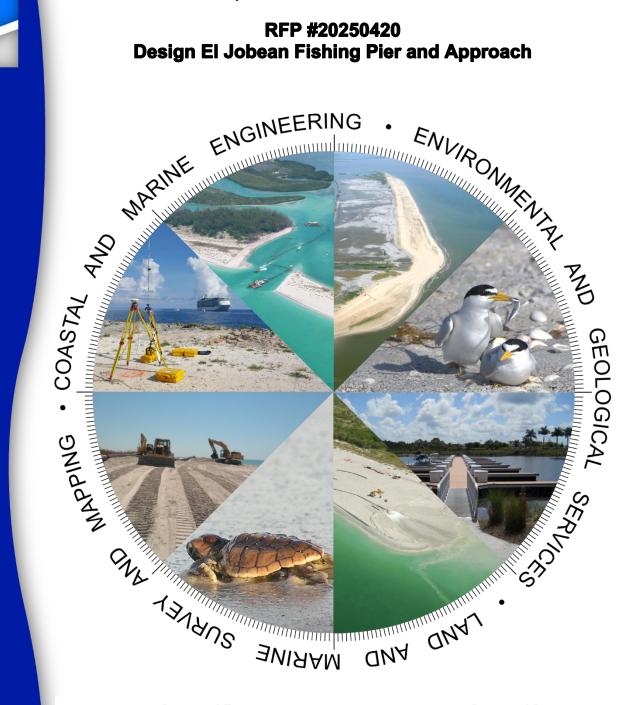


REQUEST FOR PROPOSAL

RFP #20250420 **Design El Jobean Fishing Pier and Approach**



Prepared For:

Charlotte County Administration Complex 18500 Murdock Circle, Suite 344 Port Charlotte, Florida 33948-1094 Attn: Senior Division Manager - Purchasing

Prepared By:

Michael T. Poff, P.E., President Coastal Engineering Consultants, Inc. 28421 Bonita Crossings Blvd. Bonita Springs, FL 34135 (239) 643-2324 Ext. 126 / mpoff@cecifl.com

Proposal Due Date and Time: May 23, 2025 - 3:00 P.M. **CEC File No. 25.140**

www.coastalengineering.com



May 22, 2025

Alisa True, C.P.M., CPPB Senior Contract Specialist - Purchasing **Charlotte County Purchasing Department** 18500 Murdock Circle Port Charlotte, Florida 33948-1094

Re: RFP No. 20250420, Design El Jobean Fishing Pier and Approach

CEC File No. 25.140

Dear Ms. True:

We appreciate this opportunity to present the qualifications and experience of Coastal Engineering Consultants, Inc. (CEC) to assist Charlotte County to provide professional design services to meet all applicable Federal, State, and Local requirements for permitting and construction oversight for the demolition and complete replacement/repair of the fishing pier, bulkhead and approach located at the El Jobean Fishing Pier Garden Road at River Beach Drive, El Jobean, Florida.

CEC offers our local presence in Southwest Florida to provide the County with cost-effective and personalized services. We have successfully completed dozens of projects under various Charlotte County annual and project specific contracts for over 48 years. Currently we are assisting the County on twenty-four active projects including coastal, marine, environmental, and survey projects. Throughout CEC's history, we have always put the client first and provided **superior service** to Charlotte County on a diverse range of projects and have developed **outstanding working relationships** with your staff.

Our local knowledge of your nearshore and coastal waterways is unmatched. We have unparalleled experience in providing professional design services for pier and shoreline stabilization projects in Southwest Florida, especially for Charlotte County. We wish to make a positive commitment to the citizens of Charlotte County and to the Board of County Commissioners, that we can apply all of our resources to the timely, aggressive, successful completion of your Project. Thank you for your consideration and we look forward to working with you on the **Design El Jobean Fishing Pier and Approach Project**.

Respectfully Yours,

COASTAL ENGINEERING CONSULTANTS, INC.

Michael T. Poff, P.E.

President

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PART V - SUBMITTAL FORMS PROPOSAL SUBMITTAL SIGNATURE FORM

1.	Project Team Name and T	itle	Years experience	City or individu work or this pro	ual will ut of for	City individual's office is normally located	City of individual's residence
Michael T. Poff, P.E., President / Principal Engineer		35	Bonita Springs		Bonita Springs	Naples	
Mar	k A. Kincaid, P.E., VP / Princi	pal Engineer	40	Bonita Springs		Bonita Springs	Bonita Springs
Rich	nard J. Ewing, P.S.M., VP Su	rveying & Mapping	41	Bonita Springs		Bonita Springs	Naples
lere	my B. Herget, P.E., Managing	g Engineer/Prj. Mgr.	16	Bonita Springs		Bonita Springs	Naples
Grad	dy V. Timmins, P.E., Managin	g Engineer	13	Bonita Springs		Bonita Springs	Naples
(yle	M. Gullikson, Marine Survey	or & Inspector	5	Bonita Springs		Bonita Springs	Fort Myers
/adi	m V. Alymov, Ph.D., Coastal	Modeler	23	Bonita S	prings	Bonita Springs	Naples
Samantha Brasher, Senior Designer		20	Bonita Springs		Bonita Springs	Naples	
2.	Magnitude of Company O						
	A) Total professional service		ths:		\$13,392,661		
	B) Number of similar project	24 months:			9		
	C) Largest single project to	\$ 5,000,000			\$ 5,000,000		
3.	Magnitude of Charlotte County Projects						
	A) Number of current or scheduled County Projects			24			
	B) Payments received from executed contracts with the	<u> </u>	`	pon	\$ 2,096,379		
4.	Sub-Consultant(s) (if applicable)			Work to Provided		Services to be	Provided
5.	Disclosure of interest or involvement: List below all private sector clients with whom you have an active pending contract and who have an interest within the areas affected by this project. Also, include any properties or interests held by your firm, or officers of your firm, within the areas affected by this project.						
	Firm Addre						
			act Name				
	Start Date	ng Date					
	Project Name/Description						

NAME OF FIRM Coastal Engineering Consultants, Inc.
(This form must be completed and returned)

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6. Minority Business:	Yes No X
The County will consider the firm's status as an MBE or a certificonsultants proposed to be utilized by the firm, within the evaluation	
Comments or Additional Information:	
	_
The undersigned attests to his/her authority to submit this proposa if the firm is awarded the Contract by the County. The undersi Proposal, Terms and Conditions, Insurance Requirements and proposal is submitted with full knowledge and understanding of the	igned further certifies that he/she has read the Request for any other documentation relating to this request and this
By signing this form, the proposer hereby declares that this proposubmitting a proposal pursuant to this RFP.	osal is made without collusion with any other person or entity
In accordance with section 287.135, Florida Statutes, the under Companies with Activities in Sudan List, the Scrutinized Comparand does not have business operations in Cuba or Syria (if applied or is not participating in a boycott of Israel.	nies with Activities in the Iran Petroleum Energy Sector List,
As Addenda are considered binding as if contained in the origina receipt of same. The submittal may be considered void if receipt	
Addendum No. 1 Dated 5/14/2025 Addendum No. Da	ated Addendum No Dated
Addendum No Dated Addendum No Da	ated Addendum No Dated
Type of Organization (please check one): INDIVIDUAL CORPORATION	(_) PARTNERSHIP (_) N (X) JOINT VENTURE (_)
Coastal Engineering Consultants, Inc. Firm Name	(239) 643-2324 Telephone
	_59-1728628
Fictitious or d/b/a Name	Federal Employer Identification Number (FEIN)
28421 Bonita Crossings Boulevard	
Home Office Address	
Bonita Springs, Florida 34135	_48
City, State, Zip	Number of Years in Business
Address: Office Servicing Charlotte County, other than above	
Name/Title of your Charlotte County Rep.	Telephone
Michael T. Poff, P.E., President Name/Title of Individual Binding Firm (Please Print)	5/22/2025
Signature of Individual Binding Firm	Date
_mpoff@cecifl.com Email Address	

(This form must be completed and returned)

22

HUMAN TRAFFICKING AFFIDAVIT for Nongovernmental Entities Pursuant To FS. §787.06

Charlotte County Contract #20250420

The undersigned on behalf of the entity listed below, (the "Nongovernmental Entity"), hereby attests under penalty of perjury as follows:

- 1. I am over the age of 18 and I have personal knowledge of the matters set forth except as otherwise set forth herein.
- 2. I am an officer or representative of the Nongovernmental Entity and authorized to provide this affidavit on the Company's behalf.
- 3. Nongovernmental Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes.
- 4. This declaration is made pursuant to Section 92.525, Florida Statutes. I understand that making a false statement in this declaration may subject me to criminal penalties.

Under penalties of perjury, I declare that I have read the foregoing Human Trafficking Affidavit and that the facts stated in it are true.

Further Affiant sayeth naught.

Signature

Michael T. Poff, P.E.

Printed Name

President

Title

Coastal Engineering Consultants, Inc.
Nongovernmental Entity

5/22/2025

Date

END OF PART IV

DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that Coastal Engineering Consultants, Inc. does:

- 1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5. Impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Proposer's Signature

5/22/2025

Date

NAME OF FIRM Coastal Engineering Consultants, Inc.

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I. PROJECT TEAM

A. BACKGROUND OF TEAM

INTRODUCTION

Coastal Engineering Consultants, Inc. (CEC) is a small locally owned business recognized for our expertise in marine engineering and marine surveying on the Gulf Coast. Our experienced professionals possess the knowledge, integrity, and resolve to change our environment and improve our daily lives and the communities in which we live. Based in Florida, CEC is actively involved in the evaluation, planning, studies, reports, permitting, and design of diverse marine infrastructure and ecosystem restoration projects along the Gulf Coast. Our staff of engineers, geologists, scientists, permit specialists, and surveyors design workable alternatives to produce timely, cost-effective results that are in harmony with natural ecosystems. CEC employs 23 full-time personnel, of whom six are licensed professionals in their respective fields.

CEC's strength is in its nationally recognized expertise in conducting reconnaissance and feasibility studies, performing engineering design from preliminary to final plans and specifications, cost estimating, and performing bid and construction management services for marine structures; waterfront development; coastal systems analyses; waterway management and navigation; erosion control and shoreline stabilization; beach and dune restoration; marsh and wetland creation; ecosystem restoration; comprehensive watershed studies; and multi-purpose water resource projects.

One of our primary service sectors is the design, permitting, and construction administration of piers, docks, marinas, boat ramps, mooring fields, waterway management, and related amenities. CEC's specific tasks have included bathymetric and environmental resources surveys; underwater structural inspections; coring/probing and sediment testing; submerged utility location surveys; submerged utility repairs; pier, dock, bulkhead and seawall repair plans and specifications; new facility construction plans and specifications; bid services; and construction services. We are well versed in providing myriads of complementary services for these complex projects including environmental assessments, submerged aquatic vegetation inventories and mapping, listed species surveys, delineation of jurisdictional wetland boundaries, facility amenity selection and costing, and utility hook-up capacity analysis.

Our clients have needs, and our priority is to meet those needs. We pride ourselves on this philosophy and our clients express their appreciation of the same. Second, we are privileged to be a part of this country's vision to restore and maintain its fragile ecosystems. We are honored to have been selected by various state and federal governmental agencies to provide comprehensive services of projects of national significance. Third, we enjoy the quality of life around us. As such we "give back" to our communities, staying involved in local outreach and charitable causes. Of our total staff, over 75% have been with the firm over 12 years. This is a testimony to the loyalty and dedication of our key personnel and their belief in our corporate philosophy and structure.

1. PROJECT MANAGER

Jeremy Herget, P.E. is CEC's Managing Engineer and shall serve as PROJECT MANAGER. He shall be authorized and responsible to act on behalf of CEC with respect to directing, coordinating, and administering all aspects of the services to be performed. Mr. Herget will not be substituted without express permission from the County. Mr. Herget has over 16 years of engineering experience. His design engineering duties consist of preparing construction plans and technical specifications; design and repair plans for boat ramps, docks, boardwalks, fishing piers, kayak launches; and environmental permitting. His field engineering responsibilities include marine surveying, sediment sampling, biological surveys and species identification, deployment of hydrographic instrumentation, coastal structure inspections including above and below water, and construction observations including hydraulic fill placement. The marine survey projects consist of bays, intracoastal waterways, inlets, shoals, navigation channels, beach profiling, and hardbottom mapping. His environmental permitting projects include dredge and fill, coastal construction control, sea turtle and manatee protection, mitigation planning, and beach restoration and maintenance. His responsibilities shall include marine surveys, data collection, survey plans, construction administration support services, and client liaison.

2. OTHER KEY PERSONNEL

The summary backgrounds of CEC's key personnel are described below. This will familiarize you with each individual and their related technical and managerial skills, as well as their individual professional experiences. Detailed resumes are provided in Section B. The key personnel will not be substituted without express permission of the County.

Richard Ewing, P.S.M. is CEC's Vice-President of Surveying and Mapping and has over 41 years of experience in survey and mapping services for multiple public and private sectors. He is also responsible for overseeing and performing topographic surveys, boundary surveys, bathymetric surveys, hydrographic surveys, and construction level surveys in support of our marine engineering projects. He specializes in providing services for municipal agencies, which include conducting tidal studies, land acquisition boundary surveys, and appraisal mapping using aerial photography. Mr. Ewing has actively worked on all of CEC's marine projects since 1998, responsible for establishing survey control; coordinating design, bid, and construction surveys; conducting pay quantity surveys during construction; and signing and sealing as-built surveys. He will serve as our Principal Surveyor and manage the survey components and shall be in responsible charge of the fieldwork, data collection, data reduction, and survey reporting services.

Grady Timmins, P.E. is one of CEC's Managing Engineers and has over 13 years of experience in project management, marine surveys, topographic and bathymetric surveys, marine structural design, underwater inspection, coastal site planning, construction administration, and environmental management and monitoring. Much of his experience involves design and development of marina facilities and coastal improvements including boat ramps, piers, seawalls, fixed and floating dock systems, navigation channels, beaches, and shoreline stabilization structures. Mr. Timmins' duties shall include fieldwork, assistance with the data reduction and calculations, coordinate the Project with the County's project manager, stakeholder and agency representation, construction administration, construction inspection, project certification. Mr.

Timmins is currently managing multiple engineering, dredging and surveying projects under CEC's annual contract and project specific contracts for Charlotte County.

Mark A. Kincaid, P.E. is CEC's Vice-President of Engineering and shall serve as Senior Marine Engineer. He has over 40 years of professional experience in marine engineering, marine surveys, structural design/repair, and environmental restoration projects along the Gulf Coast. His field engineering responsibilities include marine surveying, sediment sampling, biological surveys and species identification, deployment of hydrographic instrumentation, marine structure inspections including above and below water, and construction observations. Mr. Kincaid has personally logged thousands of hours of diving conducting underwater structural inspections, marine surveys, instrument deployments, and biological/geotechnical sampling. He shall serve as our Principal Engineer and oversee the Project.

Michael Poff, P.E. is President of CEC and shall serve as Principal Engineer. He has over 35 years of professional experience providing project management, marine survey services, civil design, coastal engineering, and environmental permitting throughout the gulf region with a focus in Southwest Florida. Mr. Poff is well versed in county, state and federal regulations and codes governing development. He has provided funding coordination and public education services for many local and state governments throughout the region. Mr. Poff is in responsible charge of a team of engineers, geologists, environmental scientists, marine surveyors, designers, technicians, and administrative personnel. His management responsibilities include client coordination, project funding coordination, public education, civic group representation, marketing, proposals, and contracts. He oversees the firm's QA-QC Plan. He has conducted navigation channel surveys, beach profiling, hardbottom mapping, and vibracore sampling. He has established personal relationships with the County's project managers, engineering supervisor, purchasing managers, and technical support staff. Mr. Poff has gained the trust of the local ambassadors along the waterfront communities as well as the marine advisory, parks and recreation, and beaches and shores advisory committees. He routinely attends community-wide, civic and homeowners' association, and the advisory committee monthly meetings to present the benefits and successes of the projects and to educate the stakeholders and public in general. He shall be responsible for quality assurance and quality control (QA-QC) of the Project and assist with the FEMA public assistance tasks.

Kyle Gullikson is a Marine Surveyor and Inspector for Coastal Engineering Consultants and has five years of professional experience. His field work experience includes above and underwater structural inspections, gauge deployment surveys, topographic and bathymetric surveys, geotechnical and jet probe surveys for sand searches and dredge projects, seagrass and oyster mapping surveys, and construction observations including resident inspection services. Mr. Gullikson has supported the analysis of coastal processes through field data collection including marine surveying, biological surveying, underwater inspections, and deployment of hydrographic instrumentation to collect wind, wave, tide, and current data. He shall be responsible for data collection and setting up survey control. He shall assist with the volume calculations.

