers (ARC) race completion at the marina. The ARC is a vitally important economic driver for St. Lucia and as such proper accommodations for arriving competitors during construction was a paramount consideration in redevelopment planning and the execution of construction. Additional work included: management of international marina design and construction team. ATM services included: facility evaluation, redevelopment planning, engineering design of floating dock replacement (of fixed concrete piers), demolition planning, regulatory permitting, dredging design, engineering design of fixed megayacht pier, shoreline stabilization design (bulkhead), management of geotechnical services, utility design (including marina electrical design by *Epic Engineering*), international bidding, contract negotiations with multiple international contractors, coordination with local authorities/service providers, construction oversight.

<u>Lockett Marina</u>, <u>Old Hickory Lake</u>, <u>TN</u> – Led marina planning team on this private marina development on Old Hickory Lake. Work included Marina Market Assessment, Engineering Assessment, development of preliminary marina design alternatives, regulatory permitting support, marina plan refinement, and marina economic analysis. Relevance to the Tarpon Pier project is prevalence of large houseboats on Old Hickory and Percy Priest lakes and associated analysis and integration to floating dock marina design for the Lockett project.

<u>City of Palatka Waterfront Development Revitalization Effort, FL</u> – Managed and conducted riverfront redevelopment project. Work included marina planning, upland development coordination, marina market evaluation, pro forma financial performance evaluation, permitting feasibility analysis, and bass tournament facility planning.

<u>Downtown Municipal Boat Slips, City of Clearwater, FL</u> - Conducted detailed boat slips feasibility study for marina project in downtown Clearwater. Work included marina market assessment, operations planning, construction cost estimating, and 20-year pro forma model for marina financial performance. Included close coordination with Director of Finance and Marine Facilities Director for the City as well as a team of other professional consultants. Participated in several public meetings/presentations over the course of the project.

<u>Sebastian Inland Harbor Marina, FL</u> – Led marina planning effort, marina and bulkhead design, development of construction plans and specifications for public marina in St. Augustine, Florida. Conducted close coordination with developer, contractor, architects, regulators, etc.

<u>Cypress Landing Marina, Chocowinity, NC</u> - Performed financial analysis, project planning, marina design, demolition planning, permit coordination, and comprehensive construction administration on 222-slip floating marina redevelopment in North Carolina.

<u>Yacht Haven Grande Marina Development, St. Thomas, USVI</u> – Performed detailed project planning, site inspections, and led construction administration on megayacht facility redevelopment project in the Caribbean, which included demolition and replacement of aged concrete fixed piers.

## ROBERT H. SEMMES, M.S. Senior Waterfront Planner



M.S., Agricultural Engineering, University of Florida, 1988 B.S., Agricultural Operations Management, University of Florida, 1986

Mr. Semmes has over 20 years experience in waterfront planning and development projects. He specializes in marina development and revitalization; specialty environmental issues related to port and harbor development and expansion; and ecosystem assessment, restoration, and mitigation. While with ATM, he has been involved with hundreds of marina planning and development projects. He has prepared numerous water and sediment quality assessments; sedimentation investigations; plans and specifications for dredging, marina, and boat landing construction projects; and financial projection models and business plans for marina development. He has extensive permit preparation and negotiation experience for projects with complex environmental issues including open water and ocean disposal of dredged material; development of new harbor berths and turning basins; and the larger issues related to harbor deepening and expansion. He has worked on a variety of projects throughout the United States, Middle East, North and East Africa, Panama, Mexico, the Bahamas, and the Caribbean. He has provided broad-based management, acting as an onsite engineering representative and liaison to contractors, owners, and the regulatory community. Relevant projects include:

Development of Luxury Full-Service Marina Facility, New Stock Island Properties, Key West, FL — Completed feasibility planning, market, financial studies, and Environmental Resource Permitting for a 263-berth luxury facility with sizes ranging from 50 ft. to 250 ft. in length. The facility was designed to cater to large sportfish vessels and seasonal home ported megayachts. It included fully enclosed drystack storage for luxury class multi-outboard vessels and go-fast boats ranging from 28 to 46 feet in overall length. Permits were received from the FDEP and USACE in mid-2008 within six months of application.

Master Planning of Marine-Related Components for Virginia Key Redevelopment Project, City of Miami, Virginia Key, FL – Senior supervisory planner for ATM services related to the development of a new master plan. Work included planning of new state-of-the-art drystack facilities, new wetslip marina, boat ramps, rowing courses, etc. Planning effort included regulatory feasibility, financial feasibility and pro forma analysis, attendance at numerous public workshops and consensus building.

Fernandina Harbor Marina Redevelopment, City of Fernandina Beach, FL — Provided consulting engineering services for a feasibility study, design, permitting, and construction of a marina on the Atlantic Intracoastal Waterway. The existing facility had a severe sedimentation problem and few viable dredged material alternatives. The selected alternative was permitted by FDEP and USACE and had to overcome several obstacles involving navigation concerns due to the closeness of the proposal to the deep-draft federal channel; filling of Sovereignty Submerged Lands to create intertidal salt marsh in the abandoned mooring areas; and the filling of submerged lands to create a viable boat launch ramp, etc. Coordinated all aspects of the redevelopment including the marsh creation plan; required environmental studies; numerical modeling; design workshops; permit application development and negotiations at the State cabinet level; financing, business planning, and pro forma analyses; and development of the project Plans and Specifications.

