



**City Of Key West
Design of Tarpon Pier Replacement for
City Marina at Garrison Bight
Request for Qualifications #11-002**



Date of Submittal: May 18, 2011

Prepared for: City of Key West

Prepared by: Sea Diversified, Inc.
310 North Swinton Avenue
Delray Beach, Florida 33444



COPY



Sea Diversified, Inc.

310 North Swinton Avenue
Delray Beach, Florida 33444
Phone: 561-243-4920
Facsimile: 561-243-4957

4640 Lipscomb Street, Suite 12
Palm Bay, Florida 32905
Phone: 321-984-7268
Facsimile: 321-984-7270

May 17, 2011

City Clerk
City of Key West
525 Angela Street
Key West, Florida 33040

**Re: Statement of Qualifications and Experience
Design of Tarpon Pier Replacement for
City Marina at Garrison Bight
Request for Qualifications # 11-002
Sea Diversified Proposal Number 11-1810**

Dear City Clerk:

In response to the referenced Request for Qualifications (RFQ) issued by the City of Key West Purchasing Division, Sea Diversified, Inc. is pleased to submit the following **Letter of Interest** and **Statement of Qualifications** to provide the City with a complete engineered design for the Tarpon Pier Replacement Project at the Garrison Bight City Marina. Sea Diversified specializes in marine / coastal engineering services with specific expertise in the design and construction of new marine structures including existing pier retrofits similar in scope and complexity to the Tarpon Pier at Garrison Bight. Sea Diversified has the in-house capabilities to support such projects through all phases starting with the initial program development phase, through planning, permitting, design and ultimately through construction. We are also one of the few firms in the State that offers in-house hydrographic and topographic survey expertise and underwater marine inspectors to support design, permitting, and construction activities. Sea Diversified is licensed by the Florida Board of Professional Engineers and Florida Board of Professional Surveyors and Mappers.

Based upon our initial site observations, review of data and other information regarding the marina and understanding of the City's objectives, we know the steps required to facilitate the improvements to this valuable waterfront facility. Sea Diversified has supported other municipalities with similar marina and waterfront redevelopment programs, currently and most recently within the last three years, the City of Riviera Beach, City of Boynton Beach, City of Fort Lauderdale, City of Boca Raton and the City of Pahokee.

The City of Riviera Beach Public Marina, a current project of Sea Diversified, is an active 150 slip marina comprised of charter fishing vessels, dive charter boats and private slip tenants along with upland restaurant and other commercial activities. Sea Diversified was selected by the City as the marine engineer to design, permit and facilitate the replacement of old concrete fixed docks with floating structures along with new breakwater, seawall, utilities and upland promenade. Sea Diversified will coordinate with existing slip tenants and commercial operations to minimize impacts during construction. Sea Diversified recently completed a similar marina retrofit for the City of Boynton Beach CRA with great success. We will provide this same level of professional expertise and commitment to the City of Key West.

In response to the RFQ, Sea Diversified has compiled a team of in-house professional marine / coastal engineers and support staff to meet the requirements of the project. William T. Sadler Jr., P.E., P.S.M., president and founder of Sea Diversified will be the Project Manager and primary point-of-contact for the City of Key West (wts@seadiv.com). Sea Diversified has also incorporated as part of their team several specialty sub-consultants to add or enhance the range of services offered by the firm. This



includes environmental consultants and geotechnical engineers that specialize in subsurface exploration, laboratory testing / analysis, benthic investigations, and coral reef relocations. We have also incorporated as part of our team marine electrical engineers, marina operations expertise and grant acquisition specialists. We are proud to have this supplemental and complimentary expertise as part of our team and are confident these team members will provide only the highest level of professional services under the direction of Sea Diversified for this contract.

In summary, Sea Diversified is a marine / coastal engineering firm that specializes in marinas, marine structures and related engineering disciplines. We **self-perform** field bathymetric and topographic surveys; boundary and State Submerged Lands Lease surveys; underwater inspections and other dive investigations; current, wave and tide studies; state and federal environmental permitting; and construction administration services. Our complete range of in-house services can support the Tarpon Pier Replacement Project from the initial planning phases through construction, which we believe will yield a great benefit to the City Key West. We strive for excellence in performance and client satisfaction.

Thank you very much for your consideration.

Sincerely,

William T. Sadler Jr., P.E., P.S.M.
President

WTS/mpd



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Response to Request for Qualifications
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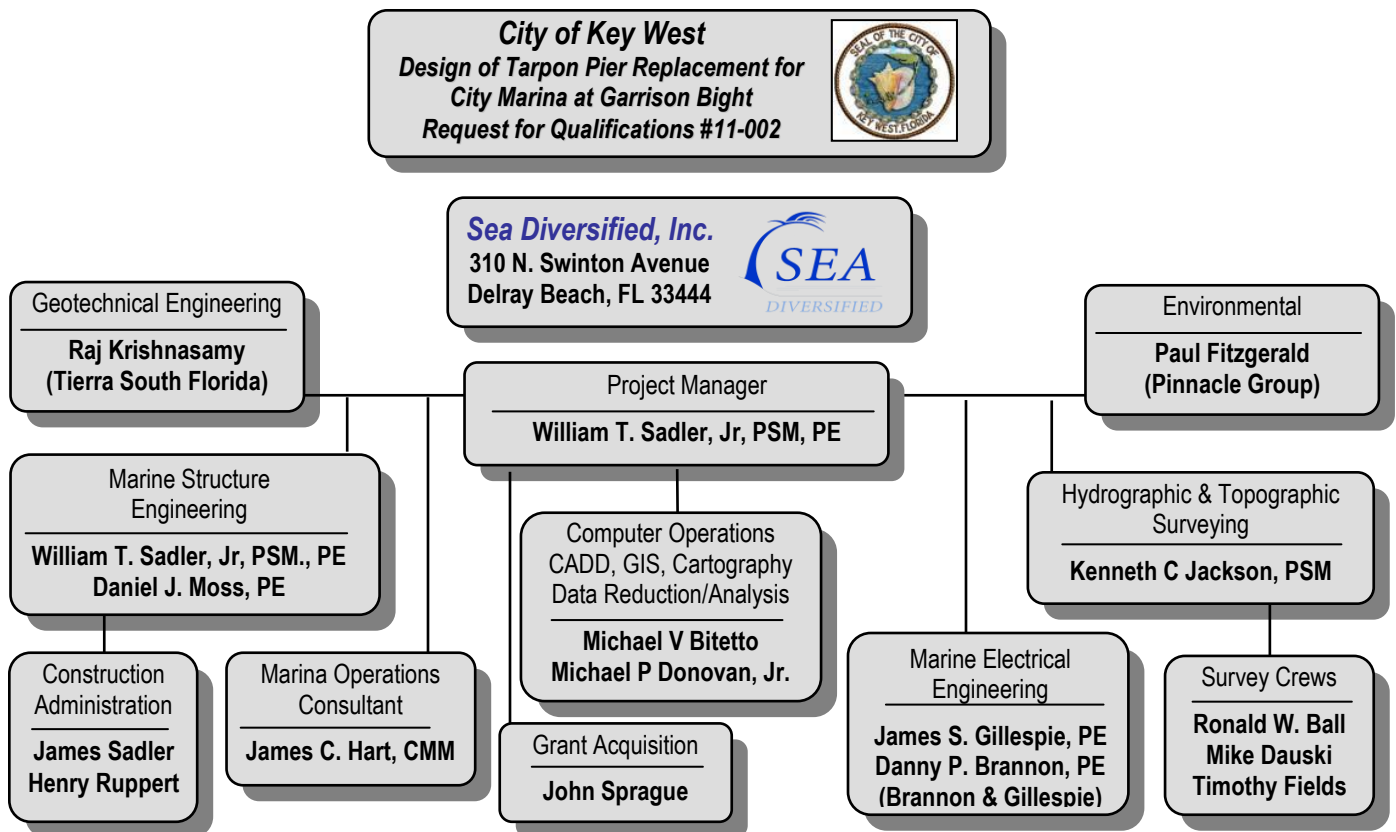
Section One: Information Page

Project Name: Design of Tarpon Pier Replacement for City Marina at Garrison Bight

Name of Firm: Sea Diversified, Inc.
 310 North Swinton Avenue
 Delray Beach, Florida 33444
 561-243-4920 (phone) / 561-243-4957 (facsimile)

Project Manager : William T. Sadler Jr., P.E., P.S.M.
 Owner / President
wt@seadiversified.com (e-mail)

Section Two: Organizational Chart



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



Response to Request for Qualifications

Statement of Qualifications & Experience

Design of Tarpon Pier Replacement for City Marina at Garrison Bight Request For Qualifications #11-002

Section Three: Company Information

Sea Diversified, Inc. (SDI), established in 2004, is a privately owned and operated multi-disciplinary marine / coastal engineering and surveying firm with established offices in Delray Beach (Palm Beach County) and Palm Bay (Brevard County), Florida. **SDI** was founded by William T. Sadler Jr., P.E., P.S.M., a long time resident of Palm Beach County who was joined by officers and key personnel that have worked together for over fifteen (15) years in the engineering and surveying industry. Mr. Sadler is a graduate of Florida Atlantic University with a B.S. in Ocean Engineering and is currently registered as a Professional Engineer, Surveyor and Contractor in the State of Florida. **SDI** is licensed by the State of Florida Board of Professional Engineers and Professional Surveyors and Mappers.

SDI originated as a firm that specializes in providing professional services relating to the marine and coastal environment and it remains **SDI's** mission to focus solely on this exciting industry. With regards to marinas and other waterfront developments, it is **SDI's** goal to offer Clients a complete and comprehensive service starting with the initial planning phases, through permitting and engineering and ultimately through construction. To support such projects, **SDI** has an in-house surveying staff that specializes in bathymetric surveys, Mean High Water (MHW) studies and State Sovereign Submerged Lands matters. Additionally, **SDI** has in-house engineering dive support for underwater inspection of existing structures and other underwater investigations that may be pertinent to a waterfront project.