Vadim V. Alymov is CEC's Coastal Modeler with over 23 years of coastal modeling experience. His experience includes borrow area and fill template design, cost estimating, design computations, technical reports, mapping, hydrological characterization, plans and specifications,

environmental impact studies, and utilization of computer-assisted and design software to prepare engineering and design documents. Dr. Alymov's duties shall include coastal processes analyses; hydrodynamic data collection and analyses; numerical model set-up, calibration, and validation; plan formulation; ecosystem design; coastal structure design; modeling of alternatives; and project performance assessments.

Samantha Brasher is CEC's Senior Designer with over 20 years of technical experience. Her duties include computations and quantity estimates preparation; assisting with the preparation of permit drawings, preliminary design plans, and construction plans; utilizing survey data to prepare drawings including bathymetric contours, repair details, and typical cross-sections; and producing engineering drawings for marine structures including boat ramps, breakwaters, groins, jetties, bridges, piers, and docks. She has completed all of CEC's drawing sets for our major coastal zone projects in Florida for over 12 years. Her responsibilities shall include preparing survey drawings, volume calculations, and final deliverables.

3. CONSULTANTS

We are fully capable of completing the tasks for this Project in a timely and cost-effective manner as CEC provides all the requested services with in-house personnel and equipment.

4. STAFFING LEVELS AND POSITIONS PROPOSED

Proposed Staff and Positions

Jeremy B. Herget, P.E. – *Managing Engineer/Project Manager*

Richard J. Ewing, P.S.M. – Principal Surveyor and Mapper

Mark A. Kincaid, P.E. - Principal Engineer/Senior Marine Engineer

Michael T. Poff, P.E. – President/Principal Engineer

Grady V. Timmins, P.E. – Managing Engineer

Kyle M. Gullikson – Marine Surveyor & Inspector

Vadim V. Alymov, Ph.D. – Coastal Modeler

Samantha D. Brasher - Senior Designer

B. ORGANIZATION CHART / RESUMES / LICENSES

Presented on the following page is our Firm Organization Chart. Resumes and Licenses for the key personnel assigned to the Design El Jobean Fishing Pier and Approach Project are presented on the proceeding pages.



Charlotte County, Florida RFP No. 20250420

DESIGN EL JOBEAN FISHING PIER AND APPROACH

Officer-In-Charge
Michael T. Poff, P.E.

Technical Resources

Coastal Engineering Consultants, Inc.

Michael T. Poff, P.E. - Principal Engineer/Quality Assurance-Quality Control

Mark A. Kincaid, P.E. – *Principal Engineer/Senior Marine Engineer*

Richard J. Ewing, P.S.M. – *Principal Surveyor and Mapper*

Jeremy B. Herget, P.E. – *Managing Engineer/Project Manager*

Grady V. Timmins, P.E. – Managing Engineer

Kyle M. Gullikson – Staff Engineer/Marine Surveyor & Inspector

Vadim V. Alymov, Ph.D. - Coastal Modeler

Samantha D. Brasher – Senior Designer



EDUCATION

 B.S. 2009 Florida Atlantic University, Ocean Engineering

CERTIFICATIONS/ TRAINING

- Licensed Professional Engineer, Florida No. 79352, 2015
- PADI Diver

YEARS OF EXPERIENCE – 16 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 11 years (2014-Present)
- US Army Corps of Engineers New Orleans District
 - 5 years (2009-2014)

FUNCTIONAL EXPERIENCE

 Serving as Managing Engineer for Town of Ft. Myers Beach coastal, marine, environmental, and survey project for over 7 years.

PROFESSIONAL AFFILIATIONS

 Society of Naval Architects and Marine Engineers

JEREMY B. HERGET, P.E.

MANAGING ENGINEER

(239) 643-2324, ext. 130 • jherget@cecifl.com

ROLE - PROJECT MANAGER

Mr. Herget is a Managing Engineer with Coastal Engineering Consultants. His experience includes providing program and project management, marine engineering, coastal engineering, environmental permitting, cost estimating, and land and marine surveying. His engineering experience includes ecosystem restoration alternative formulation; design and repair design of coastal structures; preparing construction plans and technical specifications; planning sediment fill, borrow area, and channel maintenance dredging; and wetland, marsh, beach profile, and inlet cross-section comparative analyses. His marine survey experience includes hydrographic, topographic, bathymetric, and hydraulic surveys; underwater structural inspections; tide gauge and current meter deployment and recovery; geophysical surveys and sediment sampling; and biological surveys and species identifications.

His Project responsibilities include coastal restoration design, preparing construction plans, technical specifications, and bid documents; cost estimating; environmental permitting; and bid phase services. His construction phase services include submittal review, construction stakeout and progress surveys, project scheduling, on-site construction observations project certification and environmental permitting closeout.

EXPERIENCE

Mr. Herget has supported the analysis of coastal processes through field data collection including topographic and bathymetric surveying, biological surveying and resource mapping, underwater inspections, and deployment of hydrographic instrumentation to collect wind, wave, tide, and current data. His design experience includes beach and dune layouts; borrow area sediment analysis and geometry; inlet and navigation channel dredge templates; channel markers; coastal structures such as groins, jetties, and revetments; and dune vegetation. His environmental designs include seagrass restoration efforts associated with dredging of inlets and channels.

Mr. Herget was previously employed as a Project Manager for U.S. Army Corps of Engineers New Orleans District for five years. He served as a project manager for multiple ecosystem restoration studies and the Mississippi River Levee Program which included numerous levee enlargement projects covering approximately 512 miles including those within the Hurricane Storm Damage Risk Reduction System. Mr. Herget was invited to participate in development of the Risk Management training program currently in use.

- Placida Harbour Club Boat Basin Dredging and Pier Replacement, Charlotte County
- County-wide Pier and Boardwalk Inspections, Charlotte County
- Bayshore Live Oak Pier, Charlotte County
- Saltleaf Marina and Boat Ramp, Estero
- Ville De Marco West Fishing Pier, Seawall, Docks, Marco Island
- Clam Pass Boardwalk Repairs, Collier County
- Matanzas Pass Preserve Boardwalks, Pier and Kayak Launch, Lee County
- Mound House Observation Pier, Fort Myers Beach
- Fort Pickens Ferry Dock Repair, Escambia County
- Butterford Waterway Park Boat Ramp Repairs, Charlotte County
- El Jobean Boat Ramp Repairs, Charlotte County
- Boca Grande Trestle Inspection, Charlotte County



EDUCATION

- Florida Laws of the Profession
- Mean High Water Surveying
- Florida Laws of Surveying

CERTIFICATIONS/ TRAINING

- Licensed Professional Surveyor and Mapper, Florida No. 5295, 1994
- Licensed Professional Surveyor and Mapper, Louisiana No. 5016, 2009

YEARS OF EXPERIENCE – 41 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
- 35 years (1990-Present)
- Perry Hand & Associates
- 6 years (1984-1990)

FUNCTIONAL EXPERIENCE

 Principal Surveyor and Mapper for Environmental and Coastal Projects throughout SW Florida

PROFESSIONAL AFFILIATIONS

• Florida Surveying and Mapping Society

RICHARD J. EWING, P.S.M.

VICE PRESIDENT, PRINCIPAL SURVEYOR AND MAPPER

(239) 643-2324, ext. 127 • rewing@cecifl.com

ROLE - OVERSEE SURVEY DATA COLLECTION

Mr. Ewing is the Vice-President of Surveying with Coastal Engineering Consultants. He specializes in surveying services for municipal agencies which include State land boundary acquisition surveys, appraisal mapping using aerial photography, and hydrographic surveys. He coordinates the scheduling of field crews and is the liaison between the field data collection process and reduction of survey data to produce high quality products.

His Project responsibilities include supervising data collection for the design surveys; environmental surveys; survey control; construction stake-out; preconstruction, pay and post-construction surveys; as-built surveys; and surveyor's reports.

EXPERIENCE

Mr. Ewing is proficient in the use of Global Positioning System – Real Time Kinetics to perform environmental and marine survey services. He has personally surveyed over 16 miles of Mean High-Water lines and served as lead surveyor for preparing the plats in support of establishing Erosion Control Lines for multiple Florida beach restoration and renourishment projects. He supervised the design, permit and construction surveys for seven major beach restoration and renourishment projects in Southwest Florida totaling over \$50 Million. He has overseen the data collection for environmental and coastal engineering projects under CEC's annual contracts including the dredge programs for Charlotte and Lee Counties, Marco Island, and WCIND.

- County-wide Pier and Boardwalk Inspections, Charlotte County
- Blackburn Point Park Floating Lauch Design Survey, Sarasota
- Bayshore Live Oak Pier, Charlotte County
- Ville de Marco West Fishing Pier, Seawall, Docks, Marco Island
- Fort Pickens Ferry Dock Repair, Escambia County
- Mound House Observation Pier, Fort Myers Beach
- Placida Boat Ramp Repairs and Expansion, Charlotte County
- Ainger Creek Boat Ramp Repairs Renovation, Charlotte County
- Riverside Park Boat Ramp Repairs, Charlotte County
- Darst Park Boat Ramp Repairs, Charlotte County
- Horton Park Boat Ramp Repairs, Cape Coral
- Port of the Isles Boat Ramp Repairs, Collier County
- Punta Rassa Boat Ramp Renovation, Lee County
- Pine Island Commercial Marina Renovation, Lee County
- Alva Boat Ramp Renovation, Lee County
- Saltleaf Marina and Boat Ramp, Estero



EDUCATION

 B.S. 2013 University of Central Florida, Civil Engineering

CERTIFICATIONS/ TRAINING

- Licensed Professional Engineer, Florida No. 86500, 2019
- USCG Licensed Captain
- PADI Diver

YEARS OF EXPERIENCE – 13 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 12 years (2013-Present)
- Q. Grady Minor & Associates
 - 1 years (2012-2013)

FUNCTIONAL EXPERIENCE

- Project Engineer for Southwest Florida Beach Renourishment / Inlet Dredging / Beneficial Use Projects totaling over 2MCY valued at \$45M.
- Surveyed hundreds of line-miles of coastline, navigation channels and borrow areas.

GRADY V. TIMMINS, P.E.

MANAGING ENGINEER

(239) 643-2324, ext. 135 • grimmins@cecifl.com

ROLE - DATA COLLECTION, PLANNING, DESIGN, CONSTRUCTION SERVICES

Mr. Timmins is a Project Engineer for Coastal Engineering Consultants. His engineering duties consist of preparing design plans for waterfront development, shoreline armoring, and ecosystem restoration; cost estimating; environmental permitting; and performing construction management. His field responsibilities include marine survey, deployment of hydrographic instrumentation and marine structure inspections above and below water. His marine surveying duties consist of beach profiles, borrow areas, bays, intracoastal waterways, inlets, shoals, navigation channels, and natural resources. His environmental permitting duties include dredge and fill, erosion control, and shoreline stabilization projects.

His Project responsibilities include performing design surveys of beach, borrow area and pipeline corridor; preparing design plans for beach and dune renourishment; and environmental permitting technical support. His construction phase services include contractor submittal review, construction stakeout and progress surveys, project scheduling, and on-site construction observations.

EXPERIENCE

Mr. Timmins has supported the analysis of coastal processes through field data collection including topographic and bathymetric surveying, biological surveying, underwater inspections, and deployment of hydrographic instrumentation to collect wind, wave, tide and current data. His design experience includes assisting in beach and dune; borrow area geometry; inlet and navigation channel dredge templates; channel markers; and development of construction plans and technical specifications.

- County-wide Pier and Boardwalk Inspections, Charlotte County
- Bayshore Live Oak Pier, Charlotte County
- Ville de Marco Fishing Pier, Seawall, Docks, Marco Island
- Naples Powerboat Marina Boat Houses, Naples
- Clam Pass Boardwalk Repairs, Collier County
- Mound House Observation Pier, Fort Myers Beach
- Fort Pickens Ferry Dock Repair, Escambia County
- Lynn Hall Park Boardwalks and ADA Dune Walkovers, Lee County
- Punta Rassa Boat Ramp Renovation, Lee County
- Matanzas Pass Preserve Boardwalks, Pier and Kayak Launch, Lee County
- Saltleaf Marina and Boat Ramp, Estero
- Estero Island Dune Walkover Replacement, Fort Myers Beach
- Lovers Key Bonita Beach Nourishment, Lee County
- Punta Rassa Boat Ramp Replacement, Lee County
- Pine Island Commercial Marina Renovation, Lee County
- Newton Park Seawall Improvements, Fort Myers Beach
- Southwest Florida Regional Waterway Management, WCIND
- Turner Beach Shoreline Stabilization-Beach Park Improvements, City of Sanibel



EDUCATION

- A.S. 1982 Florida Institute of Technology, Ocean Technology
- B.S. 1985 Florida Atlantic University, Ocean Engineering

CERTIFICATIONS/ TRAINING

- Licensed Professional Engineer, Florida No. 58654, 2002
- USCG Master-100 Tons
- PADI Master Diver

YEARS OF EXPERIENCE – 40 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 27 years (1998-Present)
- Suboceanic Consultants
- 10 years (1988-1998)
- General Dynamics
 - 3 years (1985-1988)

FUNCTIONAL EXPERIENCE

 Serving as Principal Engineer for coastal, marine, environmental, survey projects for 26 years throughout Southwest Florida

PROFESSIONAL AFFILIATIONS

- Association of Diving Contractors
- States Organization for Boating Access

MARK A. KINCAID, P.E.

VICE PRESIDENT, PRINCIPAL ENGINEER

(239) 643-2324, ext. 128 • mkincaid@cecifl.com

ROLE - SENIOR MARINE ENGINEER

Mr. Kincaid is a Principal Engineer with Coastal Engineering Consultants providing project management, coastal engineering, marine structures, subaqueous utilities, marine surveying, and environmental permitting. His engineering experience includes beach and marine park renovations, beach and dune restoration and nourishment, permitting, and construction management; navigation channel, inlet and waterway dredging design, permitting, and monitoring; mooring field design, permitting, anchor testing, construction management, and post-construction monitoring and maintenance; and marine structure, subaqueous utility, and bridge inspections.

His project management responsibilities include performing quality assurancequality control checks of data collection; assisting with funding and grant coordination; peer review of designs; environmental permitting; reports, technical specification, and construction bid documents; and responsible charge of bid and construction phase services.

EXPERIENCE

Mr. Kincaid's design engineering duties consist of preparing construction plans and technical specifications; cost estimating; preliminary and final design; and coordinating permit agency requirements. His field engineering responsibilities include marine surveying, underwater inspections, biological surveys and species identification, deployment of hydrographic instrumentation, marine structure inspections including above and below water, and construction oversight. The marine survey projects consist of bays, intracoastal waterways, inlets, shoals, navigation channels, beach profiling, and hardbottom mapping. His environmental permitting includes dredging, coastal construction control, endangered species protection, mitigation planning, and shoreline stabilization.

- Placida Harbour Club Boat Basin Dredging and Pier Replacement, Charlotte County
- County-wide Pier and Boardwalk Inspections, Charlotte County
- Saltleaf Marina and Boat Ramp, Estero
- Mound House Observation Pier, Fort Myers Beach
- Fort Pickens Ferry Dock Repair, Escambia County
- El Jobean Boat Ramp Repairs, Charlotte County
- Boca Grande Trestle Inspection, Charlotte County
- Bayshore Live Oak Fishing Pier, Charlotte County
- Englewood Marine Center, Charlotte County
- Matanzas Preserve Boardwalk, Kayak Launch, and Fishing Pier, Lee County
- Ainger Creek Boat Ramp Repairs Renovation, Charlotte County
- Lynn Hall Park Boardwalks and ADA Dune Walkovers, Lee County
- Alva Boat Ramp Renovation, Lee County
- Punta Rassa Boat Ramp Renovation, Lee County
- Pier B, Key West Harbor
- Ville de Marco Fishing Pier, Seawall, and Docks, Marco Island



EDUCATION

- B.S. 1988 University of Delaware, Civil Engineering
- M.S. 1993 University of Delaware, Coastal Engineering

CERTIFICATIONS/ TRAINING

 Licensed Professional Engineer, Florida No. 48218, 1994

YEARS OF EXPERIENCE – 35 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 32 years (1993-Present)
- Burkett Associates, Inc.
 - 3 years (1988-1991)

FUNCTIONAL EXPERIENCE

 Principal Engineer for Barrier Island and Ecosystem Restoration and Beach Renourishment Projects totaling over 50 MCY valued at \$760M

PROFESSIONAL AFFILIATIONS

• FSBPA, ASBPA, ASCE

MICHAEL T. POFF, P.E.