<u>City of Daytona Beach Marina, Daytona Beach, FL</u> – Project manager for the planning and feasibility studies for the redevelopment of their Halifax Harbor Marina. Completed business planning and pro forma support, marina market studies, dredging plans, sediment and water quality evaluations, multiple dock layouts, and permit agency negotiations. Successfully received permanent maintenance dredging authorizations from the FDEP. Conducted dredged material management alternatives study and successfully negotiated access of FIND spoil site for placement of the City's maintenance dredged material.

Charleston City Marina, Charleston, SC – Participated in planning the redevelopment of this award winning City Marina.

Redevelopment of Downtown Municipal Marina, Beaufort, SC – Assisted in permitting, development of Plans and Specifications, bid process, and construction supervision for the rebuilding of the marina's floating dock works. Work included a significant expansion to the marina footprint, the installation of a floating "day dock" for transient tourist traffic to the historic downtown and all associated utilities.

Redevelopment of Research Vessel Marina in Port Everglades, Nova Southeastern University, Dania Beach, FL — Served as project manager and lead consultant for specialized permit support for the 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 those 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.

#### R. Jeff Weiler, P.E.

President, Technical Advisor



Expertise: 24 yrs of experience in Civil Engineering, FL PE #46027

Site Planning, Stormwater and Flood Modeling, Environmental Engineering

#### **Relevant Projects:**

Hawk's Cay Resort, Duck Key, FL - Principal in Charge: Weiler Engineering has been the Civil, Utility, and Structural Consultant to the Hawks Cay Resort since 1997. The phased project included the design and permitting to construct nearly three hundred single-family homes with resort and waterfront amenities and a complete renovation of the five star hotel and facilities. WEC provided planning, design, and construction engineering and inspection services for nearly every phase, including docking facilities, a boat ramp, seawalls, environmental permitting, structural design, a linear park with a Multi-Use Recreational Trail, site work, stormwater drainage and treatment, water distribution, hydraulic modeling, and wastewater collection and treatment facilities for all of the homes and common facilities, including the linear park. Also responsible for the design of the reclaimed water system including reuse mains, pumping facilities, and spray irrigation design. Reserve studies have also been conducted by WEC in order to anticipate the deterioration of facilities and compensate through periodic maintenance.

Indigo Reef Resort, Marathon, FL - Principal in Charge/Project Manager: WEC provided complete site and structural design, permitting, and construction contract administration for this 67 unit waterfront resort and 67 slip marina on Florida Bay. Engineering design services and services during construction were provided for nearly every phase of this project including site, dock and seawall construction, environmental permitting, stormwater drainage and treatment, filling in a portion of two canals, water distribution, hydraulic modeling, wastewater collection and treatment facilities, and structural design for all of the homes and common facilities. Jeff provided design of the onsite wastewater treatment facility as well as the collection and transmission system. Later, Jeff assisted the resort in connection options in the City's central wastewater collection system. Jeff has extensive experience with the Florida Department of Environmental Protection, the State Water Management Districts, Florida Fish and Wildlife, and ACOE for permitting requirements for docks and waterfront improvements.

Palm Island Resort and Marina, Placida, FL - Principal in Charge/Project Manager: WEC was responsible for the design, permitting and construction administration for substantial modification to this marina facility in Placida Florida. The project included construction of two massive boat dry storage buildings, multiple docks, a boat travel lift facility, and a new breakwater incorporated into the existing marina facilities. WEC has been the consultant to the marina since 1995 and has completed the engineering services for numerous phases of the marina. Because the project was complex and permit intensive, Jeff was responsible for working closely with multiple State and Federal regulatory agencies, as well as Charlotte County, in order to coordinate their efforts.

#### Edward R. Castle, P.E., Vice President – Senior Environmental Engineer

Expertise: 24 yrs of experience, Environmental Engineering, FL PE #58574

Wastewater Treatment and Collection, Hydraulics

#### **Relevant Projects:**

Marina Improvements (2010), Marathon, FL - Engineer of Record: Provided design, permitting, & construction administration for improvements to the existing City Marina. Improvements included a floating marginal/dinghy services dock, a waterfront boardwalk, recreational facilities, a new public bath house, upgrades to the City's boat pump-out system, and associated utilities. Additionally, WEC performed benthic and seagrass surveys and assisted the City with the sovereign submerged land lease. Under Ed's direction, his staff was responsible for all aspects of design including value engineering, cost analysis, site layout, hydraulic modeling, stormwater management, and civil and structural engineering. His staff also provided construction administration services such as conducting construction progress meetings and performing site inspections.

Wastewater and Stormwater Project (2011), Marathon, FL - Project Manager: Worked closely with the City in preparing the Facilities Plans, including a phased \$120M Capital Projects budget and design of the City Wide Collection System, and 9 wastewater treatment plants and vacuum stations. Integrating an innovative stormwater management system into the design and construction of the wastewater system has saved the City an additional \$40M and caught the attention of the EPA, who presented Ed with their prestigious PISCES Award. Ed worked very closely with City Staff and has functioned as an extension of City staff as a City engineer. Under his direction, Ed's staff provided construction administration, conducting construction progress meetings, providing public outreach services, and performing construction inspection and engineering.