In today's challenging economy compounded by strict environmental regulations, we understand the value of existing marinas and the growing need for maintenance, enhancement and expansion of existing facilities. Although **SDI's** experience with new marinas is extensive, the firm has greater experience with the planning, design and implementation of improvements to existing marinas. **SDI** is considered an expert in the evaluation of existing facilities insofar as the condition of existing marine structures, the suitability of slip sizes, fairway widths and utility infrastructure to support the newer style vessels, the capacity of structures to withstand and comply with current wind storm criteria, and ability of facilities to meet ADA criteria.

Principals, officers and support personnel of **SDI** have provided marine / coastal engineering and survey services throughout the State of Florida, Puerto Rico and numerous other regions of the United States including many international areas. Services have been provided to a multitude of counties including Palm Beach, Broward and Dade Counties, as well as numerous municipalities such as the City of Riviera Beach, City of Boynton Beach, City of Pahokee, Town of Palm Beach, City of Pompano Beach, City of Plantation, City of Deerfield Beach, City of Fort Lauderdale, City of Dania, City of Holly Hill, City of Daytona, City of New Smyrna and City of Sanibel.

Areas of Technical Specialization

Marine / Coastal Engineering

- **Marina Planning, Permitting, Design and Construction**
 - Slip Mix Development and Berthing Layout
 - Basin Design, Ingress / Egress and Wave Protection
 - Floating versus Fixed Dock Analysis
 - Utility Infrastructure and Fuel Systems
 - Upland and Waterside Amenities
 - ADA Compliance
 - Marina Operations and Maintenance
 - Grant Acquisition and Project Funding
- **Marine Structures – Design and Construction**
 - Seawalls
 - Docks and Piers – Fixed and Floating



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- Breakwaters
- Revetments and Shoreline Stabilization
- Dredging and Dredged Material Handling
- Environmental
 - Environmental Studies
 - State and Federal Permitting
- Field Investigations for Planning, Design and Permitting
 - Underwater Inspection of Marine Structures
 - Seabed Classification
 - Side Scan Sonar
 - Magnetometer
 - Sub-Bottom Profiling and Sediment Sampling
 - Current, Wave and Tide Studies
- Surveying and Mapping
 - Automated Hydrographic – Single and Multi-Beam
 - Topographic
 - Boundary including State Submerged Land Lease / Easement
 - Construction Stake-out and As-builts



For this project SDI's in-house expertise and capabilities are enhanced by the following team support members:

- **Pinnacle Group International, LLC (PGI)** specializing in hardbottom, coral reef, and seagrass habitat damage assessment and restoration projects with specific expertise in the Key West area. This work was performed with Florida Keys National Marine Sanctuary and Florida Department of Environmental Protection.
- **Brannon and Gillespie Consulting Engineers, (B&G)** specializing in marina electrical design. SDI has worked with B&G on numerous marina projects ranging from small residential piers to large municipal projects in excess of 150 slips.
- **Tierra South Florida, Inc. (TSF)**, a full-service consulting geotechnical and construction materials testing engineering firm with capabilities to provide test borings, engineering analyses and reports, laboratory soils testing, and construction materials testing. TSF is one of the few firms in the State with barge-mounting testing equipment for in-water soil borings. TSF is a certified Disadvantaged Business Enterprise (DBE) with the Florida Department of Transportation. TSF is also a certified Minority Business Enterprise (MBE) with the State of Florida's Office of Supplier Diversity and a certified Community Business Enterprise (CBE) by Miami-Dade County.

Section Four: Methodology and Approach

Background

The City of Key West Tarpon Pier is a T-shaped pier approximately 400 feet long with 44 slips used by houseboats with permanent residents. The existing fixed pier is constructed of precast piles, concrete pile caps, and precast double tees for decking. It is the City's intent to replace the fixed pier with a floating structure similar to the adjacent Marlin and Kingfish piers. The scope of work includes but is not limited to the following:

- Complete engineered design for the replacement of the fixed pier system with a floating pier system
- Complete engineered design of the replacement of the existing utility services provided on the pier from utility provider's point of connection.
- Development of a demolition plan
- Development of construction options to accommodate access to houseboats during construction



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- Evaluation of pier components to remain and reused
- Attendance at public meetings associated with this project
- Geotechnical gathering
- All permitting including Federal, State, County and City permits
- Development of a Coral Relocation Plan, if applicable
- Complete bid document preparation
- Bidding oversight and bid review
- Construction oversight
- Coordination with all utility providers



SDI specializes in the evaluation of existing marina facilities and has assisted both public and private organizations with implementing improvements ranging from total reconstruction to minor repairs and maintenance. Through this experience we have developed a specific approach that we generally follow regardless of project size and complexity. This project approach, which we intend follow on the City of Key West project involves six (6) primary tasks as follows:

- Task One: Understanding of City Objectives and Scope Development**
- Task Two: Site Observation and Supplemental Data Collection**
- Task Three: Conceptual Design Development**
- Task Four: Environmental Permitting**
- Task Five: Final Plans and Specifications Preparation**
- Task Six: Construction Administration**

Task One: Understanding of City Objectives and Scope Development

SDI's approach to this project is to first gain a complete understanding of the City objectives and to gather any specific information that lead to the City's development of the project. Under Task One, **SDI** will meet with the City to discuss goals and objectives for the project and outline specific issues that need to be addressed during the design development phase. We will evaluate available funding and / or budget constraints as necessary to establish design parameters and to set limitations on the extent of improvements. We will identify and define protocol for communication and exchange of information between the City and **SDI** including subconsultants, marina staff, slip tenants and the overall general public. Ultimately, we will seek to establish a vision of what the City desires for their facility and work towards developing a comprehensive scope that ensures the satisfaction of this vision.

Task Two: Site Observations and Supplemental Data Collection

Marinas and / or types of vessel berthing facilities, on the surface, appear to somewhat standard, however in reality such facilities have their own unique conditions and requirements dictated by the local environment, intended uses, adjacent upland influences, end-users of the facility and private and / or public politics. **SDI** has conducted preliminary investigations to understand the history of the project and work completed to date. Site observations were also performed to gain knowledge of the condition of the marine structures and utilities, houseboats and other type vessels that currently use the facility, layout of the slips and marginal docks, amenities offered to the slip tenants, and adjacent upland uses.



SDI will conduct further, more detailed site observations to determine primarily the extent of existing components that may be useable for the new pier replacement project. This includes such components as the power centers that appear to be very new and suitable for reinstallation after the floating dock is installed.



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As part of this task, **SDI** will assess the availability of existing data or other information to support the design and permitting of the new pier structure. At a minimum this includes the following:

- Current bathymetric data within and beyond the marina basin.
- Marina boundary information including an accurate sketch and description of the State Sovereign Submerged Lands limits and limits of riparian ownership.
- Detailed asbuilt survey of the existing marina including upland topographic features.
- Detailed utility maps, preferably utility asbuilts.
- Geotechnical data, both upland and within the marina basin.
- Current and wave data.
- Marine resources maps.
- Environmental permits, previous and / or current.
- Upland plans for development or other improvements, if applicable.
- Previous inspection reports, conceptual plans or any other historical information pertaining to the development of the City marina.

Task Three: Conceptual Design Development

The conceptual design development phase is the key task leading to the ultimate success of the pier replacement project. Using the data and information compiled in Task Two focusing on the overall goals and objectives of the City, **SDI** will prepare conceptual plans for the proposed pier improvements. One of the initial tasks will be evaluate the size requirements for the individual slips taking into consideration the existing slip tenants of the facility and current demands for wet live-a-board slips in the Key West Area. This along with the following factors will be used for the preparation of conceptual slip layouts and other details:

- Slip and fareway orientation for ease of berthing and navigation.
- Slip sizes to properly accommodate existing and/or future vessels .
- Utility infrastructure to meet the current needs of today's vessels including properly sized electrical service, potable water and sewage pumpout.
- Wave protection
- Incorporation of existing pier components, as practical.
- Upland development, both existing and proposed.
- Parking and marina access to accommodate the slip tenants, as well as the patrons of the facility.
- Security for the slip tenants
- ADA compliance

As part of the conceptual planning efforts we will address product selection and stress the importance of choosing products that are properly engineered for the harsh marine environment. The floating dock system that the City selects is of extreme and primary importance towards the success and longevity of the marina. There are new and modern systems on the market that use advanced technologies that can be more durable and cost effective than the older systems. Many of these systems use recyclable material such as aluminum and composites to fulfill our world's "Green" initiative.

There are hundreds of floating dock manufacturers but only a handful that we consider suitable for a high – profile public facility such as that owned by the City of Key West. In order to narrow down the selection alternatives, we have developed strict performance standards for floating dock systems and will strongly suggest that the City adopt these standards for their marina. We have also developed criteria for evaluating the qualifications of the floating dock manufacturer. For projects of this nature, the manufacturer of the floating docks is equally important as the



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Contractor selected to perform the work. At a minimum, we suggest that the City consider only those manufacturers meeting the following criteria:

- Minimum five (5) years of demonstrated experience in the design and manufacturing of floating dock systems using the type of decking surface required by the City.
- Demonstrated experience and capacity to provide engineering calculations and certified shop drawings meeting the performance criteria established for the project.
- Proven Quality Assurance Program for the manufacturing and delivery of floating dock systems.
- Demonstrated ability to meet the established schedule for the project.
- Ability to provide a minimum ten (10) year warranty for the floating dock system from the date of final acceptance by the City.

Similar to the floating dock system, **SDI** will discuss with the City options including the pros and cons and cost considerations to other components of the marina such as:

- Piling alternatives – concrete, steel, ICP, timber and other
- Utility pedestal, supplemental lighting, and other electrical system options
- Fire protection system component options
- Sewage pump-out options
- Miscellaneous items – dock boxes, cleats, fendering, pile caps, signage and fish cleaning stations

Conceptual plans including product selection alternatives will be discussed through meetings with City staff or through public workshops to gain a consensus and final approval to proceed to the next step.

Task Four: Environmental Permitting

After completion and approval of the conceptual plans, **SDI** will begin coordinating with the agencies having jurisdiction to review the project. The objective of the initial coordination efforts is to gain an understanding of any specific permitting requirements or constraints associated with the project and address those issues prior to filing an application for permit or permit modification, whichever applies.