PRESIDENT/PRINCIPAL ENGINEER

(239) 643-2324, ext. 126 • mpoff@cecifl.com

ROLE – COASTAL PLANNING & ENGINEERING, DESIGN AND PERMITTING TECHNICAL SUPPORT, QA-QC, COUNTY LIAISON

Mr. Poff is the President of Coastal Engineering Consultants and is in responsible charge of a team of engineers, geologists, environmental scientists, marine surveyors, designers, technicians, and administrative personnel. He has served as Lead Engineer on integrated consulting teams for plan formulation, design, permitting, and construction administration of major civil works projects with emphasis on storm damage reduction, coastal storm risk management, beach and dune restoration/renourishment, and ecosystem restoration: restoring over 45 miles of coastline, creating/enhancing over 4,500+ acres of marsh, wetland, beach, and dune habitats; and utilizing over 60 million cubic yards. He has managed canal and waterway dredge programs for Sarasota, Charlotte and Lee Counties, Marco Island, and WCIND.

His Project responsibilities include performing quality assurance-quality control checks of deliverables; providing contract and subcontract administration; serving as liaison with key stakeholders; overseeing development, evaluation, and selection of holistic restoration strategies and design alternatives; overseeing development and implementation of numerical modeling programs to assess performance of design options; assisting with data collection, analysis and application to develop design criteria; environmental permitting; funding and grant coordination; responsible charge for preparation of design plans, reports, and construction bid documents; bid and construction phase services; and overseeing annual monitoring programs.

EXPERIENCE

Mr. Poff's responsibilities for alternatives analysis include stakeholder engagement; development of alternatives including no action, restoration strategies and design templates, and complimentary structural features; overseeing development, set-up, and calibration of numerical modeling programs; assessing performance of design alternatives through empirical analyses and numerical modeling; evaluating technical, environmental, fiscal, and societal parameters for selection of preferred alternative; and consensus building to gain acceptance of recommended plan. His design experience includes environmental restoration; mitigation; beach, dune, and marsh fill layouts; borrow area geometry; inlet and navigation channel dredge templates; channel markers; coastal structures such as groins, jetties and revetments; and dune vegetation. His environmental designs include shorebird habitat creation and sea turtle-friendly beach and dune templates to enhance nesting habitat and promote hatching success.

- County-wide Pier and Boardwalk Inspections, Charlotte County
- Ainger Creek Boat Ramp Repairs, Charlotte County
- Bayshore Live Oak Pier, Charlotte County
- El Jobean Boat Ramp Repairs, Charlotte County
- Ainger Creek Boat Ramp Repairs Renovation, Charlotte County
- Riverside Boat Ramp Park Repairs, Charlotte County
- South Gulf Cove Park Boat Ramp Repairs, Charlotte County
- Placida Boat Ramp Repairs and Expansion, Charlotte County
- Overbrook Seawall Repair, Sarasota
- Blackburn Point Park Floating Lauch Replacement, Sarasota County
- Ville de Marco Fishing Pier, Seawall, and Docks, Marco Island
- Mound House Observation Pier, Fort Myers Beach



EDUCATION

 B.S. 2019 Florida Institute of Technology, Ocean Engineering

CERTIFICATIONS/ TRAINING

 Licensed Engineering Intern, Florida No. 1100023647, 2020

YEARS OF EXPERIENCE – 5 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 4 years (2020-Present)
- RUSH Construction
 - 1 year (2019-2020)

FUNCTIONAL EXPERIENCE

- Served as Staff Engineer for Lee, Charlotte, and Manatee County Coastal projects.
- Surveyed miles of beach and inland waterways
- Project Engineer Intern for RUSH, construction of a \$38M cruise terminal at Port Canaveral

PROFESSIONAL AFFILIATIONS

• PADI Rescue Diver

KYLE M. GULLIKSON, E.I.

STAFF ENGINEER/MARINE SURVEYOR & INSPECTOR

(239) 643-2324, ext. 115 • kgullikson@cecifl.com

ROLE – DATA COLLECTION, CONSTRUCTION PHASE SERVICES, BATHYMETRIC SURVEYING

Mr. Gullikson's marine engineering design experience includes marine structure repair and replacement plans for boat ramps, docks, piers, seawalls, shoreline armoring, and access channel dredging. His coastal engineering design experience includes beach fill, navigation channels, and waterway marking. His field experience includes underwater structural inspections, gauge deployment surveys, hydrographic surveys, topographic surveys, geotechnical and jet probe surveys, biological surveys, and construction observations including resident inspection services. His environmental permitting projects include boat ramps, marinas, boardwalks and fishing piers, dredge and fill, erosion control, shoreline stabilization

EXPERIENCE

Mr. Gullikson has supported the analysis of coastal processes through field data collection including topographic and bathymetric surveying, biological surveying, underwater inspections, and deployment of hydrographic instrumentation to collect wind, wave, tide and current data.

- Ainger Creek Boat Ramp Repairs, Charlotte County
- Bayshore Live Oak Pier, Charlotte County
- Alligator Creek Dredging, Charlotte County
- Overbrook Seawall Repair, Sarasota County
- Blackburn Point Park Floating Lauch Replacement, Sarasota County
- Lynn Hall Dune Walkovers & ADA Ramps, Lee County
- Placida Boat Ramp Repairs, Charlotte County
- Punta Rassa Boat Ramp & Renovations, Lee County
- Pine Island Commercial Marina Renovations, Lee County
- Alva Boat Ramp Renovations, Lee County
- Lynn Hall Beach Park Construction Inspections, Lee County
- Post-Irma Recovery and Seawall Inspections, Fort Myers Beach
- Saltleaf Marina and Boat Ramp, Estero
- Gulf Shore Blvd. North Outlot E Sewall Replacement Inspections, Naples



EDUCATION

- B.S. and M.S. 1996
 Applied Mathematics,
 Altai State University,
 Russia
- M.S. 1999 University of Florida, Coastal Engineering
- Ph.D. 2005 University of Florida, Coastal Engineering

CERTIFICATIONS/ TRAINING

- Delft3D (Deltares, Delft)
- SMS (EMS, CA)
- CMS-Wave (USACE, FL)
- CMS-Flow (USACE, FL)
- ADCIRC (NOAA, MD)
- XBeach (Deltares, Online)

YEARS OF EXPERIENCE – 23 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 19 years (2006-Present)
- University of Florida
 - 3 years (2002-2005)
- Institute for Water and Environmental Problems (Russia)
 - 1 year (1996-1997)

FUNCTIONAL EXPERIENCE

 Coastal Modeler for Barrier Island and Ecosystem Restoration

PROFESSIONAL AFFILIATIONS

• FSBPA, ASCE

VADIM V. ALYMOV, PH.D.

COASTAL MODELER

(239) 643-2324, ext. 151 • valymov@cecifl.com

ROLE – NUMERICAL MODELING, COASTAL PROCESSES ASSESSMENTS, DATA REDUCTION AND ANALYSIS, PERFORMANCE MONITORING, REPORTING

Dr. Alymov is the Coastal Modeler for Coastal Engineering Consultants. His responsibilities include numerical modeling of wave refraction, wave dynamics, circulation, hurricane-induced storm surge and inundation, flushing, tidal and channel hydraulics, hydrodynamics, coastal sediment transport, morphologic change, and shoreline change and beach erosion. Dr. Alymov has extensive experience in computer programming, and he has implemented a wide variety of numerical models including Delft3D, MIKE21, ADCIRC, SWAN, SBEACH, and GENCADE in support of beach and dune nourishment projects.

His Project responsibilities include compilation and analysis of survey data; coastal processes analyses; shoreline and volume change assessments; development of island-wide sediment budget; development of design criteria; plan formulation; engineering design of beach restoration/nourishment alternatives; channel dredge templates; funding coordination; environmental permitting; and annual monitoring and performance assessments.

EXPERIENCE

Dr. Alymov's responsibilities for alternatives analysis include developing alternatives such as no action, hard-structural, soft-structural, and nature-based strategies; development, set-up, and calibration of numerical modeling programs; assessing performance of design alternatives through empirical analyses and numerical modeling; evaluating technical parameters for selection of preferred alternative; and preparing recommended plan features and details. He performs navigation channel and waterway improvement designs and provides technical support for permitting CEC's environmental and coastal engineering projects.

For his Doctorate Degree, he implemented model improvements including dynamic coupling of CH3D with the SWAN wave model to examine hurricane impacts along the Southwest Florida coast.

- County-wide Pier and Boardwalk Inspections, Charlotte County
- Placida Boat Ramp Repairs and Expansion, Charlotte County
- Ainger Creek Boat Ramp Repairs Renovation, Charlotte County
- Butterford Waterway Park Boat Ramp Repairs, Charlotte County
- Bayshore Live Oak Pier, Charlotte County
- Hathaway Boat Ramp Repairs, Charlotte County
- South Gulf Cove Park Boat Ramp Repairs, Charlotte County
- Punta Rassa Boat Ramp Renovation, Lee County
- Pine Island Commercial Marina Renovation, Lee County
- Matanzas Pass Preserve Boardwalks, Pier and Kayak Launch, Lee County
- Matlacha Boat Ramp Repairs, Lee County
- Alva Boat Ramp Renovation, Lee County
- Highland Shores Boat Ramp Repairs & Dredging, Manatee County



EDUCATION

• 1999-2001 Pasco-Hernando State College, Drafting and Design Technology.

YEARS OF EXPERIENCE – 24 TOTAL YEARS

- Coastal Engineering Consultants, Inc.
 - 22 years (2003-Present)
- Emergency One
 - 2 years (2001-2003)

FUNCTIONAL EXPERIENCE

 Developed detailed designs and construction plan drawings for Barrier Island and Ecosystem Restoration and Beach Renourishment Projects valued at \$560M

SAMANTHA D. BRASHER

COASTAL ENGINEERING SENIOR DESIGNER

(239) 643-2324, ext. 129 • sbrasher@cecifl.com

PROJECT ROLE – PRELIMINARY DESIGN PLANS AND CONSTRUCTION PLANS, PREPARE DRAWINGS

Mrs. Brasher has over 20 years of technical experience and presently holds the position of Senior Designer. Her responsibilities include calculating design data; analysis of reports, maps, drawings, tests and aerial photographs to plan projects; computations and quantity estimates preparation; preparing layouts; assisting with the preparation of detailed plans and specifications, reports, and studies for engineering and environmental projects.

She provides technical support to our engineering and surveying managers; produces engineering drawings for marine structures including boat ramps, seawalls, revetments, breakwaters, groins, jetties, bridges, piers, and docks; utilizes survey data to prepare drawings including bathymetric contours, dredge templates, and channel cross-sections; and is a trainer and mentor to other staff.

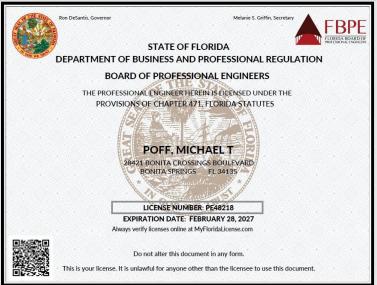
EXPERIENCE

Mrs. Brasher has extensive experience in AutoCAD Civil 3D using surfaces, alignments, profile and section views, volume reports, and raster imaging. She also has experience in Trimble Sketchup preparing 3D renderings of project sites.

- County-wide Pier and Boardwalk Inspections, Charlotte County, FL
- Bayshore Live Oak Pier, Charlotte County
- Saltleaf Marina and Boat Ramp, Estero
- Ville De Marco West Fishing Pier, Seawall, Docks, Marco Island
- Clam Pass Boardwalk Repairs, Collier County
- Englewood Marine Center, Charlotte County
- Channel Marker Inspection, Fort Myers Beach, FL
- Post-Irma Recovery Projects, Fort Myers Beach, FL
- Matanzas Harbor Mooring Field Inspection & Maintenance, Fort Myers Beach, FL
- Matanzas Harbor Mooring Field Special Anchorage Area Designation, Fort Myers Beach, FL
- Mound House Observation Pier, Fort Myers Beach, FL
- Newton Park Seawall Improvements, Fort Myers Beach, FL
- Placida Boat Ramp Repairs, Charlotte County, FL
- Punta Rassa Boat Ramp Renovation, Lee County, FL
- Pine Island Commercial Marina Renovation, Lee County, FL
- Ainger Creek Boat Ramp Repairs, Charlotte County, FL
- Alva Boat Ramp Renovation, Lee County, FL
- Spring Creek Spot Dredging, Bonita Springs, FL

CEC LICENSES

Presented below are the current copies of CEC's professional licenses.













Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: LS5295

Expiration Date February 28, 2027

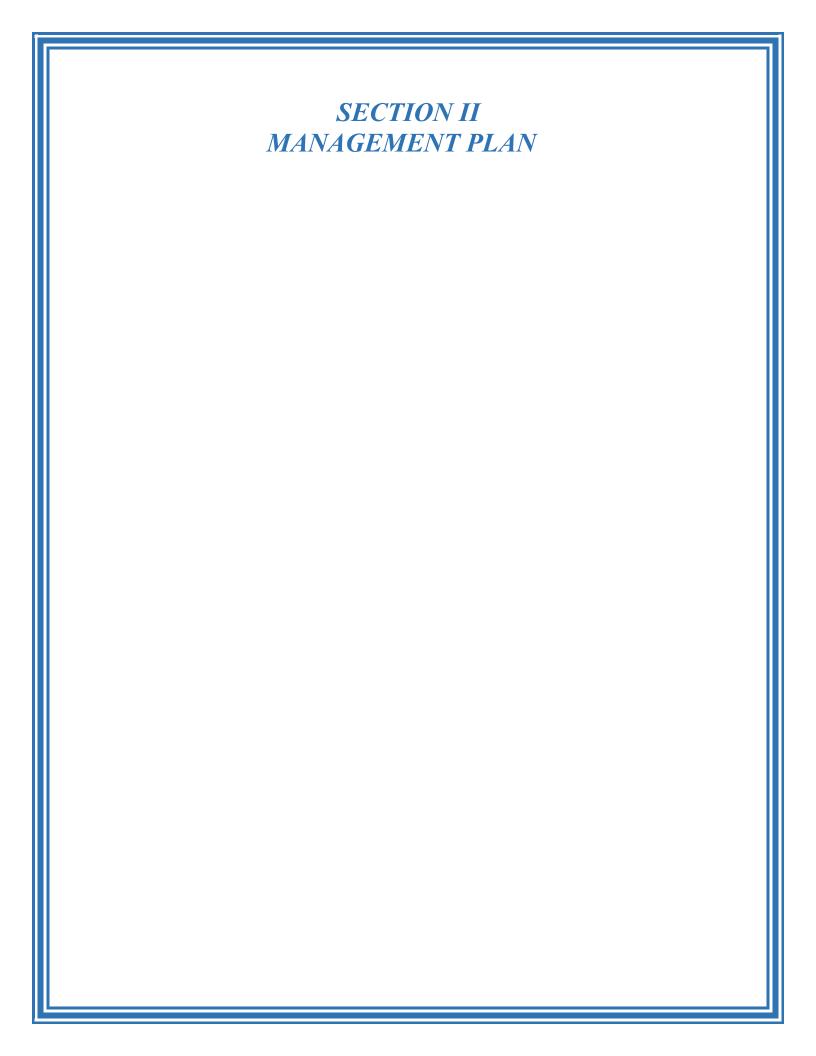
Professional Surveyor and Mapper License

Under the provisions of Chapter 472, Florida Statutes

RICHARD J EWING 28421 BONITA CROSSINGS BLVD BONITA SPRINGS, FL 34135-3201



This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



II. PROPOSED MANAGEMENT PLAN

A. TEAM ORGANIZATION

CEC conducted a detailed inspection of the fishing pier and bulkhead in 2019. All accessible elements were visually and/or tacitly inspected above and below the water. Recommendations were provided to address deficiencies with the bulkhead, pile wraps, utility conduits below-deck, and timber decking. Following the inspection, CEC assisted the County with design and implementation of repairs in early 2023. Most recently, CEC assessed the bulkhead and approximately 800 linear feet of shoreline at the base of the pier. Recommendations included repairs to the bulkhead as previously provided, and repairs to stabilize the shoreline. As such, CEC is very familiar with the structure and shoreline's history, construction, previous repairs, and pre-storm condition. CEC shall utilize this prior knowledge to aid in the Site Analysis and Design/Permitting Phases.

1. SITE ANALYSIS PHASE

Planning Scope: The CEC Team will develop the program for the fishing pier demolition and complete repair/replacement/revetment with County representatives taking into consideration County limitations and site requirements. Our key personnel will coordinate, prepare for, and present at project coordination meetings with local agencies and County representatives.