Wastewater Project (2011), Key Largo, FL - General Consultant to the Key Largo WWT District, responsible for program management, design and consulting. Tasks include overseeing engineering consultants, planning, design, construction administration, compliance reviews, and general consulting. WEC reviewed the design and provided construction administration for the \$130M project. Also provided design of a large portion of the collection system and vacuum, gravity, low pressure, and force main design in addition to several pump stations in residential and commercial areas. Project constructed under budget.

#### Michael J. Giardullo, P.E., Director of Civil Engineering

Expertise: 7 yrs of experience, Civil Engineering, Florida PE #70676

Site Plan, Road Design, Stormwater Design, Utility Design, Coastal Engineering, Construction Administration

#### **Relevant Projects:**

Parrot Key Resort (2011), Key West, FL - Project Manager: Parrot Key is a 5 acre waterfront community located in Key West. The project consists of 74 town homes, a floating personal watercraft dock, a fixed wood fishing dock, a pool and bath facility, recreation building, tiki bar, and maintenance facility. WEC was responsible for the permitting and design of all utilities, storm water facilities and improvements, civil engineering, and structural engineering of buildings and dock facilities. Michael managed all aspects of the project and worked closely with the South Florida Water Management District, USACE, DEP, local utilities, and the City to tackle the complex permitting process for this project.

Marathon Marina Improvements (2010), Marathon, FL - Project Engineer/Project Manager: WEC was tasked by the City of Marathon to provide design, permitting, and construction administration for a number of improvements to the existing City Marina. The improvements included a floating marginal/dinghy services dock, a waterfront boardwalk, recreational facilities, a new public bath house, upgrades to the City's boat pump-out system, and associated utilities. Additionally, WEC performed benthic and seagrass surveys and assisted the City with the sovereign submerged land lease. Mike was responsible for all aspects of design including value engineering, cost analysis, and dock design. Mike also worked closely with the South Florida Water Management District and the Army Corps of Engineers during the permitting process for this project.

#### Serhiy Mashtakov, P.E., Design Engineer/Structural Specialist

**Expertise: Structural Design, Florida PE #71480** 

Reinforced Concrete Seawalls, Reinforced Concrete Docks and Piers, Wood Docks and Piers

#### **Relevant Projects:**

Islamorada Kayak Ramp (2011), Islamorada, FL- Project Engineer / Project Manager: WEC was hired to provide design, permitting, and construction administration services for a kayak boat launch in the Village of Islamorada, FL. The design included a concrete boat ramp, a floating kayak launch platform, a concrete seawall, stormwater management, parking areas, and tree mitigation. Provided full design & permitting, management of construction engineering & inspection services.

Marathon Marina Improvements (2010), Marathon, FL- Project Engineer: WEC provided design, permitting,& construction administration for a number of improvements to the existing City Marina, including a floating marginal/dinghy services dock, a waterfront boardwalk, recreational facilities, a new public bath house, upgrades to the City's boat pump-out system, and associated utilities.Performed benthic and seagrass surveys and sovereign submerged land lease. Serhiy served as a designer & construction administrator for these improvements.

**33**<sup>rd</sup> **Street Boat Ramp** (2009), Marathon, FL - **Project Engineer fpr** design, permitting, and construction administration services for the restoration/upgrade of the facilities at the 33<sup>rd</sup> St. Boat Ramp, including the replacement of a deteriorated ramp and docks, a drainage system, repaving of the parking areas, and replacement of the seawall. WEC also designed a stormwater management system and made improvements to the bathroom facilities. Serhiy performed the structural calculations and design for the dock concrete piles, the dock wood framing, the new seawall, and the pre-stressed concrete boat ramp, reviewed submittals for compliance with technical specifications, and conducted site inspections.

#### Stephen L. Markey, E.I., Design Engineer

**Expertise: 4 yrs of experience, Civil Engineering** 

Site Planning, Utility Design, Stormwater Design and Modeling, Construction Administration

#### **Relevant Projects:**

Wastewater and Stormwater Project (2011), Marathon, FL - Design Engineer/Construction Services Manager for master planning, design, and permitting for its \$120M wastewater and stormwater projects, including engineering services during construction to install more than 56 miles of vacuum, gravity and low-pressure sewage lines, six WWTPs, and reclaimed water service. Provided stormwater management design & worked closely with FDEP, SFWMD, and ACOE to obtain permits for several vacuum facilities and wastewater treatment plants. Managed the inspection team & performed construction administration service.

Parrot Key Resort (2011), Key West, FL - Construction Services Manager: Parrot Key, a 5 acre waterfront community consists of 74 town homes, a floating personal watercraft dock, a fixed wood fishing dock, a pool and bath facility, recreation building, tiki bar, and maintenance facility. Responsible for the permitting and design of all utilities, stormwater facilities & improvements, civil engineering, and structural engineering of buildings and dock facilities.

Marina Improvements (2010), Marathon, FL - Construction Services Manager: Served as Construction Services Manager for this project, conducting site inspections, reviewing product submittals and pay applications, and verifying compliance with plans and technical specifications.