SDI has in-house resources, which can be supplemented by the expertise of their team members Tierra and Pinnacle Group International to gather additional or updated environmental or geotechnical data and prepare reports that may be required by the agencies. This may include updated bathymetric surveys (as discussed above), geotechnical gathering or coral relocation plans. These surveys and other investigations will only be conducted if necessary.

SDI has assumed the responsibility of environmental permitting on numerous large-scale marina projects and thoroughly understands the process and agency requirements. We strive for following a “path of least resistance” with the agencies and work with agency staff to expedite the process as quick and cost effective as possible. The look forward to construction and therefore avoid, as reasonably possible, the drawn-out and aggravating permitting process.

Task Five: Final Plans and Specifications Processing

SDI will commence with the final plans and specifications at a strategic point during the permitting phase, whereas we are confident the proposed plan layout will be approved. The scope of work will include engineering analysis of all structures, plan and section details of the floating dock system and final product review and selection. Plans and specifications will also include details of the access gangways, pile support systems, utility systems (electrical, lighting, potable water system, sewage pumpout system and fire protection).



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Plan and specifications will include detailed, site specific performance standards for the floating dock system including fixed access platforms and gangways. At a minimum this will address:

- Hurricane loading criteria – occupied and non-occupied conditions
- Design dead load criteria
- Design live load criteria
- Design point load criteria
- Berthing impact load criteria
- Wave load criteria
- Transverse and longitudinal wind load criteria

The specifications will address the requirements of the contractor and dock manufacturer insofar as engineering analyses of the system, mooring analysis, shop drawings and other required submittals. We will also address contractor means and methods for construction to minimize interruption to existing slip tenants. **SDI** takes pride in the quality and level of details associated with their construction plans. We strive for 100% accuracy to avoid issues or questions during the bidding process and / or conflicts during construction resulting in change orders.

Task Six: Construction Phase Services

SDI shall provide construction administration services during the construction of the marina and all associated components. The intent of these services is to observe construction on behalf of the owner to ensure that the work is completed in accordance with final plans and specifications. Additionally, we shall monitor construction activities as they relate to established schedules, project budgets, conformance to permit criteria and conditions and overall quality of work. Specific services shall include the following:

- Assistance with Project Bidding
- Pre-Construction Meetings
- Schedule Development
- Shop Drawing Review / Product Approvals
- Construction Observation / Preparation of Status Reports
- Review of Contractor Pay Requests
- Construction Meetings

Optional Tasks:

- **Assistance with Marina Operations**

If required by the City, **SDI** with their consultant Mr. James Hart, will assist in the developing updated marina operations documents. This may include day-to-day staff operational procedures, short and long term maintenance programs and guidelines for the slip tenants and visitors of the facility.

- **Assistance with Grant Applications or other Funds Acquisition**

SDI with their consultant Mr. John Sprague, can assist the City with acquisition of funding assistance through local, state or federal programs. Mr. Sprague has been successful with helping secure millions of dollars in funds for engineering, permitting and construction of public waterfront projects including the City of Pahokee and City of Riviera Beach marinas. Mr. Sprague will be available to assist the City of Key West, if required for this project.

Proven Methodologies

SDI has developed proven methodologies for projects of this nature. We will assign a Project Manager with expertise and experience in the nature of work, and that Project Manager will be responsible through all phases of the Project. Communication is key, therefore the Project Manager will be the sole point-of contact between the **SDI** and the City.



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The Project Manager, in coordination with the City, will establish schedules with “milestones” specifically identified based upon the overall scope of work. Support staff including subconsultants, if required, will be assigned tasks based upon their level of expertise, capabilities and experience. Quality control and assurance protocol will be in force at all times to ensure only the highest level of service and customer satisfaction.

Our philosophy is that a great design does not become a great structure until it is constructed properly. We take the steps during design, plans and specifications preparation and construction administration to achieve a project that will be a source of pride to the City, its citizens and visitors.



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Section Five: Personnel

William T. Sadler, P.E., P.S.M.

SDI Title: President

FIRM & OFFICE LOCATION

Sea Diversified, Inc.
Delray Beach, FL

EDUCATION

B.S., Ocean Engineering,
Florida Atlantic University, 1984

**REGISTRATIONS/
CERTIFICATIONS**

Professional Surveyor: FL 1998
Professional Engineer: FL 1989
Building Contractor: FL 1987

OVERVIEW

Mr. Sadler has more than 24 years of experience in surveying, mapping, and engineering. His expertise includes automated hydrographic surveying (single and multi-beam), remote-sensing investigations such as side scan sonar, magnetometer and sub-bottom profile surveys, and topographic and boundary surveying. He has served as principal-in-charge on projects throughout the state of Florida for clients such as the U.S. Army Corps of Engineers (USACE), South Florida and Southwest Florida Water Management Districts (SFWMD), Florida Department of Transportation (FDOT) & the Florida Inland Navigation District. (FIND).

EMPLOYMENT HISTORY

Sea Diversified, Inc.
2004-Current
Sea Systems Corporation
1990-2004
Keith & Schnars Associates,
1986-1990
Woods Hole Oceanographic,
1984-1986

RELEVANT PROJECTS

Marina Grande, Riviera Beach, FL

Project Manager responsible for: Planning, design, permitting and construction management of 800 feet of concrete bulkhead. Planning, design and permitting of concrete floating and fixed docks, including utilities and fuel system.

Ocean Cove, Highland Beach, FL

Project Manager responsible for: Planning, design and construction management of 1200 feet of concrete retaining wall / bulkhead; Planning, design and construction management of fixed aluminum dock system encompassing twenty-two (22) slips, including all utilities; Planning, design and construction management of rock shoreline stabilization system.

Boynton Boat Club Park, Palm Beach County, FL

Project Manager responsible for: Planning, permitting, design and construction management for improvements to boat ramps, staging docks, bulkhead and shoreline stabilization systems.

Pahokee Marina, Palm Beach County, FL

Project Manager responsible for: Planning, design, permitting and construction management of multiple phases of the municipal marina improvements including breakwater rehabilitation, floating dock systems, bulkheads, boat ramps and all utilities. Total of 116 slips under current plan with a proposed future addition of 108 slips planned for year 2005 / 2006.

Holly Hill Marina, Daytona, Florida

Project Manager responsible for: Planning and design of a 55 slip, fixed dock marina facility encompassing aluminum frame dock system with hardwood decking and concrete pile support system.

Marina Grande, North Miami Beach, FL

Project Manager responsible for: Planning, design and permitting of 2100 feet of concrete / steel bulkhead; Planning, design and permitting of 102 slip, floating dock marina including utilities and fuel system.

Gundlach's Marina, Lantana, FL

Project Manager responsible for: Planning, design and permitting of a 42 slip, fixed dock marina expansion including all utilities.

Hacienda Cove, Davie, FL

Project Manager responsible for: Planning, design, permitting & construction management of a 21 slip, fixed dock marina expansion including all utilities.

**Boynton Marina and Marketplace
Palm Beach County, FL**

Project Manager responsible for: Planning, design, permitting and construction management of a 400 foot timber pier with 15 marginal slips.

Fort Lauderdale Day Dockage, Broward County, FL

Project Manager responsible for: Planning, permitting, design and construction administration of floating docks along the New River in Downtown Fort Lauderdale. The project encompasses four (4) sites along the river with approximately 6000 square feet of floating docks plus access piers and gangways. Worked closely with City staff, the Marine Advisory Board and the Riverwalk Committee in developing the specifications for the floating docks with an ultimate goal of ensuring consistency with the Downtown Riverwalk theme





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Daniel J. Moss, P.E.
SDI Title: Marine Engineer

FIRM & OFFICE LOCATION

Sea Diversified, Inc.
Delray Beach, FL

EDUCATION

Florida Atlantic University
B.S. Ocean Engineering, 1994

**REGISTRATIONS/
CERTIFICATIONS**

Professional Engineer, FL 1999
Certified Building Contractor, FL 2004

PROFESSIONAL AFFILIATIONS

Marine Technology Society – Vice
Chair, Florida Section
Gold Coast Builders Association and
Florida Home Builders Association
National Association of Home Builders

OVERVIEW

Over 15 years of experience in marine engineering, environmental permitting, and quality assurance/quality control. His expertise includes feasibility studies, planning and design, channel and waterway design, shoreline stabilization and bank restoration projects, and environmental resource permitting.

EMPLOYMENT HISTORY

Sea Diversified, Inc.
March 2004 to Present

Sea Systems Corporation –
July 2003 to 2004

South Florida Water Management
District
July 1999 to 2003

Sea Systems Corporation
January 1990 to 1999

RELEVANT PROJECTS

Two Georges Restaurant and Marina, Palm Beach County, Florida

Lead Engineer responsible for: Planning, design, permitting and construction management of a 29 slip private marina; Planning, design and permitting a new bulkhead, fixed docks and all utilities.

Holly Hill Marina, Daytona, Florida

Lead Engineer responsible for: Planning and design of a 55 slip, fixed dock marina facility encompassing aluminum frame dock system with hardwood decking and concrete pile support system.

Marina Grande, Riviera Beach, Florida

Lead Engineer responsible for: Planning, design, permitting and construction management of 800 feet of concrete bulkhead; Planning, design and permitting of concrete floating and fixed docks, including utilities and fuel system.

Pahokee Marina, Palm Beach County, Florida

Lead Engineer responsible for: Planning, design, permitting and construction management of multiple phases of the municipal marina improvements including breakwater rehabilitation, floating dock systems, bulkheads, boat ramps and all utilities. Total of 116 slips under current plan with a proposed future addition of 108 slips planned for year 2005 / 2006.

Boynton Boat Club Park, Palm Beach County, Florida

Lead Engineer responsible for: Planning, permitting, design and construction management for improvements to boat ramps, staging docks, bulkhead and shoreline stabilization systems.

Aqua Isles Docking Facility, Ft. Lauderdale, Florida

Lead Engineer responsible for: Planning, design and permitting of 1325 feet of bulkhead / shoreline stabilization; Planning, design and permitting of a 30 slip, fixed dock marina including all utilities.

Gundlach's Marina, Lantana, Florida

Lead Engineer responsible for: Planning, design and permitting of a 42 slip, fixed dock marina expansion including all utilities.

Hacienda Cove, Davie, Florida

Lead Engineer responsible for: Planning, design, permitting and construction management of a 21 slip, fixed dock marina expansion including all utilities.