Data Collection and Fieldwork: The CEC Team will conduct a review of all existing available data to include permits, construction plans and previous assessment reports/repair plans. This is important to investigate these documents to minimize duplication of effort and to maintain consistent element labeling. The CEC team will meet with public utilities, and County planners and permit reviewers to discuss on going issues and concerns with the facility. Based upon this up front work, we will conduct the detailed surveys necessary for the design and permitting of the Project.

Site Analysis Scope: CEC will assess each structure within the scope of the inspection for overall structural integrity, outstanding deficiencies or safety issues, and anticipated service life and methods to extend service life. Based on historical data, inspection results, and site constraints CEC will evaluate the appropriate repair/replacement and/or maintenance recommendations using professional experience and input from County staff.

Conceptual Planning: We are very knowledgeable in site planning and have prepared conceptual plans for a diverse array of residential and commercial waterfront facilities including marinas, piers, boat ramps, parks, and docks. We have completed numerous conceptual plans for facilities to improve environmental conditions, create usable public spaces, provide/enhance ADA accessibility, and enhance the aquatic environment. Conceptual design also considers stormwater management, access, and visual impact. The site layout and conceptual planning process requires close coordination with the client and stakeholders to ensure their needs are addressed while also using our experience to bring forth new options for the client's consideration. Often the realities of the situation are dictated by the development regulations and require the client to re-think one or more aspects of their project. We pride ourselves on

overcoming difficult challenges such as incorporating jurisdiction wetlands into the project or providing a design that meets the complex development regulations. Together with the County, we will prepare an analysis and recommendations for the Project components including engineering standards, architectural standards, ADA guidelines, and building code requirements.

As this is a Disaster Recovery Project for Hurricane Milton FEMA DR-4834-FL, CEC will work closely with County staff and FEMA representatives to support the public assistance claim and develop hazard mitigation elements for storm resiliency. CEC is very knowledgeable with the FEMA claims process, rules and regulations, and the environmental and historic preservation review. CEC understands the importance of coordinating with FEMA representatives early and throughout the Project to ensure funding eligibility.

Local Presence: We have developed positive relationships with the area's residents, environmental organizations, and agency staff, and have established a **level of trust** for which to build on as the Project develops and advances into the implementation stages. CEC is actively working on significant marine and environmental projects that have far reaching positive effects throughout the County. Our Team has the **local presence** necessary to provide **timely and cost-effective** services. Our staff has the capability and enthusiasm necessary to manage and implement your projects within budgetary and timeframe constraints. We are very capable and are dedicated to providing you personalized service.

2. DESIGN/PERMITTING PHASE

Schematic Design Phase Scope: From the concept plans developed in the programming phase to the creation of the Project's master plan, CEC will work closely with the County staff and representatives, and respective advisory personnel to develop and review design alternatives and produce a drawing set with the recommended plan. The schematic design phase deliverables include the site plan, sections, elevations and details, and other illustrative materials, along with computer images, renderings, or 3D models. The CEC Team will prepare their Preliminary Opinion of Probable Construction Cost for the County's review and approval. Then, in conjunction with the County, we will produce the recommended construction budget for planning purposes. The CEC Team will assist the County apply for any available grant funding.



Marina Basin Rendering

Permitting: CEC believes this is one of the strengths of our Team, our personal relationships with the government agency staff. Our firms have **excellent relationships with the permit agency staff**, and we encourage the County to contact them in this regard. There is little doubt that some of the most challenging issues with this Project will be environmental permitting. We are familiar with most FDEP and USACE staff and have worked with these agencies longer than most agency staff have been there. Beyond the less-than-clear regulations, we recognize the critical human elements of trust, judgment, and discretion in the permitting process. We have an established rapport with supervisors and staff at the State and Federal level including National Marine Fisheries, U.S. Fish and Wildlife Service, USACE, U.S. Coast Guard, FDEP, Florida Fish and Wildlife Conservation Commission. Upon selection of the final design plan, the CEC Team will prepare and submit the permit applications to the State and Federal Agencies, and assist the County process the required permits and agency approvals.

Design Development Phase Scope: The CEC Team will prepare Design Drawings in conformance with the County development codes and requirements. Design Drawings will include existing conditions plan; demolition plan; site layout; seawall plans and details; shoreline improvements; upland improvement plans and details to include drainage and signage. We will provide a 50% progress set of Design Drawings with quantity take-offs and conduct formal design review meetings with the County. We will work with the County to adhere to the established budget with value engineering, cost-benefit analysis and best-value comparisons then revise the Design Drawings to meet the established budget. Upon selection of the preferred layout, the CEC Team will prepare the 100% final set of plans with specification volume documents and review with the County.

CEC In-house QA-QC Plan: CEC implements a Quality Assurance and Quality Control Program during the Design Phase. The program begins with senior management, who routinely attend training seminars sponsored by professional societies including ASCE, FES and FICE. Our President was part of the inaugural class of the FES-FICE Leadership Institute. Several of our senior staff have participated in local Leadership Programs sponsored by the areas' chamber of commerce. This investment has been rewarding as training our key personnel in people management, business practices, human resources, public speaking, and financial management have made them the leaders they are today. CEC senior staff and project managers meet weekly to review internal schedules, project deadlines, staff assignments, and top priorities. A major advantage of our diversity is the ability to allocate personnel within the office to achieve the desired priorities. CEC routinely issues reports to our clients for project updates and key milestones. Effective use of email has allowed us to communicate with clients on a daily basis during construction. Lastly, we provide our cell numbers in the event of an emergency during construction after hours. All our design plans produced by our CADD designers and technicians are prior to submittal to the project manager. This allows for a fresh perspective on the plans, streamlines review process by catching "little" things up front and allows the project manager to focus on the true design intent.

Quality Assurance Team Review: During design activities, all design work products will undergo thorough checking in accordance with CEC's Quality Management Plan. Checking will be done by Quality Control Managers who are knowledgeable in the work being checked and independent of the specific work product. A Comment - Response Log will be created to

document the reviews, responses, and revisions to major project deliverables and will include the names of those who prepared the documents and those who completed the reviews. Calculations, spreadsheets, tables, and quantity estimates will be checked throughout the design process and at the completion of each set of calculations and spreadsheets. The complete thought process and mathematics will be verified. The applicable formulas and design criteria will be referenced on the computation paper or spreadsheets and reviewed during the checking process. Corrections will be clearly noted. Revisions will be reviewed with the individual who made the original calculations. Checking all drawings, maps, charts, and sketches will be performed before submitting the deliverables. Revisions will be reviewed with the individual who prepared the original documents. A final check for consistency between the specifications and design drawings will be performed by the Quality Plan Manager.

3. CONSTRUCTION PHASE

Construction Document Phase Scope: This Phase includes preparation of final working drawings, final specifications, large scale details and specifications meeting standard codes for obtaining bids and permits and letting a contract for construction. All documents shall be thorough and absent of ambiguities and totally coordinated between the various engineering disciplines and reviewed with the County. The phase deliverables are to produce the Construction Documents that include all pertinent contract clauses, bidding standards, schedule of values, general conditions, special provisions, technical specifications, permits, and construction plans required for the contractor to price and build the project. In addition to hard-copy Construction Documents, we will provide an electronic format (AutoCAD) set of the complete document set to County Facilities.



Construction Observation Phase: The CEC Team will review the construction and determine that the Project is constructed in accordance with the approved plans and specifications. The construction observation services shall include, but not be limited to the following:

- * Routine meetings with County Representatives
- * Routine observations to determine the progress and quality of the work

- Review and process shop drawings (10 calendar days)
- ❖ Coordinate with the contractor through Request for Information process (3 calendar days)
- ❖ Final inspection and punch list before and after substantial completion
- Project Certifications
- ❖ Coordinate as-built documentation.

CEC's Construction Phase Philosophy on Bid Process, Contract Documents, and Construction Observations and Inspections:

Bid Process: The first is to take action early and begin construction management during the Bid Process. Specifically, we have assisted our client's conduct successful Bid Processes including preparing Bid Packages and Schedules, attend the pre-bid meeting, respond to contractor questions, assist the County prepare addendum, review the bids and render a professional recommendation for the lowest responsive bidder. CEC uses bidder pre-qualification and mandatory pre-bid site visits and contractor meetings to answer questions and reduce bid document uncertainty. This helps firm up and lower bid costs.

Contract Documents: The second is the Contract documents' technical specifications that the contractor must adhere to. Our standard language, used in several County projects successfully, is presented below.

The CONTRACTOR's resident superintendent shall provide the COUNTY and ENGINEER, on a daily basis, the "Daily Construction" and "Quality Control" Reports. Sample forms are contained in the Technical Specifications. These reports shall be completed and submitted to the ENGINEER by 1:00 p.m. on the day after the WORK covered by the report. CONTRACTOR shall provide COUNTY and ENGINEER with access to the site, including transportation to and from the plant. In the event that the environmental monitoring reveals a violation of standards set forth in the permit conditions and CONTRACT Documents, the CONTRACTOR shall describe the violation in the daily report in the usual manner and notify the COUNTY and ENGINEER immediately upon detection of the violation.

The CONTRACTOR has the sole responsibility for quality control and shall provide and maintain such an effective program. The CONTRACTOR shall have qualified personnel to provide and maintain control for continual dredging operations. The CONTRACTOR shall be solely responsible for providing survey equipment for all surveys. The CONTRACTOR shall establish and implement a quality control program to inspect and test the CONTRACTOR's and any SUBCONTRACTOR's equipment used in completing the WORK. The CONTRACTOR shall furnish to the COUNTY and ENGINEER within five (5) calendar days after receiving the "Notice to Proceed" a quality control plan outlining the procedures, instructions and reports that will be used. This document shall include the structure of the quality control organization, number and qualifications of the responsible personnel, methods and documentation to assure quality control, safety inspection procedures, copy of example daily quality control report forms and inspection documents, and Storm Emergency Plan. No WORK shall commence until the CONTRACTOR's quality control program is approved by the COUNTY and ENGINEER. If, during the WORK process the quality control system is deemed by the COUNTY and ENGINEER to be inadequate, the COUNTY and ENGINEER may require corrective actions to rectify said deficiencies. The CONTRACTOR's quality control program shall be part of control supervision as field overhead costs and shall not be allowed to be submitted for separate payment.

Construction Observations: The third is our approach to construction observations. We recommend our clients hire us to provide construction management, survey control, and construction stake-out. Too often this step is not followed through properly and mistakes occur. Next, we include in all of our technical specifications example forms for the contractor to use in

complying with the agency required monitoring and reporting. Our construction observers fill out these same reports for consistency. The key is to hold contractors accountable for their daily activities and reporting. Each of our staff is trained in the necessary monitoring protocols and we weekly issue the required reports to the permit agencies. CEC routinely issues reports to our clients for project updates and key milestones. Effective use of email has allowed us to communicate with client staff on a daily basis during construction. Since we are so active in the areas we work in, we routinely drop by and meet with client staff to personally provide reports. Lastly, we provide our cell and home numbers in the event of an emergency after hours.

B. ROLES AND RESPONSIBILITIES OF PARTICIPANTS

Jeremy Herget, Managing Engineer, shall serve as Project Manager and be in responsible charge of directing, coordinating, and administering all aspects of the services to be performed.

Mark A. Kincaid, Principal Engineer, will serve as Senior Marine Engineer and oversee the design. He shall be in responsible charge of the fieldwork, assessment, design, cost estimating and construction administration.

Grady Timmins, Managing Engineer, shall be responsible for inspection and data collection, assessment, design, cost estimating, and construction administration and management.

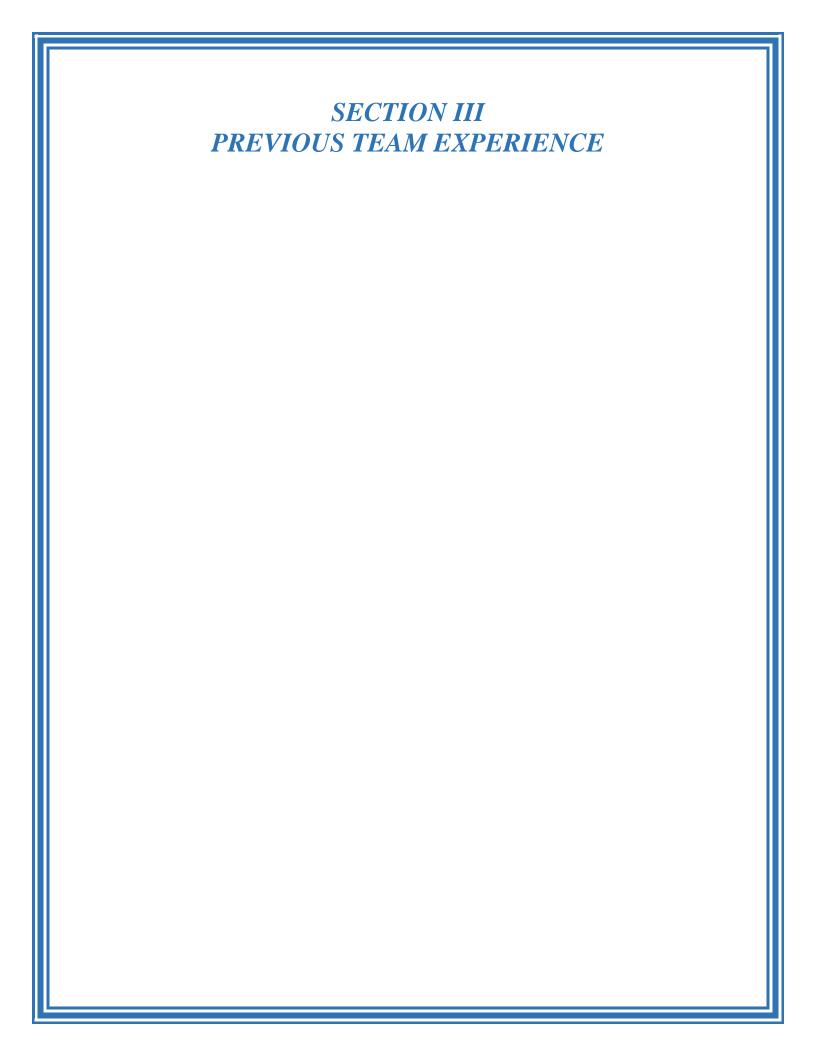
Michael Poff, Principal Engineer, shall be responsible for quality assurance and quality control (QA-QC) and assist with the FEMA public assistance tasks.

Richard Ewing, Principal Surveyor, will manage the survey components.

Kyle Gullikson, Marine Surveyor and Inspector, shall be responsible for inspection and data collection and assist with preparing construction plans and specifications. He shall also assist with construction management.

Vadim V. Alymov, Coastal Modeler, shall be responsible for ecosystem design, coastal structure design, modeling of alternatives, and project performance assessments.

Samantha Brasher, Senior Designer, shall be responsible for preparing inspection drawings, report figures, and construction plans.



III. PREVIOUS EXPERIENCE OF TEAM

A. RELEVANT WORK HISTORY WITH GOVERNMENT FACILITIES AND CM METHOD

1. GOVERNMENT FACILITIES

Government Contracting: CEC is currently on annual/continuing contracts for marine related projects with the following Federal, State, Regional, and Local agencies:

Federal:

USACE Galveston (2019-current), Mobile (2021-current), New York (2022-current), and New England Districts (2023-current) (prime, Marine/Coastal/Survey/Ecosystem Restoration) USFWS (prime, Marine/Coastal/Survey/Ecosystem Restoration, 2022–current)

State:

State of Louisiana (prime, Coastal/Geotechnical/Surveying/Ecosystem Restoration, 2009–current)

Regional:

West Coast Inland Navigation District (prime, Marine/Coastal/Survey/Environmental, 2003–current)

Municipal:

Manatee County (prime, Marine/Coastal/Survey/Environmental, 2018–current)

Sarasota County (prime, Marine/Coastal/Survey/Environmental, 2011–current)

Charlotte County (prime, Marine/Coastal/Survey/Environmental, 2001–current)

Lee County (prime, Marine/Coastal/Survey/Environmental, 2001–current)

Manatee County (prime, Marine/Coastal/Survey/Environmental, 2017–current)

City of Cape Coral (prime, Marine/Coastal/Survey/Environmental, 2006–current)

Town of Fort Myers Beach (prime, Marine/Coastal/Survey/Environmental, 1999–current)

Collier County (prime, Marine/Coastal/Survey/Environmental, 2007–current)

City of Marco Island (prime, Marine/Coastal/Civil/Survey/Environmental, 2010–current)

City of Naples (prime, Marine/Coastal/Civil/Survey/Environmental, 2014–current)

CEC has assisted many government clients obtain funding for their marine related and environmental restoration projects from a variety of sources. For Cape Coral, we assisted the staff prepare and submit grants to the WCIND and FFWCC for the design and permitting of boat ramp improvements at the D&D property. For Ft. Myers Beach, we assisted the staff prepare and submit grants to the WCIND and FFWCC for the initial construction of the Mooring Field and initial purchase of the Sewage Pump-out Boat, respectively. We have also assisted staff apply for and receive funding for mooring system maintenance, channel marker maintenance, and installation of the special purpose buoys.