#### 7. QUALIFICATIONS & EXPERIENCE

From redevelopment planning, feasibility, permitting, engineering design, contracting and construction supervision, our professionals have successfully served coastal communities allowing them to reach their marina and waterfront redevelopment goals. ATM's engineers and planners have completed many highly successful waterfront renovations for municipal marinas all over the United States. Our qualifications are:

**Design Capabilities** - From design/performance specifications for floating docks, structural design of shoreline stabilization, to customized marina utility integration, ATM has proven success throughout Florida and beyond. We have substantial experience with *marina renovation/revitalization* projects and maintain strong, ongoing relationships with marina/dock suppliers that help us develop unique marina engineering solutions. Other areas of marina design experience include:



- Substantial Experience with the Design of Floating Marina Facilities
- Marina Demolition and Redevelopment Planning
- Marina Utilities Design (Potable Water, Marine Pumpout, Fire Protection, Shore Power, Marine Fuel, Bilge Water Recovery, Waste Oil Recovery, etc.)
- ADA Access Guidelines for Boating Facilities (Section 15.2)

In addition, our staff has the specific expertise with the integration of houseboats or large live-aboard vessels into floating marina facilities (consideration of specific wind loading on these vessels, utility requirements, etc.). These types of vessels require careful analysis of wind and wave loading and extreme utility demands. For Old Port Cove Marina in North Palm Beach, ATM worked with the dock supplier and contractor to determine specific vessel loads and what actions to take should the loading exceed the design in extreme circumstances (Category 4 and 5 hurricanes). Many of our marina designs incorporate extremely high level utility demands that must be coordinated with existing upland infrastructure. For several large mega-yacht facilities, this has meant developing unique power and water supply capabilities not normally utilized for smaller non-live-aboard vessels.

ATM operates at the forefront of sustainable marina development and has designed several facilities to be compliant with "Clean Marina" or "Blue Flag" programs. Our excellence in the field of marina design has resulted in the receipt of the **2009 PIANC** *Jack M. Nichol Award* for outstanding marina design. PIANC is the global organization providing guidance for sustainable waterborne transport infrastructure for ports and waterways. This organization provides a forum where global professionals collaborate



to provide expert advice on cost-effective, reliable, and sustainable infrastructure to facilitate the growth of waterborne transport. ATM is an active member in this professional organization and others across the globe.

**Materials Selection and Value Engineering** - Most development today is highly site-specific. Constraints imposed for working with the natural system as it exists without destroying valuable marine habitats pose new challenges to site-specific engineering and materials selection. ATM is conscious of the need to select the right materials for the right price for the particular environment under study and our wealth of global marina-specific engineering expertise affords us the knowledge and insight to do so.



**Waterfront Structures** - ATMs engineers are well-versed in waterfront structures and their effect on the natural systems they occupy. Waterfront structures affect local hydrodynamics and sediment transport and may alter the surrounding habitat. Thus, care and attention must be given to these waterfront structures to minimize their impact on these systems.

Waterfront structures must be designed for variable and near catastrophic pressures. Storms, waves, tides, currents, winds, and vessel and human loads are often unpredictable or short-term. Saltwater environments increase the possibility of corrosion, as well as biodegradation by marine organisms, wetting and drying cycles, and aerobic and anaerobic sediment interfaces. ATM engineers are well aware of the design requirements for the coastal environment. We have up-to-date knowledge of available materials and products, and seek the best and lowest-cost product for each of our clients. We also have extensive experience with innovative site-specific solutions that achieve cost criteria. For Old Port Cove Marina in North Palm Beach, ATM determined the wind loading criteria that would require moored vessels to detach from the main marina structures so as to not damage the existing floating docks. This allowed the facility to save money by not over-building the docks and demonstrated that floating docks would be a good alternative to fixed docks, which were destroyed during the hurricane season of 2004.

Environmental Permitting and Negotiations - Since its founding, ATM has remained true to its roots as an environmentally focused engineering firm. Our staff has helped clients address the environmental and regulatory challenges facing their waterfront projects. ATM staff members are able to quickly and efficiently negotiate federal, state, and local permitting issues. We understand the technical, environmental, legal, and public awareness issues involved and have specific experience working within sensitive environments including a track record of marina permitting success in the Lower Keys. As an example, ATM's in-house permitting specialist was able to secure the state and federal permits for a 280+ megayacht marina and dry storage facility on Stock Island in 11 months — a very quick turnaround considering the Keys are considered an area of Critical Concern by the state and Outstanding Florida Waters. ATM also secured state and federal permits for an addition of 50 wetslips to the City of St. Augustine's Marina in a six —month timeframe, applying in April 2010 and receiving the permits in October 2010.

Our project team members all have had extensive, proactive, and successful working relationships with:

- U.S. Fish and Wildlife Service
- National Marine Fisheries
- Florida Department of Environmental Protection (FDEP)
- Florida Fish and Wildlife Conservation Commission
- Environmental Protection Agency (EPA)
- U.S. Army Corps of Engineers (USACE)
- Florida Inland Navigation District (FIND) & West Coast Inland Navigation District (WCIND)
- U.S. Army Corps of Engineers Waterways Experiment Section
- South Florida Water Management District (SFWMD)
- U.S. Geological Survey
- Marine Industry Association (MIA)
- Monroe County



Environmental Resources — When required, ATM staff scientists and engineers are qualified to perform the vast array of environmental resources assessments necessary for waterfront development. Our staff routinely performs wetland jurisdictions, water and sediment quality measurements, current and tidal measurements, benthic inventories, shellfish inventories, habitat classifications, endangered species surveys, and various other assessments. We have vast experience in proposing low-cost, innovative remedial actions, mitigation, beneficial use enhancements, and preservation of on-site and adjacent resources.