Boynton Marina and Marketplace, Palm Beach County, Florida

Lead Engineer responsible for: Planning, design, permitting and construction management of a 400-foot timber pier with 15 marginal slips.

Ocean Cove, Highland Beach, Florida

Lead Engineer responsible for: Planning, design and construction management of 1200 feet of concrete retaining wall / bulkhead; Planning, design and construction management of fixed aluminum dock system encompassing twenty-two (22) slips, including all utilities; Planning, design and construction management of rock shoreline stabilization system.





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Kenneth C. Jackson, P.S.M.

SDI Title: Vice-President

FIRM & OFFICE LOCATION

Sea Diversified, Inc.
 Delray Beach, FL

EDUCATION

Palm Beach Community College,
 Land Surveying

**REGISTRATIONS/
 CERTIFICATIONS**

Professional Surveyor: FL 1988

OVERVIEW

Mr. Ken Jackson, PSM maintains over thirty-four (34) years of experience in the surveying and mapping industry with specific expertise in hydrographic surveying, topographic surveying, and geodetic control surveying. Mr. Jackson has been involved with numerous large-scale mapping projects encompassing bridge repair investigations, submerged utility investigations, beach and nearshore surveys, dredging projects encompassing design and construction surveys, charting and volumetric evaluations.

Mr. Jackson takes a very "hands-on" approach in his Director of Surveying responsibilities and many times will work in the field with his support staff. He has extensive expertise in the latest technology for automated hydrographic data collection, as well as remote sensing equipment such as side scan sonar, magnetometer and sub-bottom profilers. For underwater investigations, Mr. Jackson is a certified Nitrox Diver, participating in underwater video and inspections, underwater mapping for environmental projects, tide/wave/ current investigations, and various other diver-assisted surveys.

EMPLOYMENT HISTORY

Sea Diversified, Inc.
 2004-Present
 Sea Systems Corporation,
 1992-2004
 Coastal Planning & Engineering,
 1989-1992

RELEVANT PROJECTS

Boynton Boat Club Park, Palm Beach Co, FL
 Licensed Surveyor responsible for: Survey control, construction-layout, as-builts, and construction management for improvements to boat ramps, staging docks, bulkhead and shoreline stabilization systems; Hydrographic, topographic, and seagrass surveys involved with environmental permitting.

Ocean Cove, Highland Beach, FL
 Licensed Surveyor responsible for: Construction-layout and as-built of 1200 feet of concrete retaining wall / bulkhead; Construction-layout, as-built, and construction management of fixed aluminum dock system encompassing twenty-two (22) slips; Construction-layout, as-built, and construction management of rock shoreline stabilization system.

Gundlach's Marina – Lantana, FL
 Licensed Surveyor responsible for: Construction-layout and as-built of a 42 slip, fixed dock marina expansion.

Marina Grande – North Miami Beach, FL
 Licensed Surveyor responsible for: Construction-layout and as-built of 102 slip, floating dock marina improvements in coordination with upland development.

Offshore Submerged Breakwater Town of Palm Beach, FL
 Licensed Surveyor responsible for: 4000 linear foot submerged breakwater offshore of the public beach area in the Town of Palm Beach.

Pahokee Marina, Palm Beach Co, FL
 Licensed Surveyor responsible for: Survey control, construction-layout, as-builts, and construction management of multiple phases of the municipal marina improvements including breakwater rehabilitation, floating dock systems, bulkheads, boat ramps and all utilities. Total of 116 slips under current plan with a proposed future addition of 108 slips planned for year 2005 / 2006.

Marina Grande – Riviera Beach, Florida
 Licensed Surveyor responsible for: Survey control, construction-layout, and as-builts of 800 feet of concrete bulkhead; Survey control and construction-layout of concrete floating and fixed docks, including utilities and fuel system.

Boynton Marina and Marketplace, Palm Beach County, Florida
 Licensed Surveyor responsible for: Survey control, construction-layout, and as-builts of a 400-foot timber pier with fifteen (15) marginal slips.

Hacienda Cove – Davie, FL
 Licensed Surveyor responsible for: Construction-layout and as-built of a 21 slip, fixed dock marina expansion.



City of Key West
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RAJ KRISHNASAMY, P.E.

**President, Principal
Geotechnical Engineer**

**23 Years Professional
Experience**

EDUCATION

MS in Geotechnical
Engineering, University of
Memphis 1995

BS in Civil Engineering,
Christian Brothers University
1987

Diploma/1984/Electronic
Engineering, Malaysian Air
Force Institute

**PROFESSIONAL
ORGANIZATION AND
REGISTRATION**

Professional Engineer:

Florida, 53567

Certified OSHA Supervisor

Certified Environmental
Consultant

PROFESSIONAL EXPERIENCE

As President and Principal Engineer for Tierra South Florida, Inc., Mr. Krishnasamy oversees the geotechnical engineering, construction materials testing, and inspection services operations. Prior to this, he was Vice President and Principal Geotechnical Engineer for Tierra, Inc. for 8 years. During that time he headed the Central and South Florida operations. Prior to that Mr. Krishnasamy was the Project Manager for a \$1.2 billion multimedia super corridor project that included universities, commercial buildings, and residential roadways. He was also Principal Geotechnical Engineer for a \$780 million elevated highway, where he established Rock Founding Rationale for deep foundation systems. Mr. Krishnasamy was also Principal Geotechnical Engineer for a \$450 million highway that included land reclamation and soil stabilization.

Mr. Krishnasamy has been involved in hundreds of projects of diversified complexity consisting of residential, commercial, educational, and wastewater treatment facilities, sports arenas, landfills, airports, roadways and land reclamation. He is an experienced Geotechnical Engineer focused on providing the client with a consistently accurate, cost-effective quality product that is delivered on time and within budget. Mr. Krishnasamy's daily involvement with the in-house and field operations of the construction and geotechnical services departments provides him the "hands-on" experience and knowledge of current construction codes and construction practices throughout the State of Florida.

ABBREVIATED KEY PROJECTS

Port of Miami – Parking Garage, Miami, FL
Port of Miami – Terminal H, Miami, FL
Port of Miami - Site Improvements – Light Fixtures @ TOC Gate
Complex, Miami, FL
Port of Miami – Building CT-F Specialty Testing, Miami, FL
Port Everglades - Terminal 18 Phase II, Fort Lauderdale, FL
Port Everglades - Terminal 19 Expansion, Port Everglades, FL
Road Town Cruise Ship Pier Extension, Tortola, British Virgin Islands
West End Ferry Terminal Expansion, Tortola, British Virgin Islands
Royal Caribbean Cruise Ship Pier, Labadee, Haiti
Riviera Beach Marina, Riviera Beach, FL
Dock Reconstruction at Palm Cove Marina, Palm City, Florida
Structural Remediation of Seawall at Sundance Marina, Jensen Beach,
Florida
Proposed Riverwalk along the Intracoastal Water Way, Boynton Beach
Blvd Extension, Boynton Beach, FL
Riverwalk Boardwalk – Phase 2, City of Port St. Lucie, Florida
Port Everglades - Southport Settlement Plates, Port Everglades, FL
Port Everglades - Terminal 26 - Passenger Bridge, Fort Lauderdale, FL
Port Everglades - Passenger Loading Bridge Terminal 2 & 18, Port
Everglades, FL
Port Everglades Mid Port Roadway Improvements, Port Everglades, FL
Port Everglades - Signage, Port Everglades, FL
Port Everglades - Spangler Road Bypass, Port Everglades, FL
Port Everglades - Northport, Fort Lauderdale, FL
Port Everglades - Southport Site Improvement - Task B&C, Port
Everglades, FL
Port Everglades - Slip 3 Toewall Installation, Port Everglades, FL



EDUCATION

- Master of Science (Candidate)
Marine Biology, Nova
Southeastern University (NSU),
2011.
- Master of Science (Candidate)
Coastal Zone Management, NSU,
2011.
- Bachelor of Science, Marine
Biology, Texas A&M University,
1992.

REGISTRATIONS

- Nitrox Enriched-Air Blender,
International Association of Nitrox
& Technical Divers (IANTD) (2002)
- Enriched Air Nitrox Instructor,
Professional Association of Diving
Instructors (PADI) (1997)
- Staged Decompression, Technical
Divers International (TDI) (1996)
- Scientific Diver Certification,
American Academy of Underwater
Scientists (AAUS) (1993-2011)
- Working Diver Certification,
National Oceanic and Atmospheric
Administration (1992)
- Research Diver, Texas A&M
University (1992)
- Open Water Scuba Diving
Instructor, PADI (1989)
- Rescue Diver, PADI (1987)
- CPR/Standard First Aid, American
Red Cross (1985 – 2011)
- Oxygen Provider, Diver's Alert
Network (1994-2011)

EMPLOYMENT HISTORY

Pinnacle Group International
2007 – Present
Continental Shelf Associates, Inc.
1994 – 2007
Texas A&M University
1987 – 1994
National Marine Fisheries Service –
1990 – 1992
LGL Ecological Research Associates
1987 - 1992

RELEVANT PROJECT EXPERIENCE

•**Damage Assessment, Coral Transplantation and Resource Monitoring – Key West, Florida.** Mr. Fitzgerald served as chief field scientist and conducted coral reef damage assessment and coral transplantation in conjunction with the maintenance dredging of Truman Harbor and the Main Ship Channel in Key West, Florida. Worked directly with Florida Keys National Marine Sanctuary personnel to remove, relocate, and transplant corals growing on harbor walls and pilings during construction activities. Over 3,000 corals were relocated during the construction activities. Supervised and conducted the field operations for a comprehensive resource health and impacts monitoring program to prevent and assess impacts to sensitive Sanctuary resources during the course of dredging activities.

•**Coral Reef Restoration and GIS Mapping – Newfound Harbor, Little Palm Island in Monroe County, Florida.** Mr. Fitzgerald conducted a coral reef rehabilitation project in Newfound Harbor Key Sanctuary Preservation Area (SPA) from 19 to 27 May 2003. He reattached and re-stabilized corals and coral fragments from multiple vessel grounding sites. Mr. Fitzgerald enhanced the habitat quality and increased the structural complexity of the previous restoration structures (coral rings) located at the Bateau Duhe vessel grounding site in Newfound Harbor Key SPA. Approximately 200 corals that were dislodged during multiple vessel groundings were collected and reattached at the Bateau Duhe restoration site in water depths of 2 to 4 m. Mr. Fitzgerald worked closely with staff from the Florida Keys National Marine Sanctuary and Florida Department of Environmental Protection to develop a restoration plan and reattachment protocols.