We have been recognized by the ASCE for two successful Florida beach projects, receiving two Project of the Year Awards and by ASBPA for one Louisiana barrier shoreline ecosystem restoration project. Our principals and project managers have received numerous professional and civic awards for outstanding service to the community and state. We pride ourselves on providing the highest level

of professional services and unparalleled customer service. We strive to improve the quality of life for our communities, neighbors, families, and each other.

Municipal Facilities: Our Team has provided decades of professional consulting experience to local, regional, and state governments. Below is a summary of government facility projects as they relate to this Project.

Park Facilities

- ❖ Boardwalk/Fishing Pier Inspections at 30 Facilities including El Jobean Fishing Pier: Marine Engineering; Charlotte County
- ❖ Bayshore West Fishing Pier Replacement: Design, Permit, Construction Management; Charlotte County
- ❖ Event Center Seawall Replacement: Design, Permit, Construction Management; Charlotte County
- Stump Pass Beach Park Docks/Boardwalk: Design, Permit and Construction Management; Charlotte County and FDEP
- ❖ Bayshore Live Oak/Live Oak Point Park Shoreline Restoration: Design, Permit and Construction Management; Charlotte County
- ❖ Boca Grande Railroad Trestle Repairs: Marine Engineering; Charlotte County and WCIND
- Placida Fishing Pier Repairs: Marine Engineering; Charlotte County
- ❖ Siesta Key Dune Access and Mobi-Mat: Design and Permit; Sarasota County
- Englewood Marine Center Fishing Pier and Boat Dock: Design, Permit and Construction Management; Sarasota County and WCIND
- ❖ Boca Grande Phosphate Dock Repairs: Marine Engineering; Lee County
- Matanzas Pass Preserve Boardwalk, Pavilion and Kayak Launch Replacements: Design, Permit and Construction Management; Lee County
- * Cape Coral Yacht Club Inspection: Marine Engineering; Cape Coral
- Sirenia Vista Observation Deck: Design and Permit; Cape Coral
- Newton Park Seawall Replacement: Design, Permit and Construction Management; Fort Myers Beach
- Ostego, Pink Shell, and Shell Mound Seawall Repairs: Design, Permit and Construction Management; Fort Myers Beach
- Coquina Barge Landing: Inspection and Design; Manatee County
- Mound House Pier: Design, Permit and Construction Management; Fort Myers Beach
- * Hercules Street Pier: Design, Permit and Construction Management; Fort Myers Beach
- * Turner Beach Park: Design, Permit and Construction Management; Sanibel and Lee County
- * Tigertail Beach Park Expansion: Coastal, Environmental and Survey; Collier County

Boat Ramps

- Placida Boat Ramp Replacement: Design, Permit and Construction Management; Charlotte County
- ❖ Ainger Creek Boat Ramp Replacement: Design, Permit and Construction Management; Charlotte County
- ❖ Alva Boat Ramp and Seawall Replacement and Access Pier Expansion, and new ADA Boardwalk: Design, Permit and Construction Management; Lee County

- ❖ Punta Rassa Boat Ramp Replacement and Access Pier Expansion: Design, Permit and Construction Management; Lee County
- ❖ Pine Island Commercial Marina Boat Ramp, Access Pier, Barge Landing, and Seawall Replacement: Design, Permit and Construction Management; Lee County
- ❖ Horton Park Boat Ramp Repairs: Design, Permit and Construction Management; Cape Coral
- ❖ Highland Shores Boat Ramp Repairs: Design, Permit and Construction Management; Manatee County
- ❖ Bayview Drive Boat Ramp Repairs: Design, Permit and Construction Management; Naples

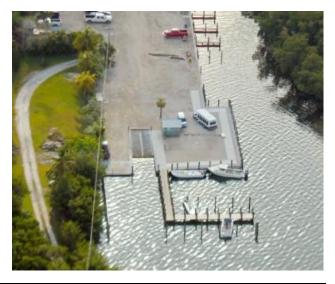
Private Facilities: Additionally CEC has provided decades of professional consulting experience to Private clients. Below is a summary of facility projects as they relate to this Project.

- ❖ Gulf Marine Ways Pier and Seawall: Inspection, Design, Permit; Lee County
- Vila De Marco West Sewall Replacement: Design, Permit and Construction Management; Collier County
- ❖ Pier B Key West: Inspection, Design, Permit; Monroe County
- MarineMax Fort Myers Seawall: Inspection and Design; Lee County
- ❖ Port of the Isles Seawall: Inspection and Design; Collier County
- ❖ Admiralty Point Seawall and Dock Replacement: Design, Permit and Construction Management; Collier County
- Naples Power Boat Marine Seawall: Design/Build with Kelly Brothers; Naples
- ❖ Mooring's Bay Seawall: Inspection and Design; Collier County
- * Tropics Seawall Replacement: Design, Permit and Construction Management; Collier County
- Pelican Point and Pelican Point West Seawall Replacement: Design, Permit and Construction Management; Collier County
- Colony Gardens Seawall Replacement: Design, Permit and Construction Management; Collier County
- Placida Harbour Club Boat Basin: Design, Permit and Construction Management; Charlotte County

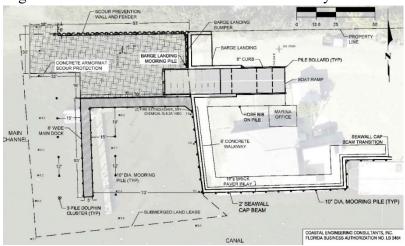
2. CONSTRUCTION MANAGER METHOD

Pine Island Commercial Marina Renovations: Boat Ramp, Barge Landing, Access Pier, Docks, and Seawall Repairs / Replacements; Lee County

CEC was hired by Lee County to design and permit the complete renovation of the Commercial Marina Facility that services Pine Island. The renovations included a commercial barge landing, boat ramp, docks, access pier, seawall, and access channel dredging. CEC recommended significant upgrades to the facility including increasing the capacity of the barge landing to for a 70-ton forklift and scour protection for the boat ramp and adjacent shoreline.



Lee County chose to utilize the Construction Manager (CM) Method to complete the construction of the facility renovations. CEC worked with the County and their CM firm to value engineer the contract documents to meet the County's fiscal constraints. CEC recommended two local



marine contractors for the CM firm to interview and obtain competitive bids. CEC responded to Requests for Information to address the marine contractor questions and firm up bid pricing. CEC provided construction observation services including underwater inspections during boat ramp repairs and scour protection installation. The boat ramp was designed to be constructed without installation of a cofferdam resulting in a reduced project cost and time frame. CEC supported the

County in providing construction administration services and project certifications.

Placida Boat Ramp Expansion Project; Charlotte County

CEC and Atwell are currently assisting the County and their CM firm to concept plan, design and permit the Placida Boat Ramp Expansion Project. The project proposes to create one, large, interconnected park property by combining the existing park parcel and parcel to the west. The three existing launch lanes will be removed, and six launch lanes (three double-lane boat ramps) will be constructed in a centralized location within the park. The historic man-made dead end canal that separates the two park properties will be filled. Additional amenities will be constructed including boarding piers, kayak launch, restroom, shade structures and parking for individual vehicles. The existing park's traffic circulation will be reconfigured to improve inter-park connectivity.



Utilizing the CMAR approach, CEC and Atwell have worked closely with the County and their CM to evaluate concept plans and design alternatives to meet and exceed the desired goals and objectives while trying to align with the budget recognizing that traffic circulation constraints have required optimizing the design plan in excess of the original budget. CEC has developed multiple versions of the approved site plan in an attempt to avoid and minimize environmental impacts. Environmental permit applications were submitted in July 2022. Permit applications are under review. CEC is currently overseeing the post-hurricane environmental assessment and coordinating the results into the permit process.

B. RELEVANT WORK HISTORY WITH MARINE/SEAWALL/CIVIL, COASTAL, ENGINEERING AND STRUCTURAL PROJECTS

1. MARINE AND COASTAL ENGINEERING QUALIFICATIONS

Public Safety: Our marine related projects are designed with public safety in mind. Marinas, boat basins, navigational channels, and harbor plans have public safety issues and concerns. CEC has extensive experience in designing marina facilities with adequate turning radiuses, vessel drafts, clearance for boat maneuvering and passing, and appropriate navigational markers. We address public safety through education, vessel drafts, dredge designs, and channel marking plans. State and federal rules require facilities to be designed for ADA accessibility. For dredge and fill permits, we specify boater education signage for public safety, endangered species awareness, and environmental resource protection. Because we actively use the waterways and public facilities, we take great pride in designing and providing safe facilities, not only for the general public, but also for our families and ourselves.

Waterfront Development: One of CEC's main areas of expertise is in the design and permitting of diverse waterfront development projects for both the public and private sectors ranging from boat ramps to municipal yacht basin dock modifications to mooring fields to shoreline stabilization repairs and upgrades. Our specialty is in coordinating the regulatory permits as we have established excellent relationships with the FDEP and USACE local. Further, our designs have successfully minimized environmental impacts or have included appropriate mitigation plans such that the environmental agencies (e.g. FWC and FWS) respect our work product. The size of our projects has ranged from small dock modifications on the order of a few thousand dollars to minor boat ramp repairs in the tens of thousands of dollars to major boat ramp, seawall, dock, and shoreline infrastructure totaling hundreds of thousands of dollars.

Project Designs: Virtually every one of our marine projects includes definition of marine processes; modeling; remote sensing including bathymetric surveys and core borings; and structural inspection and design criteria. From these design elements, we develop plans and specifications to accomplish the construction. From conceptual through preliminary and final design, our services typically include an alternatives analysis to identify key parameters for evaluating project performance and enabling an objective comparison of designs to find and select the most balanced plan. The parameters include Technical: is the design constructible? Can contractors access the site? Is there sufficient sediment for restoration if needed? Does the approach channel have to be dredged? How can the facility be upgraded to provide ADA access? Environmental: What are the project benefits? Impacts? Is the

mitigation plan sufficient to offset the impacts? Fiscal: Is it within the client's budget or is there sufficient documentation to justify increasing the budget? Social: Will the local sponsor accept the outcome? What are the risks? Have the Stakeholders' input been taken into consideration and issues resolved? The one common element to all of these steps is that we produce high quality reports. We have in-house technical writers who assist the engineers and scientists write their text such that it is technically sound but understandable to the anticipated readers, who are often not technically based.

Marine Structure Inspections, Design and Repairs: The marine and coastal engineers and geologists of CEC have over sixty years of combined experience in the inspection of marine structures including bridges, seawalls, piers, marinas, ports, and jetties. One of our Project Engineers, Mark Kincaid, has personally inspected the majority of the U. S. Naval installations throughout his career. Our specific tasks have included underwater structural inspections including still photography and digital video; coring and sediment testing; submerged utility location surveys; submerged utility repairs; structure repair plans and specifications; new facility construction plans and specifications; bid services; and construction administration.

Marine and Hydrographic Surveying: High quality marine and hydrographic surveys are critical to the design and permitting of marine projects. Our land and marine surveyors and engineers conduct field surveys and analytical studies utilizing state-of-the-art scientific instrumentation and data collection systems. Typical studies and surveys include profiles and sections, estuarine hydrodynamics and marina basin flushing. Our survey and coastal engineering staff utilize the latest in high technology equipment including Leica and Trimble RTK GPS Systems and a hydrographic survey system consisting of a CEE Echo Fathometer, Trimble RTK GPS interacted into a shipboard computer, and Hypack Software.

2. PROJECT EXPERIENCE

The CEC Team has unparalleled experience with the design, permit, and construction oversight of waterfront facilities. A sample of the diverse range of projects is presented herein. Additional project descriptions are presented in Section VI "Similar Project Examples."

Boca Grande Trestle Inspection, Charlotte County: CEC assisted WCIND (on behalf of Charlotte County) conduct a structural inspection of approximately 5,800 LF of trestle, steel swing span, concrete piers and bridge tender house. The purpose of the inspection was to assess the condition of the trestle for potential safety hazards and provide WCIND and County staff with risk mitigation recommendations to address public safety and structural stability concerns.

To reduce potential navigational safety hazards CEC developed a Risk Mitigation plan which identified deteriorated timber members for removal that were no longer contributing to the stability of the trestle structure. Additionally, CEC developed a Stabilization and Fender Repair plan to stabilize the railroad swing bridge and prevent future movement. CEC oversaw the implementation of both plans.



County-Wide Pier and Boardwalk Inspection & Repairs, Charlotte County: Charlotte County contracted with CEC to inspect for safety and structural integrity the County's fishing piers and boardwalks at 35 park facilities. A total of 94 inspected structures, eight (8) were fishing piers. These piers were located at Anger, Bayshore Live Oak (two piers), Boca Grande, Centennial, El Jobean,

Placida, and Port Charlotte Beach. The scope of services included: prepare a facility inventory, conduct inspections, assess overall structural integrity, identify outstanding deficiencies or safety issues, develop replacement repair or recommendations, and assess service life and methods to extend service A contingency task was included for preparation of repair plans and specifications. A report presented the facility inventory,



inspection procedures, inspection findings, assessments, repair and maintenance recommendations, order of magnitude construction budgets, and priority based on public safety, structural conditions, and magnitude of repairs. The objective was to perform inspections of the timber structures at each facility in sufficient detail to assess the general structural condition of each structure and to document the inspection findings. Inspections included all structural and non-structural elements including piles, clamps, caps, stringers cross bracing, decking, handrails, stanchions, fasteners, and all other hardware. Site constraints were documented that may affect permitting, construction access, and construction methods. Recommendations were developed in close coordination with County representatives. An order of magnitude construction budget was developed per facility to be inclusive of repair/replacement costs, contract fees (e.g. mobilization, environmental protection), and contingencies. Order of magnitude repair costs were developed per structure and were strictly the

summation of the itemized repairs for that structure. Unit costs were based on recent bids and sound engineering estimates for similar work.

Naples Powerboat Marina Boathouse B, Collier **County:** The Naples Powerboat Marina is located adjacent to Tin City in Downtown Naples. CEC partnered with Kelly Brothers to perform a design build project to address damage from Hurricane Irma to 450 linear feet of seawall, timber boarding piers, and a boat house structure. CEC inspected the damaged structures and prepared emergency permits and construction documents and specifications. performed construction oversight including construction stakeout and survey. Project footprint was restricted to due close proximity of retail, office, and restaurant buildings. CEC optimized the project design to fit within project constraints.



Bayshore Live Oak Pier, Charlotte County: Bayshore Live Oak Park is the focal point of the Charlotte Harbor Historic District. This 10-acre linear park provides beautiful vistas of the harbor and majestic sunsets. The facility boasts two public fishing piers, a playground, amphitheater, two bathroom buildings, and a kayak launch. The west pier dates back to the 1950's prior to the creation of the park. The 607-foot-long T-shaped fixed timber structure is in poor condition. Timber piles

supporting this structure exhibit varying stages of fungal decay and marine borer attack. Further, storm impacts (Irma, Ian) have caused major structural damage, closing the structure indefinitely. CEC is providing design, permitting, and construction oversight for Charlotte County to replace the pier. Design includes improvements to the pier and upland facility to enhance public safety and provide ADA accessibility. Challenges to the design and permitting of the structure include



avoidance of impacts to adjacent submerged aquatic resources and protected aquatic vegetation.

Ainger Creek Boat Ramp Repairs, Charlotte County: As one of, if not the most, heavily utilized boat ramps in west county, the Ainger Creek Boat Ramp provides boaters access to Lemon Bay, intracoastal waterway, and Gulf of Mexico. Located just minutes away from Stump Pass, this ramp accommodates the boaters of the community and surrounding area.

CEC is very familiar with the Ainger Creek Boat Ramp. Our crew routinely utilizes this boat ramp when performing marine work associated with our ongoing Charlotte County projects. CEC provided the detailed inspection report and recommendations. From these recommendations, CEC designed the repair plans to address the scouring and deteriorated conditions of the ramp. The County implemented repairs in 2019. CEC provided construction administration services.





During our boat ramp inspection, CEC engineers took note of the deflection in seawall along the shoreline. It appears the deflection corresponds to an expansion joint in the cap that was aligned with the seawall panel edge, which would allow for material to erode from behind the wall.