Our experience in ecology, water resources, and coastal engineering provides valuable issue identification and sustainable solutions throughout project feasibility, planning, design, construction, and operations and sets us apart from other marine engineering firms.

Our team includes an *ATM staff member who helped develop and implement coral transplanting techniques and is able to provide the City with relocation plans should they be required.* He has also worked on seagrass surveys, seagrass restoration, and performed many projects in environmentally sensitive areas while managing construction techniques for minimal impact. He was part of the team on the Looe Key Reef Restoration in the Florida Keys Marine Sanctuary.

**Construction Services** – ATM's professionals have assisted our clients with over \$235,000,000 in <u>marina</u> construction completed between 2003 and 2011. *Detailed construction planning/phasing, demolition planning, consideration of ongoing marina operations, project bidding, construction contract negotiation, progress inspections, pay request approvals, change order management, and contractor oversight are all services performed on a daily basis by ATM staff. Much of this work was performed for public entities and helps us continuously refine our design and permitting approach.* 

Experience with Community Involvement Programs for marina redevelopment and expansion projects - ATM staff have conducted numerous public workshops, education programs and community involvement programs for municipal marina development projects. In addition, we have developed and maintained a number of interactive websites for these projects that help keep stakeholders aware of project progress and may also be geared to receive public feedback. Our successes with municipal marina community involvement projects includes work in Miami, Palatka, Clearwater, Fernandina Beach, Daytona Beach, Punta Gorda, St. Augustine, Naples, Ft. Pierce, Jacksonville, Titusville, St. Johns County, St. Lucie County, Palm Beach County, Lake Park, Charleston (SC), Beaufort (SC), Columbus (OH), Buffalo (NY), and others.

**Surveying Services** – ATM provides a wide range of land and hydrographic surveying services using in-house equipment. Key staff has over 25 years of combined surveying experience and utilizes state-of-the-art technology in conducting both nearshore hydrographic and upland surveys. The ATM team has conducted surveys in locations throughout the southeastern United States and Caribbean and regularly supports our marina staff on projects in these locations.

**Facility Inspections** – ATM has performed countless due diligence and structural facilities inspections to determine life cycle and replacement values for key marine components. These inspections require precise analysis to value the remaining structures and determine present and future cost appropriations to keep the marina operating at a profit. Reuse of critical components can save the Owner a significant amount of money, and the inspections are conducted with safety in mind.

Marina redevelopment projects are different than new construction in that some demolition must occur and existing slip holders must be inconvenienced as little as possible. For Tarpon Pier, juggling the replacement of the dock while allowing marina patrons to utilize the marina will be a critical component.

ATM has been faced with these restrictions on many occasions, and is familiar with the development of demolition plans. For the Washington Sailing Marina in Washington D.C., ATM developed a unique system in which boats were moved to different locations within the marina while the old docks were replaced with new docks. This had to be done within a very small window of time due to permit restrictions and weather. Another consideration is the eventual disposal of potentially large and hazardous materials, which needs to be considered in the planning process and addressed in the demolition plans.



#### WEILER ENGINEERING CORPORATION



"Excellence In Engineering"

With offices in *Key West, Marathon, Key Largo, and Port Charlotte,* Weiler provides a wide array of professional engineering services to municipalities and local governments and has an impressive track record of *municipal and private clients in Southwest Florida and the Florida Keys.* 

Capabilities include design, permitting, construction administration, operations and maintenance, and compliance monitoring/reporting for stormwater management systems and facilities, wastewater collection systems and treatment plants, public parks and recreational facilities, airports, and other local government facilities. Their past, proven, local experience in marina, dock, and boat ramp design services for a long list of clients including the City of Marathon, the Village of Islamorada, and many private clients from Key West to Key Largo is unmatched in the area. Weiler's construction specialists are proficient in cost estimating, construction scheduling, shop-drawing review, inspection, project management, and coordination of grant documentation and will be a valuable part of our project team.



#### **EPIC ENGINEERING**

Epic Engineering has been a key subconsultant to ATM for many years, supplying electrical engineering services to our marina projects. Representative ATM projects include: include the

Charleston City Marina and Barefoot Landing Marina in SC; Cypress Landing Marina, Chocowinity, NC; Yacht Haven Grande in St. Thomas USVI, Scrub Island, Cat Island, Rose Island and Hawke Island in the Bahamas and Sebastian Inland Marina in St. Augustine, Punta Gorda and Cocoa Beach Florida.

#### UNIVERSAL ENGINEERING SCIENCES, INC.



Geotechnical services for the Tarpon Pier Replacement project will be provided by personnel and equipment from UES's regional office in Fort Myers. UES has 32 professional and technical personnel, including three engineers and four drill rigs in their Southwest Florida office. UES has successfully completed geotechnical exploration and engineering services on a wide range of

public and private projects throughout Southwest Florida and the Florida Keys for the past 25 years and are very familiar with the local soil and groundwater conditions in Key West. A partial list of UES's geotechnical project experience in the Florida Keys includes: *Wastewater Treatment Plant Expansions for Key West Utilities, Parrot Key Condominiums, Marathon Wastewater and Stormwater projects, Sombrero Beach Road, Hawks Cay, Grassy Key Housing, and the Key Largo Sewer Project.* 