•**Pre-Dredging Seagrass and Coral Reef Habitat Characterization – Key West Harbor, Monroe County, Florida.** Mr. Fitzgerald served as Chief Field Scientist and Diving Safety Officer for a resource survey of the seagrass and hard bottom communities in the nearshore water off Fleming Key, the Key West Bight turning basin, Man of War Harbor, and Fleming Key Cut. The purpose of this resource survey was to assess the seafloor substrate and benthic biological communities along potential dredged material placement pipeline access routes to Fleming Key. This resource survey was conducted in association with the Environmental Assessment Supplement for Fleet Support and Infrastructure Improvements, Naval Air Station, Key West, Florida.

•**Seagrass and Benthic Habitat Characterization and GIS Mapping – Lake Worth Lagoon, Palm Beach County, Florida.** Characterized and mapped seagrass habitat located in a protected portion of south Lake Worth Lagoon between Hypoluxo Island and the barrier island of Palm Beach, Florida. This assessment survey was conducted from 27 to 29 August 2009 and in support of a proposed dock renovation and extension project. The purpose of this study was to survey the lagoon bottom in vicinity of the proposed construction project and document any associated seagrasses, particularly Johnson's seagrass (*Halophila johnsonii*) which could be impacted by the footprint of the proposed dock extension or any construction related activities. The survey was conducted in two phases in accordance with recommendations by the National Marine Fisheries Service (2002) recovery plan for Johnson's Seagrass. The first phase was conducted to delineate, identify and map existing seagrass beds in vicinity of the study area. The second phase was used to determine seagrass densities using quantitative sampling methods including Braun-Blanquet (1932) and shoot densities (shoots/m²). Species of special concern also were monitored during the survey.



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James C. Hart, C.M.M.

Project Title: Marine Consultant

FIRM & OFFICE LOCATION

City of Fort Lauderdale, FL

EDUCATION

B.S. Humanities & Social Sciences
 Drexel University, 1975
 Master of Science
 Western Illinois University, 1978

PROFESSIONAL ACCOMPLISHMENTS

Certified Marina Manager (CMM)
 Member, Marine Industries Association of South FL
 Member, Association of Marina
 Past Member, Board of Directors, Marina Mile Association
 Past Member, Propeller Club of the U.S.

EMPLOYMENT HISTORY

1985 – 2010
 Supervisor of Marine Facilities
 City of Fort Lauderdale
 100 N. Andrews Avenue
 Fort Lauderdale, FL 33301

RELATED EXPERIENCE

PERSONNEL

• FY 1985 to Present - Reorganized existing docks operation from a staffing level of 2 full-time employees in 1985 to present level of 7 full-time employees

EXPENSE BUDGET

• FY 1985 - 2009 - Increased annual operating funds from approximately \$300,000 in FY 1985-86 to approximately \$1.6 mm projected in FY 2008-09.

REVENUE

•FY 1985 - 2009 - Increased net operating revenue to the general fund from approximately \$400,000 in FY 1985-86 to \$1.2 mm projected in FY 2008-09.

DEVELOPMENT

•1989-2005 - Directly responsible in strategic planning associated with approximately \$1mm of improvements and upgrades to 50 service centers at existing marine facilities in conjunction with Riverwalk Development in downtown Fort Lauderdale; worked directly with design consultants such as Ed Stone and Associates, Rhett Roy Landscape Architects, and Marina Power Co.
 •1994-1999 - Participated on the selection committee for then design consultant International Marine Resources, Inc. chosen to provide engineering and design services for the \$5 mm Las Olas Municipal Marina Project.

GRANTS

•1989-1999 - Assisted in acquiring approximately \$2 mm in grant funding for Riverwalk, Cooley's Landing and Las Olas Marina development projects
 •1992 - Acquired grant funding of approximately \$440,000 for dredging the South Fork of the New River in accord with an initiative of the Marine Industry to provide deep water access for mega-yachts
 •2008-2010 –Acquired grant funding of approximately \$1,000,000 to develop municipal day dockage in downtown Fort Lauderdale
 •2009-2010- Acquired grant funding in the amount of approximately \$900,000 to redevelop the Fort Lauderdale Municipal S.E. 15th Street Boat Launching Facility
 •2009-2010 – Acquired grant funding in the amount of \$255,000 for design and permitting of the Intracoastal Waterway adjacent the Fort Lauderdale Las Olas Municipal Marina, Fort Lauderdale Aquatics Complex and the Bahia Mar Yachting Center.

CAPITAL IMPROVEMENT PROJECT PLANNING

•1985-2009 - Developed and managed capital improvement budgets from \$3.5 mm to \$20.0 mm
 •1989-2005 - Riverwalk Marine Facilities - planning and design of service centers and amenities of approximately \$1mm
 •1989-1991 - Cooley's Landing Marina - planning and design of facility components including structural and amenities
 •1994-1999 - Las Olas Municipal Marina - participated on selection committee for design and construction bid criteria for the \$5 mm state of the art facility.
 •2005-2009 – New River Floating Docks – participated in selection of consultant and designed initiatives and drafting of RFP for \$1.1 mm state of the art facilities (600 lineal ft.)
 •2007 to date – S.E. 15th Street Boat Launching Facility and Marine Complex – planning, design, and funding for “green” initiatives for \$2.4 mm redevelopment project.
 •2008 to date – Cooley's Landing Boat Ramp Replacement Project – planning, design, and funding initiatives for \$218,000 replacement project.

MASTER PLANNING

•2001- Participated in the Marine Industries Association Master Plan and served on the Intergovernmental Coordination Committee
 •1991 - Staff liaison to the Fort Lauderdale Waterway Master Plan; a comprehensive plan comprised of members of the City's Marine Advisory Board, Planning and Zoning Board, and Parks and Recreation Advisory Board





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John Sprague
Title: Marina Grant Specialist

FIRM & OFFICE LOCATION
JH Sprague Consulting LLC

SPECIALIZATION
Marina Infrastructure &
Engineering grant Writing
Construction/grant Administration
Marina Permitting requirements, State
Land Leases

OVERVIEW
Mr. Sprague has over 35 years experience in the Marina Business. For 25 years he has been involved with state and federal governmental processes involving marina development, in working on laws, rules and policies to increase and preserve public access to the waterways, while balancing protection of the environment which is so vital to the recreational boating public. Mr. Sprague has been involved in other individual marina development projects to solve issues related to their development over the years. For the last 25 years Mr. Sprague has been involved with the Marine industries Association of Florida and the Marine Industries Association of Palm Beach County in the areas of increasing enhancing and preserving boating public water access and currently Chairs Governmental Affairs for both Associations. This has involved working on bills, rules, ordinances and policies as they relate to marinas, the environment, endangered Species and many other issues related to boating. Mr. Sprague in the last few years has either written or assisted local government grant writers in the area of grants for marina construction, docks and seawalls etc.

AFFILIATIONS
Past President Marine Industries Association of Florida
Current Chair, Governmental Affairs
Past President Marine Industries Association of Palm Beach County
Current Director of Governmental Affairs

RELEVANT PROJECTS
Current Consulting to the City of Riviera Beach Florida: Grant Writing, grant administration and coordination for the reconstruction of the City Marina. Five grants have been awarded for a total of \$ 8,829,000 with another pending for an additional \$ 1,500,000 dollars. Working on identifying additional grants for upland improvements as well as additional marina funding for other phases. Coordination with and working with city staff, coastal engineers, permits, design, engineering and construction entities and funding.

Riviera Beach CRA: Grant writing for the marina Complex. Developed business attraction and property improvement grant program with CRA staff. Working on numerous other projects within the CRA District.

City of West Palm Beach: Downtown docks assisted in grant for \$ 500,000

City of Pahokee- Everglades Venture Co: In 2001 Mr. Sprague formed a public private partnership between Everglades Venture Co and the City of Pahokee to develop 4 miles of waterfront on Lake Okeechobee. The initial construction components were construction of a new R/V campground with 115 sites to start and a new 125 slip Marina with breakwater. An additional component was a recreation complex containing a new store with offices, campground/marina check in with a Tiki bar-restaurant and swimming pool. Mr. Sprague and his partner wrote grants for the project and

secured over \$ 8,000,000 in grants to assist in the construction. Mr. Sprague also secured a 50 years upland state lease and a 25 year submerged land lease for this project from the State of Florida. This facility is now one of the Loggerhead Marina facilities.

Viking Developers: Mr. Sprague worked with Viking Developers on it's master development agreement with the City in the initial stages as well as working on projects assigned to the developer during the preliminary planning and design of the marina complex.

Viking Yachts Service Centers: Mr. Sprague advises Viking on permit issues and submerged land lease reductions on both Riviera Beach facilities.

Riviera Beach CRA: Mr. Sprague is also assisting the CRA through a non-profit (BRIC) in developing and administering grant incentive programs for local businesses and to improve the looks and functionally of the downtown.

Old Slip Marina: Mr. Sprague owned and operated Old Slip Marina for 25 years in downtown Riviera Beach.





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Section Six: Qualifications

Marine / Coastal Engineering

SDI's marine engineering capabilities begin with a sound understanding of the marine environment. This understanding is crucial for obtaining useful data and preparing designs for marine structures. This fundamental understanding allows us to solve design problems in unique and dynamic conditions. Criteria such as wind, storm surge, wave forecasting, corrosion, erosion, soil stratification of shorelines, ship impacts, facility infrastructure and utility needs apply, along with sound engineering principles, in developing structure designs suited to last at least 50 years in the harsh marine environment. Our designs include marinas with fixed and floating docks; boat ramps; piers and lake walks and shoreline protection such as seawalls, rock revetments and breakwaters. Our marine engineering designs are signed and sealed by State of Florida Licensed Professional Engineers certifying that they meet code requirements for hurricane level forces and conditions. Excellent designs are no more than a piece of paper until projects are constructed properly. Therefore, we insist upon observing construction of our designs to assure that structures are constructed according to plans and specifications.