CEC brought this to the attention of the County project manager noting the seawall was not included in our scope of work. The County is pursuing an expansion plan in the near future and the seawall will be addressed accordingly. CEC has been hired to provide comprehensive services for the expansion plan.

Lynn Hall Memorial Park Dune Walkovers and ADA Access Ramps, Lee County: Lee County owns and maintains this beach front park property on Estero Island. CEC was hired by the County to provide comprehensive planning, engineering, permitting, and surveying services. This project included demolishing and removing four existing dune walkovers and water services; and replacing them with four new dune walkovers and new water services. Three of the dune walkovers were



designed to be ADA accessible and the fourth large enough to accommodate maintenance vehicles.

The existing dunes were enhanced with beach compatible sand and native dune vegetation planted to mitigate dune vegetation impacts. The project received a FDEP CCCL Permit.

During the Programming and Master Plan Phases, CEC and the County met with the Town of Ft. Myers Beach, the local government with jurisdiction on site development, to garner their approval of the desired park renovation plan. The

Town displayed support for the County's initiatives to improve public access, enhance the storm protection for the park, and make the facility ADA compliant. CEC worked with the two governments to prepare, submit, present, and obtain the necessary variances to allow the project to be approved.

CEC provided full bid and construction phase services including construction plans and specifications, bid document preparation, bid process coordination, construction stake-out, contractor coordination, inspections, substantial and final completion, and as-built survey.

Englewood Marine Center, Charlotte County: CEC assisted WCIND with the development of the Englewood Marine Center consisting of two Sarasota County waterfront parks; one on Cherokee

Street and the other on Harbor Lane. At the Cherokee Street Park site, the amenities included: replacement of 250-foot long existing pier with a new ADA accessible recreational education/fishing pier; new boat dock along approximate historic alignment of prior boat dock for temporary mooring of four vessels along with a kayak/canoe launch from beach; educational kiosk for manatees and environmental resources; and ADA parking and access walkways.

At the Harbor Lane site, the work included repairing the existing seawall, removing and replacing the existing dock within the basin, and repairing and extending the existing marginal dock.

CEC performed design surveys, developed structural design criteria, prepared the preliminary design plans that supported environmental regulatory permitting, and prepared the final design plans which served as the construction plans.





C. PERMITTING EXPERIENCE

CEC is well known for successful time and cost-effective permit coordination. The primary steps in minimizing permitting time are to have a pre-application meeting with the reviewing agencies and subsequent follow-up meetings at issuance of their requests for additional information. Meeting face to face with the reviewing agency personnel allows us to openly discuss the proposed project and hear and see their reactions. We identify potential problems immediately, which enables us to advise our clients on how to proceed. We also believe there is considerable benefit to be gained by having the reviewing agency staff attend public input meetings or at least have the "ambassadors" attend the agency meetings. This allows the reviewers to put a "face" with the "name" and gain a better understanding of the public's concerns.

Our key personnel have worked with the various state and federal agencies for a variety of marine related projects. Beyond the less-than-clear regulations, we recognize the critical human elements of trust, judgment, and discretion in the permitting process. For major projects we establish a permitting team to improve the depth of permitting expertise to most effectively work with the regulatory agencies consistent with regulations. The permit team meets routinely to track the permit process and proactively manage the work to obtain the desired permit on time and within budget. We expeditiously prepare applications and/or Request for Additional Information (RAI) responses, hold face to face meetings with our clients to review and finalize, then send to the agencies. When action by an agency staff member is needed, we strive to persistently but graciously, prompt the needed

action via emails, phone calls, or a personal appearance in the agency office, where we will appeal up the chain of command until we receive an acceptable or reasonable agency response. Ultimately, many projects will boil down to differences in judgment and opinion between the applicant and agency staff. Our approach fosters understanding, trust, favorable discretion in the permitting process, and ultimately favorable final agency action.

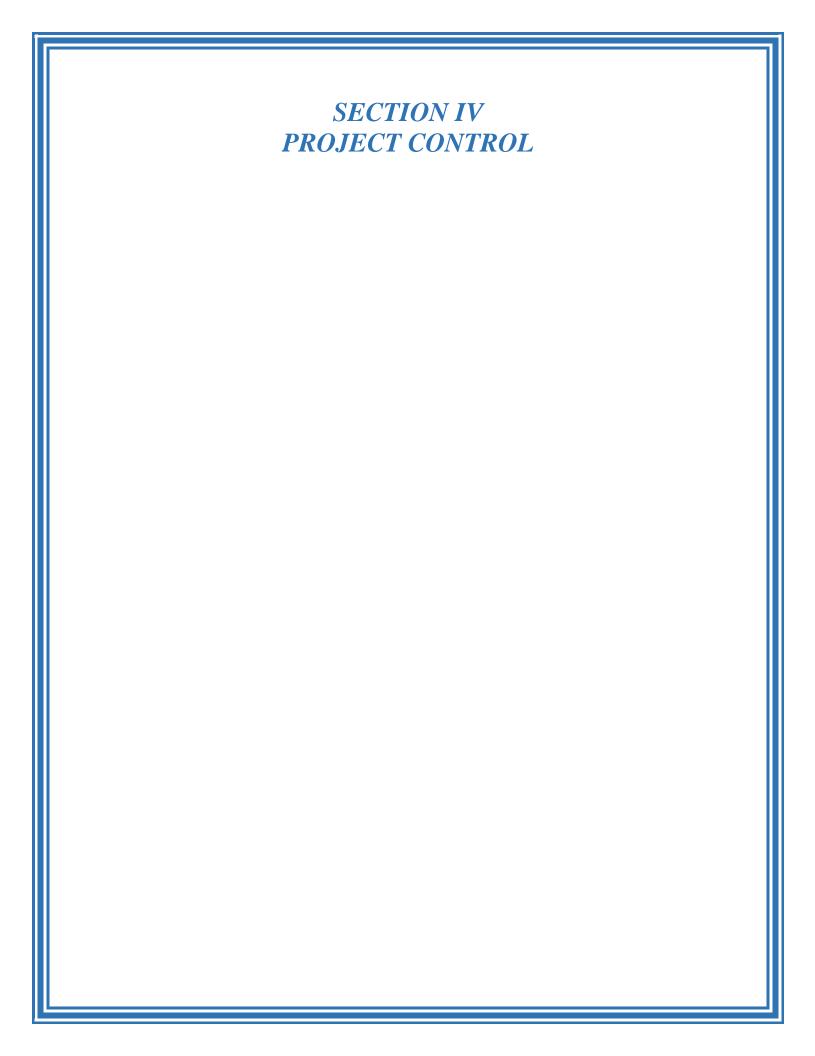
For key projects, we set up pre-application meetings to present the proposed plans and get their feedback. Then we prepare the permit application and documents and have a pre-submittal meeting to review the draft deliverables and again get feedback. After submittal, we meet for a third time to try and iron out issues prior to a RAI being issued. It is critical the client participates in one or more of these key meetings to demonstrate the commitment of the local sponsor. Further, we conduct joint fieldwork with their biologists to confirm resource mapping. The cooperation of DEP staff is extremely professional in nature. While the lack of a federal time clock still inhibits some processes from moving forward timely, CEC remains proactive with the local offices encouraging them to attend construction meetings and site visits on dredge and fill projects to educate their staff on coastal and marine projects. These steps foster goodwill, and we believe aids in our projects receiving prompt attention.

We perceive one of our strengths is our personal relationships with the agency staff. We can rely on these relationships to save time during the permitting process as the reviewers trust our work product and have a comfort level that projects will be constructed using Best Management Practices. Another technique is to submit the local and state/federal permits concurrently. We have successfully processed many permits by concurrent agency submittals to reduce overall permitting time.

D. DESIGN WITHIN A FIXED PROJECT BUDGET

Our project managers shall be responsible for overseeing each facet of the Project to ensure cost control compliance is maintained. All our design plans produced by our designers and technicians are **reviewed by a peer designer or technician** prior to submittal to the project manager. This allows for a fresh perspective on the plan review, streamlines the review process by catching the "little" things up front, and allows the project manager to focus on the true design intent. Further, our staff is committed to cost control compliance. We communicate routinely with contractors and apply industry knowledge to stay aware of issues and constraints that affect cost. Construction access, construction workload, material availability, mobilization, trucking costs, fuel costs, and site experience or familiarity can all affect construction cost. We are willing and able to comply with the customary submittals of Opinion of Cost. Upon client review, if such cost exceeds the proposed budget and jeopardizes completion of the Project, we work with the client to evaluate the design, identify areas to be changed to reduce costs, and/or provide technical support data to justify increasing the budget.

Section IV "Project Controls" presents our Team's approaches to implement Cost and Schedule Controls. Section VI "Present Similar Project Examples" provides details on projects we have completed to date along with their project specific cost and schedule controls to maintain our client's fixed price budgets. Section VII "Experience and Capabilities" reaffirms our Team's philosophy on Cost Analysis and Cost Control.



IV. PROJECT CONTROL

INTRODUCTION

We have been contracted by federal and state government agencies, private industry, and a variety of industrial/commercial entities to perform all types of projects. We have established a track record of client satisfaction by going beyond what our clients request of us, recommending the actions necessary, and advising clients when they have asked for services that are not necessary. We are often able to apply our expertise to accomplish client goals through innovative solutions. We consistently achieve high quality work with exceptional cost and schedule controls by developing and maintaining a highly experienced professional staff and applying our Quality Management Plan.

Team Leaders

Project Manager – Jeremy B. Herget, P.E. is one of CEC's Managing Engineers serving as Project Manager with over 16 years of experience in project management, marine structural design, underwater inspection, coastal site planning, construction administration, marine surveys, topographic and bathymetric surveys, and environmental management and monitoring. His engineering responsibilities include calculating design data, preparing layouts, and preparing detailed plans and specifications; utilizing survey data to prepare detailed repair plans; and producing engineering drawings for marine structures including boat ramps, access piers, seawall, and docks all with ADA access in mind. His management responsibilities include client coordination, subconsultant coordination, public and stakeholder presentations, marketing, proposals, and contracting. He shall be responsible for directing, coordinating, and administering all aspects of the services to be performed.

Principal Engineer – Mark Kincaid, P.E. is Vice-President of Engineering and Principal Engineer serving as CEC's Senior Marine Engineer. Mr. Kincaid's engineering experience includes civil, coastal, survey, and environmental projects for over 40 years. He has designed over 12 boat ramp replacement/repair projects in Southwest Florida in the past 17 years. These projects have included replacing the ramps in place or relocating the ramps to preferred locations on the property. He has analyzed site constraints, ADA access, boating patterns, vehicle circulation, and launching and retrieval patterns to produce optimal site plans to achieve his client goals and objectives for improving the park facilities. He shall supervise all engineering designs.

Senior Designer – Mrs. Samantha Brasher presently holds the position of CADD Manager with over 20 years of experience in CADD designing for coastal and ecosystem related projects. Her responsibilities include calculating design data, preparing layouts, and assisting with the preparation of detailed plans and specifications; utilizing survey data to prepare detailed repair plans; and producing engineering drawings for marine structures including boat ramps, access piers, and docks all with ADA access in mind. She has also prepared drawings for infrastructure location surveys and as-builts depicting plan, profile, and depth of cover. She shall coordinate all CADD deliverables.

A. SCHEDULE CONTROL TECHNIQUES

1. PROJECT SCHEDULING

CEC utilizes commercially available scheduling software to develop a work breakdown structure that is visually represented by Gantt chart and tracks the project by monitoring the project progress by means of the critical path method. Once the critical path is identified, CEC can develop a resource-leveled schedule which enables us to apply resources exactly when and where required. Once the resources are applied to the schedule, CEC then sets up milestones to ensure the progress is constantly ongoing. CEC has aggressively defined goals and objectives and established schedule projections for each job through weekly internal staff meetings. Personnel and staff are allocated to make sure those commitments are met. Internally, we have the ability to reallocate our diverse staff and resources to add extra horsepower, if needed, to meet budgetary or timeframe constraints. For government projects which rely so heavily on public input, it is essential the schedule be maintained so that public meetings can be advertised appropriately and to keep stakeholders informed as the work progresses. It is typically necessary to alter the schedule based on unexpected events. CEC performs minor schedule revisions frequently and at all major milestones.

2. MINIMIZE PERMITTING TIME

CEC is well known for successful time and cost-effective permit coordination. The primary steps in minimizing permitting time are to have a pre-application meeting with the reviewing agencies and subsequent follow-up meetings at issuance of their requests for additional information. Meeting face to face with the reviewing agency personnel allows us to openly discuss the proposed project and hear and see their reactions. We identify potential problems immediately that enables us to advise our clients on how to proceed. We also believe there is considerable benefit to be gained by having agency staff attend public input meetings or at least have the "ambassadors" attend the agency meetings. This allows the reviewers to put a "face with a name" and gain a better understanding of the public's concerns. We perceive our strength is the personal relationships with the reviewing agency staff. We can rely on these relationships to save time during the permitting process as the reviewers trust our work product and have a comfort level that projects will be constructed using Best Management Practices.

3. SCHEDULE MANAGEMENT

Mark Kincaid, Principal-In-Charge will assure that the schedule will be met in a timely manner. CEC has successfully managed and completed projects utilizing subconsultants under multiple engineering and related disciplines for the past 40 years. To aid our Project Managers in this effort, CEC has invested in one of the most sophisticated project management and cost tracking programs available for architectural and engineering consultants. CEC's workload has steadily grown to the point where our managers now routinely manage and coordinate a combined average of 400 active projects ranging in size from as little as \$1,000 to as much as \$500,000 during a calendar year. We have put into place an Executive Information System that allows our managers to quickly obtain summary information concerning client history, client and

project billing, accounts receivables, project profitability, project budgets, vendor history, vendor status, accounts payable, purchase orders, financial status, and cash position.

B. ABILITY TO MEET PROJECT COST CONTROL

CEC uses the latest in, field data collection technology including DGPS and RTK GPS stations. For remote locations, we typically install duplicate instrumentation to ensure collection of the required data to avoid remobilization costs and time delays. Our field crew and office staff have worked together to standardize the data collection procedure, nomenclature, and symbols. That data is directly linked to hardware and internal software then transferred to provide documentation, plan views, and digital files with a minimum of human intervention. Our up-to-date drafting software is standardized in the Survey and Engineering departments for whom Survey acts as a conduit of data gathering. Survey's main responsibility is to gather data and to prepare the survey plans, cross-sections, legal descriptions, and survey plats. Those documents are then transferred or forwarded to the various design groups so that that data is then utilized in design software to provide up-to-date modern optimized design plan results. Our staff attends annual training sessions in their areas of expertise.

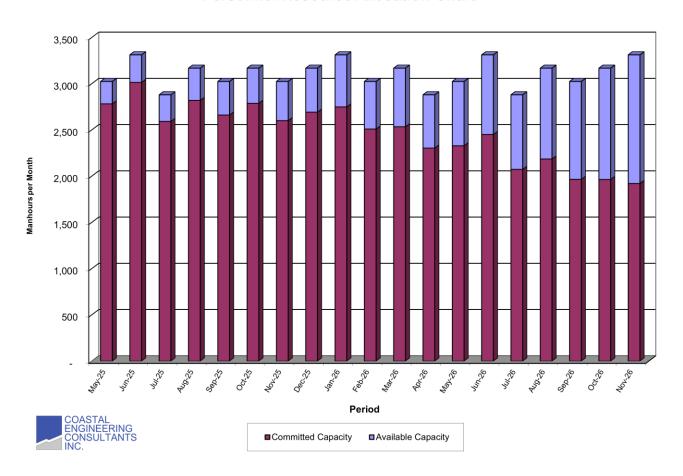
Our Senior Principal, Michael Poff, shall be responsible for overseeing each facet of the project to ensure cost control compliance is maintained. All of our design plans produced by our designers and technicians are peer reviewed prior to submittal to the project manager. This allows for a fresh perspective on the plan review, streamlines the review process by catching the little things up front, and allows the project manager to focus on the true design intent. Further, our staff is committed to cost control compliance. We communicate routinely with contractors and apply industry knowledge to stay aware of issues and constraints that affect cost. Construction access, construction workload, material availability, mobilization, trucking costs, fuel costs, and site experience or familiarity can all affect construction cost. We shall, in conjunction with the client, evaluate the design, identify areas to be changed to reduce costs, and/or provide technical support data to justify increasing the budget.

Our Project Manager and Principal Engineer, Jeremy Herget and Mark Kincaid, are avid boaters and watermen and utilize many waterfront facilities and marine structures in Southwest Florida. They are intimately familiar with piers, shoreline armoring, living shorelines, waterfront parks, and public access. The optimal way to maintain cost control is to design it right the first time and their combined experience is unparalleled in the region.