#### 8. REPRESENTATIVE DESIGN PROJECTS

Project Name & Location	Old Port Cove Marina, North Palm Beach, FL
Client Contact	Old Port Cove Holdings, Mr. Mark Lavery, 561-626-1760
Project Description	ATM served as the marina design consultant for the \$7 million renovation of the Old Port Cove Marina.
<ul> <li>Replacement of aged fixed concrete docks with floating docks</li> <li>Replacement of existing utilities with high-capacity utilities design</li> <li>Design consideration for high wind profile vessels</li> <li>Shop drawing review</li> <li>Construction administration</li> </ul>	Renovations included demolition and replacement of fixed, piers, and piling with new state-of-the-art hardwood-decked floating docks and new power pedestals with up to 100 amp single and three-phase shore power, cable, phone, WiFi, and the convenience of in-slip pump-out. In addition, the marina now has a first-class fire fighting system, new lighting and lushly landscaped upland and parking area.  The newly renovated marina can accommodate approximately 55 vessels from 50-feet to 190-foot megayachts. Old Port Cove Marina is the first facility of its kind in the northern Palm Beaches built specifically to accommodate megayachts - vessels 80' or larger. The facility can also accommodate yacht tenders from 20- to 30-feet in length. Phase I (North Basin – 59 slips) was completed from demolition to completion in a 6-month timeframe with the open house in February 2008. Construction for Phase 2 (South Basin – 144 slips) was completed in November 2008.

Project Name & Location	Rodney Bay Marina, St. Lucia
Client Contact	Island Global Yachting, Mr. Eric Simonton, 954-332-2468
Project Description Project Relevance	ATM worked with Island Global Yachting (IGY) on the complete redevelopment of the Rodney Bay Marina in St. Lucia as an international yachting destination.
<ul> <li>Marina inspections &amp; evaluation of fixed concrete pier components to remain and be reused</li> <li>Demolition plan</li> <li>Phased construction plan to accommodate ongoing marina operations</li> <li>Fixed pier replacement with floating docks</li> <li>Utilities</li> <li>Environmental studies</li> <li>Bidding &amp; negotiation</li> <li>Comprehensive construction administration</li> </ul>	The work included an aggressive wetslip replacement project that resulted in the demolition of existing fixed concrete docks, dredging, and the construction of 170 new floating wetslips for vessels up to 60-ft. as well as a 32-slip megayacht pier for vessels up to 255-ft. Project was phased/scheduled operations/terminus of a trans-Atlantic sailing race (ARC).  Engineering design elements for the project included fixed piers, floating docks, shoreline stabilization (revetment & sheetpile bulkhead), marina utilities (shore power, potable water, and marine pumpout), and dredging. Upon completion of the engineering design, ATM prepared a bid package and facilitated the bidding process, including contract negotiations between the owner and selected contractors. ATM also provided comprehensive construction administration services on the project. Dock construction was completed on schedule in December 2008. The Rodney Bay Marina is now considered one of the premier marina facilities in the Caribbean.



Project Name & Location	Bay Bridge Marina, Stevensville, MD
Client Contact	Brothers Property Mgmt. Corporation, Mr. Tom Hacker, 305-285-1035
Project Description  Project Relevance  Marina condition	The Bay Bridge Marina was experiencing structural failures of both docks and anchor piling on a number of dock trees, including the main fuel dock. In May, 2009, ATM conducted a professional evaluation of the condition of the docks, reviewed regulatory requirements for repair/replacement, and provided a recommendation for a path forward. The Owner agreed with ATM's recommendation to replace the docks with new commercial-grade floating docks and authorized
<ul> <li>assessment</li> <li>Demolition &amp; dock replacement planning</li> <li>Regulatory permitting</li> </ul>	ATM to commence dock demolition and replacement planning that considered the seasonal nature of the boating community in the area and annual boat show requirements at the marina facility. The dock replacement project had to be scheduled so there was limited interruption to ongoing marina operations. Through diligent regulatory permitting efforts with the Maryland
<ul> <li>Marina design, bidding, contract negotiation, construction administration.</li> </ul>	Department of Environment (MDE) and the USACE, as well as careful attention to detail during marina design and bidding efforts, ATM was able to meet the Owner's goals with an on-time project delivery.
	Critical to this effort was involvement of ATM technical staff throughout the construction process. Acting as the Owner's Representative, ATM was able to work efficiently with the dock supplier and general contractor to facilitate the project, resolve conflicts, and maintain schedule and budget.
	The result of the project is a showcase floating dock installation for the entire mid-Atlantic region which was designed for site-specific environmental conditions to allow for many years of useful service.

Project Name & Location	Old Island Marina and Boatyard, Stock Island, FL
Client Contact	Edward Kulik, LRC Opportunity Fund, 212-268-0000 office/
Project Description  Project Relevance  Environmental assessments  Modeling  Bathymetric surveying  Water quality  County, State, Federal permits  Development of Design Basis for extreme conditions and high wind profile vessels  Utilities  Specification & load estimates	ATM provided full planning, engineering, environmental assessment and permitting for the redevelopment an existing open water basin into an upscale 285-slip marina, 362-slip dry stack barn, upland support facilities and excavation of upland piers all within the Florida Keys Marine Sanctuary. <i>Marina was planned to accommodate several live-aboard vessels with full-time direct connection sewage removal capacity.</i> The permit process required extensive contact with FDEP Marathon office. This effort ultimately resulted in the acquisition of project permits for the redevelopment.  In support of the environmental permitting efforts, ATM conducted a benthic assessment of the impacted portions of the basin, flushing study of pre- and post-project conditions, and a water quality analysis. ATM performed a short term tide study and bathymetric survey of the access channel and marina basin in support of a marina redevelopment in the Florida Keys.  ATM also conducted a comprehensive marina and drystack market assessment to assess boating market trends and potential demand in the lower Florida Keys region. Based on the market assessment findings and in conjunction with the upland master planning, a conceptual marina, drystack, and boatyard layout was developed.