Marinas

SDI has experience in all aspects of marina design including site reviews / research, environmental data collection (climatologic, geotechnical, hydrographic, benthic), feasibility studies, alternative layouts, ingress/egress on land and on water, mitigation studies, public workshops, coastal and structural calculations, detailed plans preparation, bidding assistance and construction administration. We consider the preliminary planning to be an interactive process with the client or owner / developer to determine the services, amenities and clientele desired for the facility. We then develop a site plan and fleet mix to meet objectives and maximize revenue. The fleet mix will consider local demographics and site constraints in developing an array of slip sizes, with the final goal of optimizing ease of maneuvering the larger vessels.



Engineers at **SDI** have designed both fixed and floating dock systems taking into consideration environmental conditions such as wind and wave climate, marine resource constraints, bathymetric characteristics and adjacent land uses and geographic considerations. **SDI** considers a variety of structure type including concrete, aluminum steel, timber and composite materials. **SDI** through extensive experience in the design of marinas has thorough knowledge of utility infrastructure. This includes power requirements for a full range of vessels, fire protection systems, sewage pumpout systems and fuel systems.

Marine Structures

SDI has extensive experience in structural design of coastal and marine structures such as docks, elevated boardwalks, seawalls, breakwaters, jetties, rock revetments, artificial reefs, pile-supported runways for heavy forklift loading and catwalks for gantry cranes. All coastal and marine structure designs consider storm surge, hurricane / code wind requirements, waves, currents, ship and debris impacts, corrosion and constructability. Our construction plans include the technical specifications directly in the plans, rather than in separate books, to improve their availability and the contractor's understanding and adherence to them.



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Seawalls

Projects have encompassed miles of seawalls ranging from small residential walls to large commercial walls designed to support large surcharge and direct loading from ninety-ton forklifts. **SDI** analyzes each wall individually, not using software or previous similar designs, seeking optimum performance, practicality and cost efficiency. Engineers at **SDI** have designed and administered the construction of concrete panel, king and batter pile walls, concrete sheetpile walls, steel, and aluminum and vinyl sheetpile walls. Designs have incorporated a multitude of lateral support systems including conventional deadman systems, batter piles (bearing and tension) and auger-driven helical anchors. **SDI** has developed a unique set of specifications for their seawall designs including specialized concrete mixes and curing procedures, pile specifications and specific means of controlling expansion and contraction.



Docks and Piers

SDI has designed, permitted and administered the construction of numerous dock and pier structures for both private and public concerns. This has included fixed and floating structures using a multitude of material components such as pressure treated timber, aluminum, concrete and hardwoods. All docks and piers are designed for durability and longevity in the harsh marine environment and take into consideration structural capacity requirements, constructability, aesthetics, maintenance and environmental conditions. **SDI** specializes in the use of pre-manufactured products such as aluminum structures, fixed and floating, with hardwood, composite or concrete decking materials. **SDI** is currently working with the City of Fort Lauderdale on their new downtown Riverwalk floating dock project and has specified the use of an aluminum floating dock manufactured by Technomarine. The floating docks are designed for high occupancy public use and capable of meeting strict wind, wave, current and ship impact criteria. The docks also include a high strength concrete decking material with color stamping of the City Riverwalk logo.



Breakwaters

Many of the marine projects designed by **SDI** include the incorporation of fixed and floating breakwater structures. As part of the design process a detailed wind and wave analysis is performed to assess the structural criteria for the marine dock and mooring systems specifically when subject to hurricane forces. Various systems have been incorporated as part of the design including concrete floating structures, steel and aluminum fixed structures and rock structures

Rock Revetments

SDI has designed numerous rock revetments for shoreline protection in all types of marine and freshwater environments. Revetments are designed based upon such factors as soil characteristics, wave climate, upland development constraints and level of required protection. Rock characteristics, including size and density, are specified based upon the structural criteria for the project, local availability and site constraints pertaining to equipment access.



Construction Administration

SDI, along with extensive experience in the design of seawalls, marinas and other marine structures has provided numerous services pertaining to construction contract administration as well as construction engineering and inspection. The owner of **SDI** is a Licensed General Contractor in the State of Florida, as well as a Licensed Professional Engineer and has completed numerous projects in a design-build capacity. It is always recommended



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that the Engineer-of-Record administer the construction of the project to insure the project is completed in strict adherence to the plans and specifications. In view of this, **SDI** has been involved in the majority of their marina projects from the initial planning and permitting phases through construction and final certification.

Dredging and Dredged Material Handling

SDI has planned, permitted and managed numerous dredging projects associated with marina improvements, navigation, environmental enhancement and beach restoration programs. **SDI** understands dredging methodologies and limitations, as well as the environmental permitting criteria pertaining to both hydraulic and mechanical dredging activities. **SDI** prepared and managed the maintenance dredge program for the City of Pompano Beach encompassing over twenty-six (26) miles of tidal manmade waterways. **SDI** also permitted and managed the maintenance dredging of the City of Pahokee Marina basin, which is considered a Class I waterbody by the State of Florida with strict environmental constraints. **SDI** designed, permitted and administered dredging programs for other public entities including the City of Plantation, City of New Smyrna Beach, City of Dania, Florida Department of Transportation, as well as numerous private organizations throughout the State of Florida.



Environmental

Environmental Studies

SDI has ecologists who perform the field studies necessary for coastal and marine projects. This encompasses benthic surveys, bottom investigations, seagrass mapping and classification, endangered species surveys (upland and aquatic, plant and animal species). Our ecologists are knowledgeable of the state and federal permitting process and converse regularly with the ecologist and permit reviewers at the agencies.



Environmental Permitting

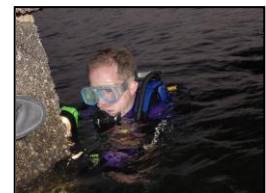
SDI is experienced with the local, state and federal environmental permitting rules and the actual processing of permits with the individual agencies. Professionals at **SDI** have been processing environmental permits since the early '80s and have the critical understanding of the intent and evolution of the regulations. This experience gains respect with managers and reviewers at the agencies. For marinas and other coastal structures, we understand the critical issues that dictate the environmental permitting process. These issues include manatees, seagrasses, mangroves, water quality and preservation of dedicated local, state and federal resources. Our permitting strategy is to seek the "path of least resistance" in order to expedite the process. We have a reputation of working well with the agencies on behalf of the owner and strive for compromise yielding cost efficient processing time while maintaining the objectives of the owner.



Field Investigations for Planning Design and Permitting

Engineering Inspections

Waterfront improvement projects generally entail an initial site inspection of existing structures. **SDI** performs inspections, both above and below water, to determine the condition of structures and whether such structures can be incorporated as part of renovations or new construction.



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Seabed Classification

SDI has utilized various technologies for seabed classification studies including remote sensing equipment such as high-resolution side scan sonar and sub-bottom profilers. Additionally, SDI has deployed underwater towed video equipment with automated real-time GPS stamping capabilities. Sediment sampling and diver reconnaissance is also a service SDI employs to supplement remote sensing data. SDI recently completed an extensive mapping effort of the Lake Worth Lagoon in Palm Beach County. The investigation encompasses the mapping and classification of seabed conditions along with a sub-surface survey to quantify the extent of accumulated muck over natural lake bottom.

Side Scan Sonar Surveys

Technicians at SDI are also experienced in the field of side scan sonar investigations for efficient mapping of exposed bottom features that may be pertinent to a design or construction project. Side scan sonar will produce an acoustic image of the bottom from a digital tow fish operating at high frequency ranges of generally 100 – 500 kHz. SDI specifically owns and operates an EdgeTech TD-272 Dual Frequency Side Scan Sonar System (100/500 kHz), with topside OIC Digital Side Scan Sonar Data Acquisition System. The system is cable of detecting and mapping exposed bottom features such as exposed rock, vegetation cover, pipeline / cable crossings and manmade debris.



Magnetometry

SDI has employed magnetometers on projects in order to identify and map buried features of ferrous composition such as cables, pipelines and manmade debris. SDI has used this technology to determine the presence or absence of items of cultural importance including historical vessel remnants and armory. Cultural resource investigations encompassing magnetometer surveys can be assigned to SDI with the assurance of years of experience that few firms in the United States can match. Florida’s coast is rich in cultural resources as a result of our maritime history, and it is often necessary to provide investigations of these areas to delineate potential historic sites.

Sub-Bottom Profiling and Sediment Sampling

SDI has conducted several sub-bottom surveys and has the required expertise in the acquisition, interpretation and mapping of sub-bottom material stratifications. Sub-bottom surveys have been conducted to determine sediment thickness over hardbottom conditions, borrow areas studies, hazard detection, submerged utility location and cultural resource detection and mapping. Sub-bottom data is collected using a shallow draft survey launch equipped with an Edge Tech Sub-Bottom Profile System interfaced with DGPS and computer-based navigation system. The sub-bottom profile system is a portable system using Full Spectrum CHIRP pulses to create high definition image slices of the sub-bottom material characteristics. Depending on sediment characteristics, several meters of penetration can be achieved using this system.



SDI’s survey fleet includes a shallow draft survey barge equipped with A-Frame and vibra-core system for mapping and sampling of sediments. This system was employed to map and characterize sediment deposits in the Lake Worth Lagoon as required by Palm Beach County DERM as part of their environmental enhancement program.

Current, Wave and Tide Studies



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525 Angela Street
Key West, FL 33040



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SDI has extensive expertise and experience in the deployment and monitoring of self-recording current, wave and tide gauges for design and planning of marinas, docks, breakwaters and dredging. Current studies generally encompass the use of Acoustic Doppler Current Profilers (ADCP) that will record directional current data throughout the water column to evaluate surface and sub-surface current velocities and current direction changes influenced by tides. Such data is valuable for berthing design in confined marina basins and in open water areas. Wave data is beneficial for the design of floating dock systems, breakwaters, jetties, shoreline stabilization systems and coastal restoration programs. SDI has deployed numerous tide gauges around the state and in areas of the Caribbean for establishment of tidal datums.