C. RECENT, CURRENT AND PROJECTED WORKLOAD

Below is our Team's projected workload for the foreseeable future. The graph depicts the staff hours available per month (Maximum Capacity), hours assigned to current contracts (Committed Capacity), and anticipated hours to be assigned to the Project. We can dedicate hundreds of personnel hours per month and have more than sufficient resources to handle the Project timely and effectively. CEC does not foresee a projected workload that would limit our team's ability to accomplish the work required under this contract in a timely and cost-effective manner.

Personnel Resource Allocation Chart





V. DESIGN APPROACH

A. DESIGN METHODOLOGY INCLUDING PROGRAMMING AND PHASED APPROACH

CEC conducted a detailed inspection of the fishing pier and bulkhead in 2019. All accessible elements were visually and/or tacitly inspected above and below the water. Recommendations were provided to address deficiencies with the bulkhead, pile wraps, utility conduits below-deck, and timber decking. Following the inspection, CEC assisted the County with design and implementation of repairs in early 2023. Most recently, CEC assessed the bulkhead and approximately 800 linear feet of shoreline at the base of the pier. Recommendations included repairs to the bulkhead as previously provided, and repairs to stabilize the shoreline. As such, CEC is very familiar with the structure and shoreline's history, construction, previous repairs, and prestorm condition. CEC shall integrate this prior knowledge in the following scope of services as our Design Methodology and Phased Approach to assist the County successfully implement their development program. We shall develop, update, and report progress on a Critical Path Method-based schedule throughout the duration of the Project.

1. PROGRAMMING PHASE

Project Initiation Meeting: Arrange, prepare for, and attend the kick-off meeting with County and stakeholders to discuss the Project goals, identify concerns and issues, obtain initial input, establish lines of communication and contact people, and identify additional stakeholders.

Data Collection: Perform the following surveys within the Project area.

- Inspect pier and earthen filled causeway to understand magnitude of storm impacts.
- Assess conditions to determine whether a repair or replacement design is warranted.
- Perform bathymetric surveys to provide current conditions.
- Map environmental resources within 50 feet of existing structures.

Existing Conditions Plan: Prepare an existing conditions plan update depicting the existing conditions of the uplands, waterway and shoreline including the following information.

- Property boundaries and approximate shoreline.
- Site infrastructure.
- Topographic and bathymetric contour lines.
- Environmental and resource protection areas.
- Shoreline features, e.g., seawalls, revetments, canals, vegetation, exotics.
- Marine structures including docks, piers, pilings, etc.
- Signage and marking locations.

Concept Planning: Refine conceptual plan based on the Existing Conditions Plan and Program Analysis. The concept plans will depict the boundary survey, allowable setbacks per County code, extent of resource habitats, topography and bathymetry, available upland area for the proposed development, parking and vehicular circulation, pedestrian circulation, and conceptual stormwater

management program. Prepare order of magnitude construction budget. Identify what variances will be needed for the desired Master Plan.

Stakeholder Meetings: Arrange, prepare for, and attend one meeting with County to obtain input, identify outstanding issues, and outline presentation for stakeholders. Arrange, prepare for, and attend one stakeholder meeting to present the Project goals and Concept Plans, identify concerns and issues, and obtain stakeholder input. Prepare and distribute meeting minutes. Refine the Master Plan per the input.

2. SCHEMATIC DESIGN PHASE

Schematic Design: Prepare the Schematic Design Plan including site layout, structural and shoreline improvements, roads, parking, drainage, signage, and typical sections, in conformance with the Project zoning, and County development codes and requirements. Evaluate the site's existing drainage characteristics and design and prepare the preliminary paving, grading and drainage plans. Prepare the engineering report, drainage calculations and construction drawings. Prepare Preliminary Plans that shall be in sufficient detail for permitting purposes. Prepare Preliminary Opinion of Probable Construction Cost.

Pre-Application Meetings: Coordinate, prepare for, and present the Project to the local, state and federal regulatory agencies to garner their input and identify issues or concerns.

Value Engineering: Coordinate with the County and apply industry knowledge to identify issues and constraints that may affect the Project's construction costs such as contractor availability and workload, construction access, material availability, mobilization, trucking costs, fuel costs, and site experience. Propose value engineering recommendations to be employed throughout the final design and bidding tasks.

3. DESIGN DEVELOPMENT PHASE

Project Design: Prepare detailed final design plans to show the general scope, character, and extent of the work to be furnished and performed by the contractor. The plans shall include horizontal and vertical control, survey baseline, staging area, site plans, profiles and cross-sections, construction details, quantity requirements, and environmental protection measures. Develop a Final Opinion of Probable Construction Cost. Construction costs shall be broken down by project features such as mobilization and demobilization, site preparation/demolition, repairs, and environmental protection. The design shall consider life-cycle costs, long-term maintenance, energy conservation, and long-term operational costs.

Environmental Resource Permitting: Prepare draft permit drawings detailing the proposed project including existing conditions plan; site plans; typical cross-sections, and details. Prepare technical materials for inclusion in the State and Federal permit applications including justification statement to document the need for the project, maps and aerial photos, endangered species, water quality, and seagrasses (if necessary) protection plans during construction, NMFS Section 7 Checklist Form and USFWS Manatee Biological Evaluation, and adjacent property owners. Based

on the County's comments, finalize and submit the Permit Applications. Prepare mitigation plans to offset defined project impacts to natural resources if required.

Permit Processing: Monitor the progress of the ERP Application with the permit agencies and coordinate receipt of needed jurisdictional, regulatory and operational information from all required agencies to effect timely and complete submissions for the Project. Assist County in preparing and responding to the permit agencies' Requests for Additional Information to answer questions and address their concerns. Prepare for County a summary of the agency approvals listing the special permit conditions, responsible party, and time frame for implementation and construction for the Project.

County Site Development Approvals: Prepare permit application, support documents, drawings and specifications, and submit to County for approvals. Assist County in preparing and responding to the inter-agency Requests for Additional Information to answer questions and address concerns. Assist County coordinate inter-agency Site Development Approvals.

4. CONSTRUCTION PHASE

Construction Documents: Prepare detailed construction plans and specifications including description of work, special terms and conditions, quantity estimates, bid schedules, and technical specifications describing the general scope, character, and extent of work to be furnished and performed by the contractor. Prepare Bid Forms, Schedule of Values, Special Provisions. Review drafts of the deliverables with the County to obtain their input and complete one round of edits. Based on the review, prepare and submit to the County one reproducible engineering scaled set of final drawings along with one electronic copy of both CADD and PDF files, and one reproducible set of technical specifications and special conditions along with one electronic copy of both Word and PDF files.

Assist the County in coordinating the bidding process. These services will include assisting the County issue responses to Requests for Information as appropriate to interpret, clarify or expand the Bid Documents; assisting the County in evaluating the bids; and making a recommendation for award.

Construction Observations: Arrange, prepare for, and attend one (1) pre-construction meeting with the County, contractor, and appropriate stakeholders designated by the County Project Manager to discuss the Project construction; develop a Project schedule; review permits, plans, and specifications; identify concerns and issues; and establish lines of communication, and contact people. Attend routine construction meetings with the County and contractor covering work progress and schedule, conformance to plans and specifications, and other relevant issues that need to be addressed. Record and distribute meeting minutes.

Consult with the County and contractor as reasonably required and necessary with regard to construction. Assist the County prepare required field changes, change orders, or contract modifications requested by the contractor and submit to the County for approval. Provide the contractor with instructions issued by the County in addition to providing any necessary interpretations or clarifications of the contract documents requested by the contractor. Make

determinations on non-conforming and unauthorized work as authorized in the contract documents. Based upon construction observations and evaluations of data reflected in contractors' request for payment, render recommendations concerning amounts owed.

Make visits to the site at intervals appropriate to the various stages of construction as deemed necessary in order to observe, as an experienced and qualified design professional, the progress and quality of the various aspects of the contractor's work. Based on information obtained during such visits and on such observations, endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and keep the County informed of the progress of the work.

Upon receiving written notice that the Project is substantially complete, conduct a one-time comprehensive review of the Project, develop a list of items needing completion or correction, forward said list to the contractor and provide written recommendations to County concerning the acceptability of work done and the use of the Project. Upon receiving written notice from the County, the Project is finally complete, perform final site observations in conjunction with the County. Assist the County in closing out construction contract.

Permit Monitoring: Assist the County during construction of the Project in providing the following environmental monitoring services as required by the Permits. Assist the County in obtaining agency Notice to Proceed. Conduct the environmental monitoring as required by permits. Assist the County in reporting monitoring results to permit agencies and coordinate additional requirements if necessary for water quality protection. Prepare and submit to the County and permit agencies the Project Certifications and as-built surveys.

B. ANTICIPATED ISSUES

1. SUBMERGED DEBRIS

Hurricane Milton removed approximately 290 linear feet of superstructure (railing system, decking, and stringers) from the pier. A majority of the timber superstructure is likely submerged and resting on the channel bottom. As the magnitude and footprint of the debris field is unknown it would be prudent to map it for the purposes of demolition/debris removal, contractor access, and design of pier repair/replacement alternatives. With in-house sidescan sonar equipment, CEC has the ability to collect the data necessary to map the debris field and evaluate the data for potential Project impacts. As an alternative, many of CEC's engineers are SCUBA certified and can provide subsurface visual assessments if required.

2. PUBLIC PARK SAFETY AND SECURITY

After recent tragic events at public facilities around the nation, public safety and security have become an issue that cannot be ignored. Our Team will include an analysis on crime prevention through environmental design whereby you reduce the opportunity and fear of crime through the effective use and design of the built environment. Structural enhancements and spatial definition can deter, detect, and delay potential criminals from entering a public facility. Predicting and determining the types of users to enter the space, and their intended purposes is critical to designing

a public facility. This approach can make a direct impact on reducing external threats using natural access control, surveillance, territoriality boundary definition, management, and maintenance strategies which we will identify and propose during the Programming and Design Phases.

C. INNOVATIVE APPROACHES IN PROGRAMMING AND DESIGN

1. PROJECT METHODOLOGY AND APPROACH

The following represents CEC's innovative approaches in programming and design that will guide us as we design and develop the Project. We employ strategies and processes that integrate technology while developing workable solutions. Our collaborative and team systematic approach includes the key elements described herein.

CEC will utilize a collaborative and consensus building and holistic approach consisting of experts in the field of planning, design, and engineering. CEC and County Staff have worked together as a Team on past projects and are well prepared to partner again on this Project. Our Project expertise extends to designing public park facilities that protect and encourage public use. We value our ability to listen while building consensus and all Team members have equal value as we discuss and delineate all goals and details of the Project.

2. MISSION STATEMENT

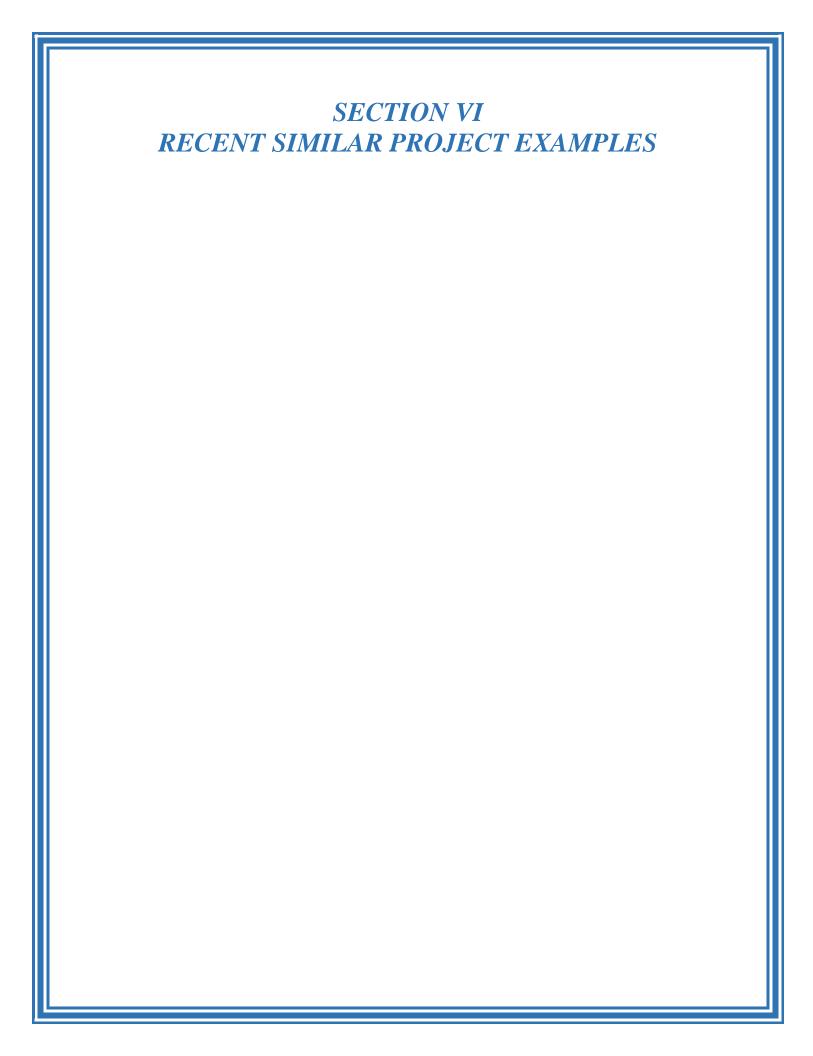
The mission statement will be the anchor to all critical decisions as the Project moves forward. We want to first listen and then understand all the factors that will drive the project, whether they be tangible or intangible elements. We also believe that the most obvious solution may not always be the best solution in the long term. Programming and mission statement development will be done through extensive involvement of stakeholders. Our designers come to the project ready to listen without pre-judgment or canned solutions. We start the journey from CEC's pre-2024 inspection results and the lessons learned from previous projects ready to guide us. By attentively listening and asking some additional probing questions, we will develop a better understanding of the needs and wants for this project. Once we define the true needs and wants, we will work with Charlotte County to balance the needs and wants with the budget. All programming and planning will include an analysis of how the facility can integrate technology and be designed to be flexible to future uses and programs.

3. COLLABORATION WITH ALL PROJECT STAKEHOLDERS

Our approach and collaborative method includes working very closely with all stakeholders so that all voices can be heard and considered. All users, advisors, researchers, and contractors bring valuable input to the table, and we will encourage their participation so that a functional collaborative solution can be developed. Through this process we will encourage open discussion and input so that design consensus can be realized and ultimately result in a quality project. This collaborative process will continue through every phase of the project development. This process also is a tool that we employ to minimize conflicts and misunderstandings between the design team and the Client. Open transparent communication between the Project Team is our number one priority.

4. PUBLIC PARK SAFETY AND SECURITY

In the wake of multiple hurricanes, public safety and security at the County's public facilities have become an issue that cannot be ignored. CEC can include an analysis on crime prevention through environmental design whereby you reduce the opportunity and fear of crime through the effective use and design of the built environment. Architectural features, structural enhancements, and spatial definition can deter, detect, and delay potential criminals from entering a public facility. Predicting and determining the types of users to enter the space, and their intended purposes is critical to designing a public facility. This approach can make a direct impact on reducing external threats using natural access control, surveillance, territoriality boundary definition, management, and maintenance strategies which we will identify and propose during the Programming and Master Plan Phases.



VI. RECENTLY ACCOMPLISHED SIMILAR PROJECTS

A. MOUND HOUSE OBSERVATION PIER

Centered atop of a 2,000-year-old Calusa Indian shell Mound House is a cultural and environmental landmark on Fort Myers Beach. As the oldest standing structure on Fort Myers Beach, it offers a unique blend of history, archaeology, and natural beauty. The Town of Fort Myers beach contracted CEC to design, permit, and oversee the construction of the Mound House Observation Pier. The timber pier, approximately 2,500 square feet, was designed to complement the upland park and historic site improvements conducted by the Town.

CEC conducted field work to support the development of two alternative pier designs and reviewed the alternatives with Town staff. CEC modified existing environmental permits to reflect the preferred alternative. Construction plans and specifications were developed for inclusion into the Town's standard bid documents. CEC assisted the Town oversee the construction of the pier.