#### **Project Name & Location**

#### Palm Island Marina, Placida, FL

#### **Client Contact**

Palm Island Marina, LLC, Dean Beckstead, 941-697-4356

#### **Project Description Project Relevance**

- Design, permitting, and construction administration,
- Construction of multiple floating docks
- Pump-out station and dock utility design,
- Coordination with County and State/Federal regulatory agencies

Weiler Engineering was responsible for design, permitting and construction administration for substantial modification to this marina facility in Placida. The project included construction of two massive boat dry storage buildings, multiple docks, a boat travel lift facility and a new breakwater incorporated into the existing marina facilities. WEC has been the consultant to the marina since 1995 and has completed the engineering services for numerous phases of the marina. The project is



complex and permit intensive and required considerable coordination with multiple State and Federal regulatory agencies as well as Charlotte County. Currently, WEC is assisting the Owner with the preliminary design and permitting to expand the marina to include a mixed use community with nearly 1000 homes. Construction Cost \$3 Million.

#### **Project Name & Location**

#### Coral Lagoon Resort - Boat House & Marina, Marathon, FL

#### **Client Contact**

#### The Singh Company, Elizabeth Newland, 305-743-2810

#### **Project Description Project Relevance**

- Site design, structural design, permitting, and construction administration
- 69 wet boat slips and seawall
- Installation of dock utility services

Weiler Engineering provided complete site and structural design, permitting, and construction contract administration for this 5.4 acre, 25- unit waterfront marina resort, 69 slip marina, and 47,000 sq. ft. dry storage facility and marina store on Florida Bay. Engineering design and construction services were provided for nearly every phase of this project including site, stormwater drainage and treatment, water distribution, wastewater collection and treatment facilities, docks, seawalls, environmental permitting, and structural design for all of the homes, seawalls, docks and common facilities. The project is unique and complex as it was necessary to utilize a compact site while maintaining the unique character of the marina and to preserve the existing canals and access to the marina. It was necessary to completely restore all of the existing seawalls, boat well, and docks and construct new structures in some areas and expand the docking facilities to enhance flushing and water quality through the marina. Project included design & permitting to enhance the channel access from Bone Fish Harbor. Worked with local fire department to provide fire protection to the dock areas utilizing a dry line standpipe system, as the site density and the unique shape of the property precluded adequate access for fire protection vehicles to the docks.

#### Project Name &Location

#### Hawk's Cay Resort Marina, Duck Key, FL

Client, Contact

#### **Project Description**

- **Project Relevance**  Site design and permitting
- Docking facilities, boat ramp
- Utility installation
- Interaction with quests and residents to minimize disruption during construction

Village at Hawk's Cay. Michelle Koby, Property Manager, 305-743-3000

Weiler Engineering has been the Civil, Utility and Structural Consultant to the Hawks Cay Resort since 1997. The phased project included the design and permitting to construct nearly 300 singlefamily homes with docking facilities, resort and waterfront amenities, and a complete renovation of

the five star hotel and facilities. Engineering design services and services during construction were provided for nearly every phase of this project including docks, dock utilities, seawalls, site, storm water drainage and treatment, water distribution, wastewater collection and treatment facilities, permitting, and structural design for all of the homes and common facilities. Weiler is currently a consultant to the Resort.







#### 9. REFERENCES

#### **Charleston City Marina Company**

Mr. Robbie Freeman City Marina PO Box 759 Charleston, SC 29402

PO Box 759 Charleston, SC 29402 843-577-7702 ATM has provided Waterfront Master Planning, feasibility studies, economic evaluations, waterfront design, permitting, construction documents, and construction administration services for the award-winning Charleston City Marina, SC, which included a variety of commercial grade docks.

#### rfreeman@megadock.us

#### **Old Port Cove Marina**

Mr. Mark Lavery
Old Port Cove Marina
112 Lakeshore Drive
North Palm Beach, FL 33408
561-626-1760/ 561-386-9589 (cell)
mmlave@aol.com

ATM provided design services for the replacement of the existing fixed docks with new floating docks to withstand hurricane conditions. ATM's role included the wind/wave analysis, review of shop drawings, and construction oversight to ensure that the docks were constructed and installed within the tolerances of the design plans.

#### Safe Harbour Marina, Stock Island

Mr. Edward Kulik
LRC Opportunity Fund
5 International Dr., Suite 220
Rye Brook, NY 10573
office 212-268-0000 / cell 646-294-2162
fax 914-937-8013
ed@lavitt.com / edkulik@gmail.com

Ed Kulik was chief point of contact with New Stock Island Properties, LLC for ATM's work on the redevelopment of a large portion of Safe Harbor in the southern portion of Stock Island. ATM services included conceptual and final marina master planning/design, hydrographic survey, biological resource evaluations, water and sediment quality evaluations, financial performance modeling, and environmental permitting.