Surveying and Mapping

Hydrographic Surveys

One of SDI's primary services that make the firm very unique to the industry is automated hydrographic employing single-beam, dual-frequency and multi-beam technologies. Personnel of the firm have surveyed hundreds of miles of inland waterways throughout the State of Florida including many coastal regions of the United States, Caribbean, Puerto Rico and the U.S. Virgin Islands.



Hydrographic and remote sensing studies are conducted from one of SDI's fleet of multiple vessels of varying size, type and capabilities. Typical inland and nearshore hydrographic surveys are conducted using a 24-foot survey launch with enclosed cabin and center-hull mounted transducer. This vessel has a trailer for efficient mobilization to any location in Florida. For deep water surveys or survey operations requiring accommodations and / or long travel, SDI has a 35-foot launch with enclosed air-conditioned cabin, generator, dive compressor, kitchen, head / shower and sleeping accommodations. This vessel also has a trailer for efficient mobilization to any location within Florida. For extreme shallow water operations, SDI has numerous survey skiffs ranging in size for 12 feet to 19 feet. For sediment testing, including vibra-coring and dive operations, SDI has a 26-foot survey platform with open deck and A-frame.

Bathymetric data is collected using Odom single or dual frequency sounder and where deemed necessary this system may be interfaced with a CMS-25 Motion Sensor System. Sounders equipped with multi-beam technology may also be employed as necessary for the project. For horizontal vessel positioning, a Trimble-based real-time Differential Global Positioning Systems (DGPS) is utilized with vessel navigation and data collection/storage provided via the Coastal Oceanographics' "Hypack" system. "Hypack" is a powerful software used for pre-planning survey transects, vessel navigation, bathymetric data collection and data processing. The system applies horizontal position to sounding data real-time during the course of the survey, allowing review of bathymetric data during the course of collection to ensure quality of data. The software provides an efficient tool for data processing, charting and volume computations.

Survey Support for Detailed Design and Construction

SDI has provided survey support relating to design and construction of major engineering projects. This includes projects relating to marina and waterfront development, beach restoration, canal maintenance, shoreline stabilization, wetland restoration, jetty and breakwater rehabilitation, spoil area construction and management, seawall construction, and numerous others. On such projects, SDI provides detailed topographic and boundary surveys required for design purposes, survey support during construction and final asbuilt surveys.

Construction Layout and Alignment Surveys



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



Response to Request for Qualifications
Statement of Qualifications & Experience
Design of Tarpon Pier Replacement for
City Marina at Garrison Bight
Request For Qualifications #11-002

SDI has been involved in numerous projects requiring construction layout services. Projects have included numerous marinas, docks, seawalls, piers, dredging and bank stabilization, many other marine / coastal construction projects. As an engineering firm, crews are trained to read and comprehend construction plans and specifications and are instructed to work very closely with the contractor to ensure proper layout of the work.

Real Estate Boundary, Tidal and Sovereign Submerged Lands Surveys

Professionals at SDI have an extensive degree of experience conducting boundary surveys, ranging from small and large-scale platted property boundaries to those involving State Submerged Lands. All boundary surveys insofar as field procedures, map/report requirements and accuracy standards are conducted in accordance to the Minimum Technical Standards and FDEP criteria for State Submerged Lands Leases and Easements, as applicable. SDI is also very experienced in conducting tide studies for establishment of Mean High Water (MHW) lines as pertaining to State Sovereign Submerged Land boundaries. SDI conducts such studies using in-house owned and operated, self-recording tide gauges in accordance with FDEP specifications. SDI recently completed an extensive tidal study and MHW mapping survey along the New River in Fort Lauderdale associated with a State Submerged Lands Lease required for the construction of new docks. SDI performed all the required field survey efforts and prepared the sketch and legal description required by the FDEP, Division of State Lands in Tallahassee.



Section Seven: Representative Design Projects & Client References

SDI has a vast amount of experience in waterfront and marine related projects encompassing planning, design, environmental and construction administration services. SDI has in-house capabilities to support all project elements including bathymetric / topographic surveys, boundary surveys, environmental studies, underwater engineering inspections, sediment sampling and current / wave and tide studies. Projects have been completed in all types of environments including coastal areas, tidal waterways, freshwater lakes and canal systems and sensitive marine wetland areas comprised of seagrass beds, mangroves and other protected habitat. Such projects have been completed for both public and private entities extending primarily along the southeast coast of Florida in a similar environment to that of Key West City Marina. SDI's vast experience and level of expertise can be demonstrated through the following representative projects along the east coast of Florida:

Marinas and Pier Structures

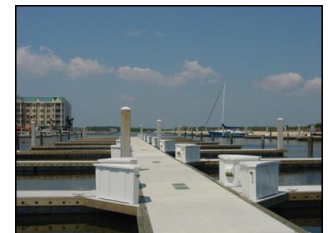
Riviera Beach Municipal Marina, Palm Beach County, Florida (Ongoing)

- 150 slips, Pre-Manufactured Fixed and Floating Docks
- Wave Attenuator, Steel Bulkhead, Maintenance Dredging
- Planning, Survey, Design and Permitting
- Client: City of Riviera Beach / Ed Legue (561-891-7899)



Boynton Harbor Marina, Palm Beach County, Florida (Construction Complete)

- 22 slips, Pre-Manufactured Fixed Docks
- Planning, Survey, Design, Permitting and Construction Administration
- Client: City of Boynton Beach CRA / Michael Simon (561-737-3256)



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



Response to Request for Qualifications
Statement of Qualifications & Experience
Design of Tarpon Pier Replacement for
City Marina at Garrison Bight
Request For Qualifications #11-002

Harbor Village Marina, Ponce Inlet, Volusia County, Florida (Construction Complete)

- 140 slips, Pre-Manufactured Floating and Fixed Docks
- Timber Boardwalk, Rock Revetment, Steel Bulkhead
- Wetland Mitigation / Enhancement
- Planning, Design and Permitting
- Client: Private Developer



Pahokee Marina and Campgrounds, Palm Beach County, Florida (Construction Complete)

- 108 slips, Pre-Manufactured Floating and Fixed Docks
- Fixed Breakwater, Boat Ramp, Steel Bulkhead
- Planning, Design, Permitting and Construction Administration
- Client: City of Pahokee / John Sprague (561-723-5418)



Loggerhead Marina, Riviera Beach, Florida (Construction Complete)

- 400 Boat dry Storage Facility
- Floating Staging Docks, Fixed Fuel Dock and Steel Bulkhead
- Planning, Design, Permitting and Construction Administration
- Client: Loggerhead / Ken Blair (561-625-9443)



Marina Grande, Holly Hill, Florida (Design and Permitting Complete)

- 32 Slips, Pre-Manufactured Fixed Docks – City Fishing Pier
- Planning, Design, Permitting and Construction Administration
- Client: Swerdlow / Randy Foltz (954-786-4683)

Ocean Cove Marina, Highland Beach, Florida (Construction Complete)

- 22 Slips, Pre-Manufactured Fixed Docks – Rock Revetment
- Planning, Design, Permitting and Construction Administration
- Client: J.H. Norman & Associates, Inc. / Jeff Norman (561-391-1747)



The Symphony Marina, Fort Lauderdale, Florida (Construction Complete)

- 18 Slips, Pre-Manufactured Fixed Docks
- Steel Sheetpile Bulkhead
- Planning, Design, Permitting and Construction Administration
- Client: Altman Group / Bill Schnabel (305-460-9900)



Grand Harbor Marina, Vero Beach, Florida (Permitting Complete)

- 55 Slip Marina Expansion, Fixed and Floating Docks
- Planning, Design and Permitting
- Client: Loggerhead / Ken Blair (561-625-9443)

Marina Grande, North Miami Beach, Florida (Bulkhead Complete)

- 115 Slip Marina, Fixed and Floating Docks
- 2200 feet of Steel Sheetpile Bulkhead and Retaining Wall
- Planning, Design and Permitting
- Client: Boca Developers / Randy Foltz (954-786-4683)



Fort Lauderdale Day Dockage, Broward County, Florida (Construction Ongoing)

- Five Floating Dock Systems for Transient Dockage – ADA Compliant
- Planning, Design, Permitting and Construction Administration
- Client: City of Fort Lauderdale / Cate McCaffrey (954-828-5130)

Boca El Rio Park, Boca Raton, Florida (Design and Permitting Complete)



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



Response to Request for Qualifications
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- Timber Boardwalk through Sensitive Mangrove Area along the Hillsboro River
- Planning, Design and Permitting
- Client: City of Boca Raton / Jeff Borick, ASLA (954-786-4683)

Boynton Boat Club Park, Boynton Beach, Florida (Construction Complete)

- Concrete Boat Ramp Improvements
- Floating Staging Docks at Ramp and Temporary Loading / Offloading Docks
- Planning, Design and Permitting
- Client: City of Boynton Beach / Michael Simon (561-737-3256)



Revetments, Groins and Shoreline Stabilization

Herbert Hoover Dike Rock Revetment, Pahokee, Florida (Construction Complete)

- 10,000 Feet of Rock of Rock Revetment
- Planning, Design, Permitting and Construction Administration
- Client: City of Pahokee / John Sprague (561-723-5418)

Ocean Cove Wetland Protection, Highland Beach, Florida (Construction Complete)

- Rock Revetment – Restoration of Tidal Flushing
- Planning, Design, Permitting and Construction Administration
- Client: J.H. Norman & Associates, Inc. / Jeff Norman (561-391-1747)



Dredging and Dredged Material Handling

Waterway Maintenance Dredging, Pompano Beach, Florida (Complete)

- 26 Miles of Inland Waterway Dredging
- Planning, Design, Permitting and Construction Administration
- Client: City of Pompano Beach / Clayton Young, P.E. (954-786-4029)

Waterway Maintenance Dredging, Plantation, Florida (Complete)

- 60,000 cy of Inland Waterway Dredging
- Planning, Design, Permitting and Construction Administration
- Client: City of Planation / Brett W. Butler, P.E. (954-797-2282)

C-10 Canal Maintenance Dredging, Dania Beach, Florida (Complete)

- 55,000 cy of Inland Waterway Dredging
- Planning, Design, Permitting and Construction Administration
- Client: FDOT, District IV / Paul Doll, PSM (561-777-4579)



Section Eight: References

SDI strives for client satisfaction as reputation relating to repeat business, referrals and long-term relationships with clientele is the key to success of our organization. We are proud of our accomplishments and are awarded by successful completion of a project that fulfills or exceeds the expectations and goals of our clients.