#### Palm Island Marina, LLC

Mr. Dean Beckstead 7080 Placida Rd Cape Haze, FL 33946 94-697-4356

THE WEILER ENGINEERING CORPORATION Design, permitting, and construction administration for modification to marina facility, including construction of multiple floating docks with 25 wet boat slips, dredging, installation of dock utilities, and improvements to a sewer pump-out station.

dlbeckstead@comcast.net

#### City of Marathon - Marathon Marina

Ms. Susie Thomas, Community Svcs. Director

305-289-4103 /

thomass@ci.marathon.fl.us

Mr. Richard Tanner, Marina/Ports Director 305-289-7788

tannerr@ci.marathon.fl.us

9805 Overseas Hwy Marathon, FL 33050 THE WEILER ENGINEERING
CORPORATION

"Excellence In Engineering"

Complete site & structural design, permitting, wastewater treatment & stormwater management design, and construction administration for City Marina, including construction of a floating marginal/dinghy services dock, installation of dock utilities, improvements to boat pump-out facility, installation of sewer lift station & force main, construction of waterfront boardwalk, & construction of 22 wet boat slips.

#### Hawk's Cay Resort And Marina

Ms. Michelle Koby, Property Manager 61 Hawks Cay Blvd

Duck Key, FL 33050 305- 743-3000 THE WEILER ENGINEERING CORPORATION "Excellence In Engineering"

michelle@villageathawkscay.com

Site design & permitting for construction of docking facilities, dock utility services, boat ramp, seawall, site utilities, and stormwater management facilities and complete redesign and permitting of the reuse system used to irrigate the resort. Construction took place while resort stayed open, WEC worked closely with client to minimize disruptions to residents and guests.





#### THE CITY OF KEY WEST

525 Angela Street Key West, FL 33040

#### **ADDENDUM 1:**

Design of Tarpon Pier Replacement for City Marina at Garrison Bight Request for Qualification RFQ#11-002 April 29, 2011

This addendum is issued as supplemental information to the bid package for clarification of certain matters of both a general and a technical nature. The referenced bid package is hereby addended in accordance with the following items:

- 1. Attached is the prebid sign in sheet (1 attachment)
- 2. Attached to this email is an electronic copy of the document City Marina Inspection developed by CH2MHILL (1 attachment)
- 3. Attached is an electronic copy of the Marina Management Plan (1 attachment)
- 4. Attached is a copy of the Permit documents required during the construction of the Marlin Pier Replacement Project (3 attachments)
- 5. Response to Questions; The following are responses to questions received.
  - Are the cover letter, covers, and section dividers included in the limit of 25 pages for responses? Response: The information page, organization chart, methodology and approach, company information, personnel, qualifications and references shall be no more than 25 written pages.
  - My copy of the RFQ only includes 2 pages for the Public Entity Crimes form (pages 10 and 11), however page 1 indicates that this form is 3 pages. Please clarify. Response: The Public Entity Crimes Form is 2 pages in length..

All Proposers shall acknowledge receipt and acceptance of this Addendum No. 1 by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Urman applied lethrology Mgmt
Name of Business

#### ANTI-KICKBACK AFFIDAVIT

SS:		
COUNTY OF MONROE		
I the undersigned hereby duly sworn depose and say that no portion of the sum herein response will be paid to any employee of the City of Key West as a commission, kickback, reward or gift,		
directly or indirectly by me or any member of my firm or by an officer of the corporation.  BY:		
sworn and prescribed before me this day of May, 2011		
NOTARY PUBLIC, State of Florida		
My commission expires:  CANDICE A BRANDT  MY COMMISSION # DD845168  EXPIRES December 14, 2012		
(407) 398-0153 Florida Notary Service com		

STATE OF FLORIDA

### SWORN STATEMENT UNDER SECTION 287.133(3)(a) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

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

This sworn statement is submitted with Bid, Bid or Contract No. RFQ 11-002 for Design of Tarpon Pier Replacement for City Marina - Garnson Blight.  This sworn statement is submitted by APPLIED TECHNOLOGY + MANAGEMENT
(Name of entity submitting sworn statement)
whose business address is 5550 NW 111 TH BLVD
GAINESVILLE FL 32653 and (if applicable) its Federal
Employer Identification Number (FEIN) is 59 - 2413268 (If the entity has no FEIN,
include the Social Security Number of the individual signing this sworn statement.)
My name is DAWN G. PETRELLA and my relationship to (Please print name of individual signing)
the entity named above is Chief Financial Officer.
I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.
I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), <u>Florida Statutes</u> , means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
I. A predecessor or successor of a person convicted of a public entity crime: or

An entity under the control of any natural person who is active in the management of t entity and

who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

2.

I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural 7. person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity. Based on information and belief, the statement, which I have marked below, is true in relation to the entity 8. submitting this sworn statement. (Please indicate which statement applies.) Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989. The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.) There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.) The person or affiliate was placed on the convicted vendor list. Them has been a subsequent proceeding before a hearing officer of the Sate of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.) The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services. (Date) PERSONALLY APPEARED BEFORE ME, the undersigned authority, (Name of individual signing) who, after first being sworn by me, affixed his/her signature in the space provided above on this\_ My commission expires:





Appled Technology & Management, Inc. 305 6th Avenue Melbourne Beach, FL 32951-2605 www.appliedtm.com