Marine related ventures such as large-scale marina improvement projects can involve numerous environmental challenges that sometimes take time to address and overcome. For public marina projects, especially existing facilities with slip tenants, fueling facilities, commercial fishing and dive operations and adjacent restaurant operators, public involvement and participation is critical towards the success of the project. When tasked with assisting a public entity with developing a new or retrofitting an existing marina, SDI will seek to form a partnership with the entity and work side-by-side through all phases of the project. In our experience, projects of this nature can extend beyond a year and the partnership must remain intact and focused on common goals and objectives.



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



Response to Request for Qualifications
Statement of Qualifications & Experience
Design of Tarpon Pier Replacement for
City Marina at Garrison Bight
Request For Qualifications #11-002

Client: City of Riviera Beach
 200 E 13th Street
 Riviera Beach, Florida 33404

Contact: Mr. Ed Legue – Marina Director
 (561) 891-7899

Projects: Improvements to the Riviera Beach Marina

Services: Marine Engineering, Environmental Permitting,
 Construction Administration, Topographic & Hydrographic
 Surveys, and Structural Investigations

SDI Contact: William T. Sadler, Jr., P.E., P.S.M.



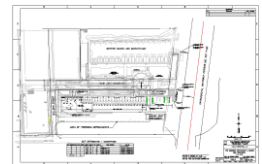
Client: Boynton Beach Community Redevelopment Agency
 915 South Federal Highway
 Boynton Beach, Florida 33435

Contact: Mr. Michael Simon
 (561) 737-3256

Projects: Two Georges Boardwalk & Bulkhead

Services: Marine Engineering, Environmental Permitting,
 Construction Administration, Topographic & Hydrographic
 Surveys, and Structural Investigations

SDI Contact: William T. Sadler, Jr., P.E., P.S.M.



Client: City of Plantation - Department of Engineering
 400 Northwest 73rd Ave
 Plantation, Florida 33317

Contact: Mr. Brett Butler, P.E.
 (954) 797-2282

Projects: Seminole Middle School Bulkhead Design, Plantation Isles
 Long-Term Canal Maintenance

Services: Marine Engineering, Environmental Permitting,
 Construction Administration, Topographic & Hydrographic
 Surveys, and Structural Investigations

SDI Contact: William T. Sadler, Jr., P.E., P.S.M.



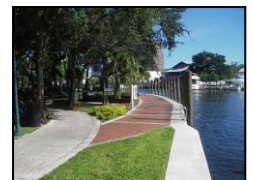
Client: City of Ft. Lauderdale
 100 N. Andrews Avenue
 Fort Lauderdale, FL 33301

Contact: Mrs. Cate McCaffrey
 (954) 828-5130

Projects: Ft. Lauderdale New River Floating Docks

Services: Marine Engineering, Environmental Permitting,
 Construction Administration, Topographic & Hydrographic
 Surveys and Structural Investigations

SDI Contact: William T. Sadler, Jr., P.E., P.S.M.



Prepared for:

City of Key West
Office of the City Clerk
525 Angela Street
Key West, FL 33040



October 4, 2010

Re: Letter of Recommendation – Sea Diversified, Inc.

To Whom It May Concern:

I have been working with the staff of marine engineering and design professionals from Sea Diversified, Inc., for the past three years. It is with great pleasure that I provide this letter of recommendation on behalf of this outstanding company.

Sea Diversified, Inc. was hired by the CRA in the spring of 2007 to assist the CRA with various aspects of our overall Boynton Harbor Marina redevelopment plan. In addition to providing their marine and upland survey services, their vast experience with marina design and engineering proved most valuable during the Agency's Boynton Harbor Marina Slip Reconstruction project. Sea Diversified, Inc. performed all of the design services for the new marina, processed the FDEP, Army Core and City of Boynton Beach permits as well as provided Construction Administration services for the \$750,000.00 reconstruction project. Sea Diversified, Inc. staff was professional and diligent in their efforts to provide the CRA with an outstanding new 19 slip, fixed frame commercial marina dock system from start to finish. Currently, Sea Diversified, Inc. is acting as design engineer and Construction Administrator for the Agency's \$60,000.00 Boynton Harbor Marina Fuel Dock Reconstruction project replacing 250ft of wooden dock structure for our very active commercial fuel dock.

During the past three years, Sea Diversified, Inc. has proven extremely qualified, professional, accessible and on target with design elements to achieve the project's goals and objectives. The quality of their work and design, their vast experience with marina design, engineering and construction techniques, has allowed for creative and successful marina redevelopment projects. Members of their staff assigned to our project have been readily accessible by phone, computer and site visits. Sea Diversified, Inc. project managers are quick to respond to issues, lead the project team with focus and direction all the while being extremely aware of their client's desired outcome for the design and predetermined needs.

In closing, I recommend Sea Diversified, Inc. to you without reservation. If you have *any* further questions regarding Sea Diversified, Inc.'s qualifications, please do not hesitate to contact me.

Sincerely,

Michael Simon
Development Director

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

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: _____

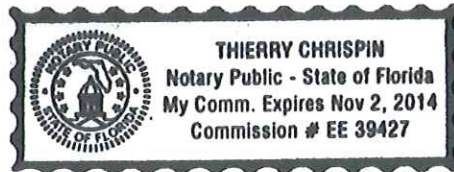
~~William T. Sadler, Jr, PE, PSM - President~~

sworn and prescribed before me this 17th day of May, 2011


NOTARY PUBLIC, State of Florida

My commission expires:

11/2/2014




ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

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: 
Raj Krishnasamy, P.E. / President

sworn and prescribed before me this 11 day of May, 2011

NOTARY PUBLIC, State of Florida



My commission expires: 5/15/2012



**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.**

1. This sworn statement is submitted with Bid, Bid or Contract No. RFQ # 11-002 for
Design of Tarpon Pier for City Marina at Garrison Bright

2. This sworn statement is submitted by Tierra South Florida, inc.
(Name of entity submitting sworn statement)

whose business address is 2765 Vista Parkway, Suite 10, West Palm Beach, FL 33411

and (if applicable) its Federal
Employer Identification Number (FEIN) is 20-0282450 (If the entity has no FEIN,
include the Social Security Number of the individual signing this sworn statement.)

3. My name is Raj Krishnasamy, P.E. and my relationship to
(Please print name of individual signing)

the entity named above is President

4. 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.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of 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.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 1. A predecessor or successor of a person convicted of a public entity crime: or
 2. An entity under the control of any natural person who is active in the management of the 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.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural 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.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity 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. There has been a subsequent proceeding before a hearing officer of the State 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.)

(Signature)

5/11/2011

(Date)

STATE OF Florida

COUNTY OF Palm Beach

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Raj Krishnasamy, P.E. who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 11 day of May, 2011.

My commission expires: 5/15/2012



ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

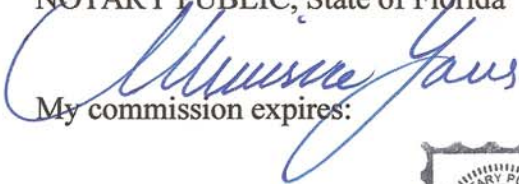
COUNTY OF MONROE

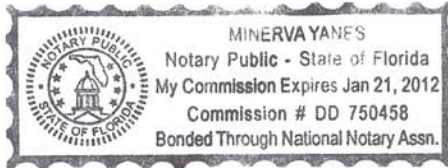
I the undersigned hereby duly sworn depose and say that no portion of the sum herein response will be paid to any employee of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

BY: 
Paul Fitzgerald - Managing Director (Pinnacle Group International)

sworn and prescribed before me this 16 day of May, 2011

NOTARY PUBLIC, State of Florida


My commission expires:



**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.**

1. This sworn statement is submitted with Bid, Bid or Contract No. RFQ# 11-002 for
Design of Tarpon Pier Replacement for City Marina at Garrison Bight

2. This sworn statement is submitted by Sea Diversified, Inc.
(Name of entity submitting sworn statement)

whose business address is 310 North Swinton Avenue, Delray Beach, Florida 33444
and (if applicable) its Federal
Employer Identification Number (FEIN) is 51-0501765 (If the entity has no FEIN,
include the Social Security Number of the individual signing this sworn statement.)

3. My name is William T. Sadler, Jr, PE, PSM and my relationship to
(Please print name of individual signing)

the entity named above is President.

4. 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.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of 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.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

1. A predecessor or successor of a person convicted of a public entity crime: or

2. An entity under the control of any natural person who is active in the management of the 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.

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8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

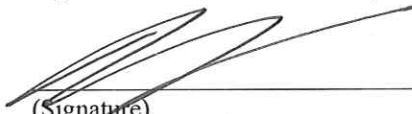
Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 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. There has been a subsequent proceeding before a hearing officer of the State 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.)

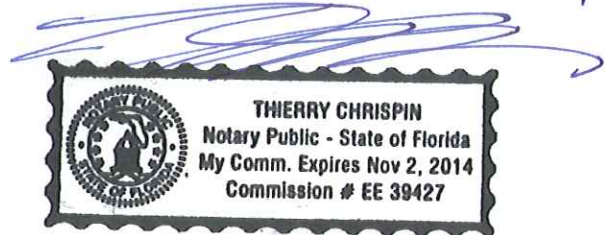


 (Signature)

5-17-11

 (Date)

STATE OF FL
 COUNTY OF WPB



PERSONALLY APPEARED BEFORE ME, the undersigned authority,

William T. Sadler, Jr, PE, PSM who, after first being sworn by me, affixed his/her signature in the
 (Name of individual signing)

space provided above on this 16th day of May, 2011.

My commission expires: 11/2/2014



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

Sea Diversified, Inc.
Name of Business



Surveying • Engineering • Applications

Corporate Headquarters

310 North Swinton Avenue
Delray Beach, Florida 34444

Phone: 561-243-4920

Fax: 561-243-4957

Central Florida Division

4640 Lipscomb Street, Suite 12
Palm Bay, Florida 32905

Phone: 321-984-7268

Fax: 321-984-7270

www.seadiversified.com