- 1. Schedule and Cost Control: Prior to soliciting bids from marine contractors, CEC conducted an extensive jet probe survey to determine the presence or absence of subsurface rock at the proposed pile locations. The survey data indicates the anticipated level of effort that may be required from a contractor to install piles. As such, this information was provided to contractors with the intent that the information would generate more favorable pricing and alleviate unnecessary delays during construction.
- **2.** Construction Problems and Means Taken to Solve: No design problems were encountered during construction.
- **3.** Additional Construction Costs Caused by Design Deficiencies: There were no change orders issued due to design deficiencies.
- **4. Project Delivery:** A timber pier, approximately 2,500 square feet, was constructed to provide recreational and educational opportunities along the waterfront of Matanzas Harbor. The pier was designed to meet ADA guidelines.

B. FORT PICKENS FERRY DOCK REPAIR

The ferry dock at Fort Pickens Gulf Island National Seashore in Pensacola Beach was severely damaged in 2020 during Hurricane Sally by a construction barge which broke loose from its mooring. In 2023 the National Park Service (NPS) completed temporary repairs to the pier restoring ferry operations and pedestrian access. In 2024 USACE-Mobile District contracted CEC to develop permanent repair alternatives for the pier and design the preferred repair.



To document existing conditions CEC conducted a detailed structural inspection along with bathymetric and topographic surveys. Broken precast 14"x14" concrete piles were buried along the shoreline. CEC field verified the location of the buried vertical end of the piles. Electrical conductors were tested as part of the inspection.

CEC prepared an inspection report outlining structural deficiencies and recommended repair alternatives noting the pier alignment goes through an identified archaeological resource site. Cost estimates were developed for each alternative and reviewed for cost-effectiveness. Based on the NPS budget, a scope was identified for the permanent repair. CEC developed Ready-to-



Advertise documents including construction plans, specifications and Opinion of Probable Construction Cost.

- 1. Schedule and Cost Control: CEC worked closely with USACE-Mobile and NPS to determine the cost-effectiveness of each repair alternative to ensure compliance with project budget while satisfying the project goals.
- **2.** Construction Problems and Means Taken to Solve: N/A CEC was not contracted to provide construction oversight.
- **3.** Additional Construction Costs Caused by Design Deficiencies: While not a design deficiency, additional costs were accounted for to accommodate best management practices to preserve the archaeological resource site during construction.
- **4. Project Delivery:** As a result of Hurricane Sally, the pier sustained severe damage. The structure required a complete inspection. Budgetary restrictions were considered throughout the design process.

C. VILLE DE MARCO WEST FISHING PIER, FINGER PIER AND SEAWALL RESTORATION

As a result of Hurricane Irma, Ville de Marco West (VDMW) experienced significant damage to their waterfront property. Wave action and extreme water velocities caused the channel bottom in front of the property to scour from -20 ft NAVD to -32 ft NAVD. Storm surge and wave action eroded fill around the tieback



system causing the seawall to fail. Additionally, VDWM's fishing pier and multiple finger piers were destroyed in the storm.

CEC assisted VDMW assess storm impacts and develop a restoration plan for the waterfront property. As part of the assessment, CEC performed an above and below water inspection and conducted bathymetric surveys to evaluate the scour hole, toe wall and seawall failure. CEC developed construction plans and specifications that included repairing the failed section of toe wall with steel



sheet piles, filling the scour hole with sediment dredged from an adjacent navigation channel, capping the filled scour hole with articulating concrete block mats to prevent future scouring, removing the failed seawall, and replacing it with a steel sheet pile wall, and replacing the timber fishing pier and finger piers. CEC assisted VDMW during construction by providing contract administration, survey support and construction inspections.

- 1. Schedule and Cost Control: CEC represented VDMW during the construction administration phase to maintain cost and schedule controls.
- 2. Construction Problems and Means Taken to **Solve:** No design problems were encountered during construction, however permitting the restoration work required extensive coordination with State and Federal environmental agencies and local municipalities. Sand used for fill was obtained from local navigation channels.



- **3.** Additional Construction Costs Caused by Design Deficiencies: There were no change orders issued due to design deficiencies.
- **4. Project Delivery:** Approximately 650 square feet of fishing pier was replaced. Due to the siting of the pier, 10-inch diameter, concrete filled, steel pipe piles were utilized in the design. Approximately 850 square feet of finger was replaced.

D. SALTLEAF BOAT RAMP AND MARINA – PHASE I AND II

CEC was hired by London Bay Development Group to design, permit, solicit, and oversee construction of a luxury private and public marina within the new Saltleaf community in Bonita Springs, Florida. The 2-acre marina includes 72 wet slips, over 1,200 linear feet of seawall, 11,500 square feet of timber piers and boardwalks, 2,700 square feet of aluminum floating docks, and a public single-lane boat ramp with 15 trailer parking spaces. Permitting included public stakeholder meetings, resolving the prior landowner's outstanding environmental compliance issues, multiple permit modifications including creation of a 3.64-acre conservation



easement for pristine mangrove forest adjacent to the marina. CEC worked closely with subconsultants to provide a cohesive design and ensure seamless construction of the facility's waterfront facilities and upland elements. Construction of the marina was split into two phases to expedite construction while the City finalized review of the Land Development Order.

- 1. Schedule and Cost Control: The project schedule was driven by the permitting process. CEC worked with London Bay to award the construction contract while waiting for approval of the permit modification which included the final design of the marina. CEC assisted the owner negotiate with the contractor to minimize cost increases and change orders during construction.
- 2. Construction Problems and Means Taken to Solve: The City of Bonita Springs Fire required installation of a fire



- suppression system to service the boarding and finger piers and all boat lifts. CEC conducted extensive coordination with subconsultants and stakeholders to review fire suppression alternatives. CEC designed the necessary fire suppression to service all required elements within the marina.
- **3.** Additional Construction Costs Caused by Design Deficiencies: There were no change orders issued due to the repair plan developed by CEC.
- **4. Project Delivery:** Over 11,500 square feet of timber pier and boardwalk was constructed. CEC's design included compliance with ADA guidelines. Piers and boardwalks were designed to accommodate numerous utility conduits below deck for a cleaner appearance.

E. CLAM PASS BOARDWALK REPAIRS

In Collier County the Clam Pass Boardwalk connects the County's parking lot and the beach with a three-quarter-mile long timber boardwalk. The elevated boardwalk passes through a coastal habitat of mangrove forest and spans Outer Clam Bay. A majority of the boardwalk is constructed over land affected by tidal waters.

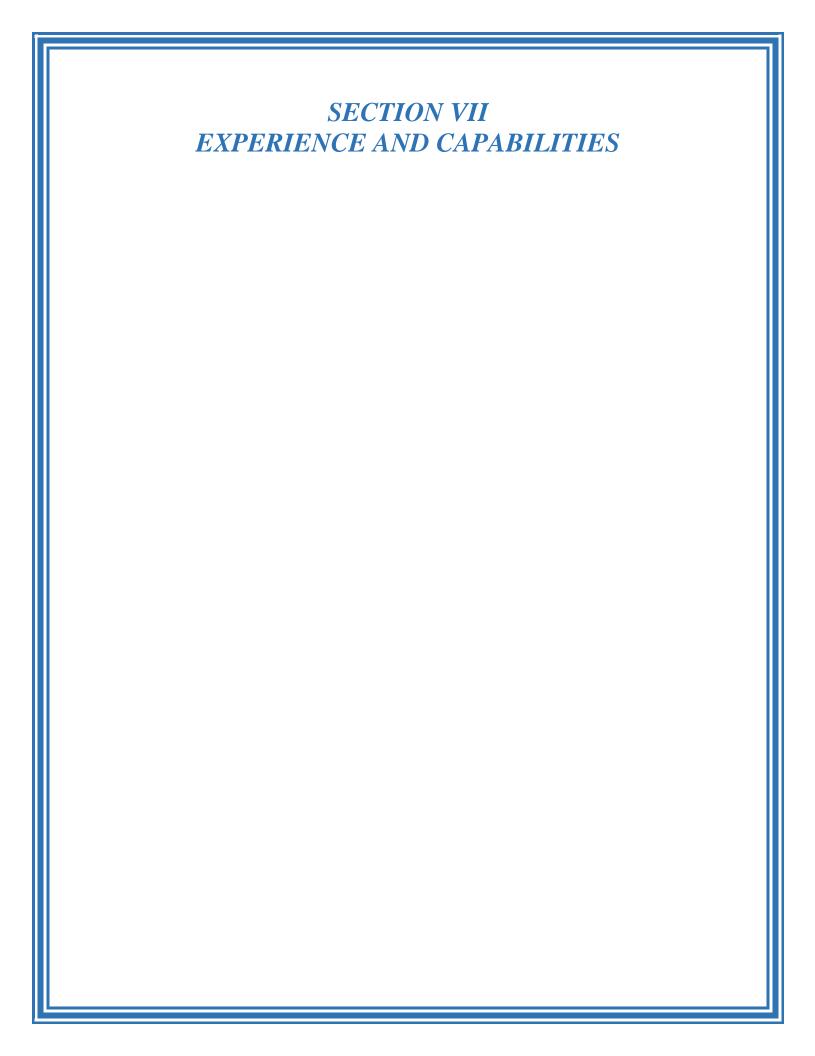
Collier County contracted CEC to inspect the boardwalk's timber piles and superstructure, design and permit repairs, and oversee construction. CEC assembled the inspection data into a



detailed report with recommended repairs. As many of the timber piles exhibited fungal decay three alternatives were developed and presented to the County to address the deficiency. Implications associated with cost, impacts to the surrounding mangrove forests, access constraints, closure of the facility, and schedule were evaluated for each alternative. Ultimately the County elected to repair piles by either installing sister piles, applying a structural pile jacket, or sealing the pile with a polyethylene backed tape. CEC developed construction plans and specifications to implement pile repairs and replacement of deteriorated timber members and corroded hardware.

- 1. Schedule and Cost Control: CEC worked closely with the County during the bidding phase to maintain cost and schedule controls.
- **2.** Construction Problems and Means Taken to Solve: No design problems were encountered as a result of the repair plan developed by CEC during construction
- 3. Additional Construction Costs
 Caused by Design Deficiencies:
 There were no change orders issued due to the repair plan developed by CEC.
- **4. Project Delivery:** A three-quartermile long timber boardwalk was repaired to extend the useful working life of the structures. All work was completed in an environmentally sensitive area.





VII. EXPERIENCE AND CAPABILITIES

INTRODUCTION

The CEC Team is well versed in working with multiple organizations specific to government facilities. In Section II "Proposed Management Plan" we detail our proposed Public Information Program that includes the residents, key stakeholders, and permit agency staff in a comprehensive manner.

In Section III "Previous Experience" we describe our relevant work history with Federal, State, and Local Governments and provide examples of our design, permit, and construction management of marine structures within a fixed price budget with government facilities. CEC's experience in Southwest Florida is unparalleled, providing land and marine surveys, coastal engineering, coastal geology, and environmental services on 11 municipal projects plus multiple private projects over the past two decades.

In Section VI "Present Similar Project Examples" we detail several key marine projects for municipal and private entities and share our success stories in assessment, design, permitting, estimating, and providing construction oversight.

A. LIFE CYCLE COST ANALYSIS INCLUDING VALUE ENGINEERING

Value Engineering (VE) is about optimizing the value of the design that will achieve the goals of the project. Having reliable cost information together with the use of structured brainstorming workshops to extract the maximum benefits to be derived are an essential element of VE. For complicated marine projects, the CEC Team recommends interviewing reputable marine contractors who can offer creative ideas and clearly explain their VE ideas to the County, allowing the team to make an informed decision.

Depending on the construction material utilized for pier replacement, a 20-year to 50-year life cycle is recommended based on CEC's professional experience. In a saltwater environment, the anticipated life cycle for timber construction typically ranges between 25 and 35 years while concrete construction typically ranges between 35 and 50 years. While timber construction typically provides a lower initial cost, the life span of the timber is not as long as concrete. Conversely, concrete typically requires a higher initial cost, but the life span is longer than timber. CEC will strive to achieve quality designs that require minimal maintenance/repairs over the design life of the structures. The County's input on the operating maintenance costs from managing their facilities will be considered as part of the Life Cycle Cost Analysis.

B. COST ANALYSIS AND CONTROL

In Section III D "Design Within a Fixed Project Budget" and Section IV "Project Controls" we highlighted our cost analysis and control approaches; and for the sake of brevity we will not repeat all of the previously presented information herein. We do reaffirm that our Project Manager and senior personnel will be responsible for complying with the County's budget and fiscal constraints.

Our project approach includes reviewing and incorporating key elements such as Project schedule and budget. The process of budget development and verification is a top priority as we move through the project. Working as a team with the County and the County's Construction Manager as well as the Project stakeholders, the project schedule is organized, and significant key milestones are identified. As the Project progresses, the budget and schedule are continuously monitored and updated.

The most typical issue that arises is inadequate funding for the selected design. Have enough funds been earmarked for the expected scope and quality? The response to this question will set the tone for the Project as it develops. We understand this and will review all budget categories and compare their allocations of funding to what can be obtained in the current construction marketplace. In our "hot" marine construction market we are witnessing continually and rapidly rising materials and labor costs to the point that construction pricing is rising faster than what can be achieved and saved by value engineering. Our budget analysis will build in contingencies for the potential escalation of construction costs.

C. LIFE CYCLE COST ANALYSIS

The purpose of a Life-Cycle Cost Analysis (LCCA) is to evaluate the "fiscal" performance of design alternatives over an established period of time (POT) and to select the optimal design that yields the lowest overall cost that achieves the project goals over the POT. The assumption of the LCCA is there are multiple options that have differing costs that can achieve the project goals. Ideally the LCCA should be conducted early in the design phase to provide the most opportunity to modify alternatives to yield life-cycle cost savings.

The various costs may include some or all of the following:

- Initial Costs (Purchase, Acquisition, Design and Permitting, and Construction)
- Operating
- Maintenance and Repairs
- Replacement
- Financing

These costs are entered as base-year amounts in today's dollars; then escalated to their future year of occurrence and discounts them back to the base date to convert to present values. The LCCA can be performed in constant dollars or current dollars. The constant-dollar method excludes inflation, while the current-dollar method includes inflation. Both methods yield identical present-value life-cycle costs.

D. ENVIRONMENTAL ASSESSMENT

The CEC Team has unique experience with performing and reviewing environmental assessments. CEC has a biologist on staff that has been trained by agency staff to perform upland and aquatic resource surveys in diverse habitats. Staff is knowledgeable in plant and animal identification and well-rehearsed in endangered species native to our area. CEC staff has also participated in federal Independent External Peer Reviews (IEPRs) as a subject matter expert. When necessary, we have

successfully completed the required Uniform Mitigation Assessment Method (UMAM) forms to evaluates functions through consideration of an ecological community's current condition, hydrologic connection, uniqueness, location, fish and wildlife utilization, time lag and mitigation risk. This form is necessary to determine the amount of mitigation needed to offset adverse impacts to wetlands and other surface waters and to award and deduct mitigation bank credits.

E. PERMITTING IN SOUTHWEST FLORIDA AND CHARLOTTE COUNTY

In Section III "Previous Experience" and Section VI "Present Similar Project Examples" we highlight CEC's channel and dredging design, permitting, and construction management experience with Charlotte County channel survey and dredging projects. CEC is well known for successful time and cost-effective permit coordination. For these example projects, the required permit is the state and federal dredging permits which need to be secured by the County prior to construction. CEC has aided Charlotte County in preparing and submitting the required permit applications to include but not limited to FDEP environmental resources, exemption requests, submerged land lease, and coastal construction control line. Additionally CEC has prepared federal permit applications to include engineering Form 4345, project design criteria checklist, and NMFS Section 7 checklist. Our key personnel have worked with the various state and federal agencies for a variety of marine related projects. Beyond the less-than-clear regulations, we recognize the critical human elements of trust, judgment, and discretion in the permitting process. To reduce overall permitting time, CEC employs a technique to submit the local and state/federal permits concurrently. We have successfully processed many permits by concurrent agency submittals.

For major projects we establish a permitting team to improve the depth of permitting expertise to most effectively work with the regulatory agencies consistent with regulations. The permit team meets routinely to track the permit process and proactively manage the work to obtain the desired permit on time and within budget. We expeditiously prepare applications and/or Request for Additional Information (RAI) responses, hold face to face meetings with our clients to review and finalize, then send to the agencies.

We perceive one of our strengths is our personal relationships with the agency staff. We can rely on these relationships to save time during the permitting process as the reviewers trust our work product and have a comfort level that projects will be constructed using Best Management Practices. Further, we conduct joint field work with FDEP staff and keep all coordination extremely professional in nature. While the lack of a federal time clock still inhibits some processes from moving forward timely, CEC remains proactive with the local offices encouraging them to attend construction meetings and site visits on marine related projects to educate their staff on coastal and marine projects. This fosters goodwill and we believe aids in our projects receiving prompt attention.

CEC has experience with obtaining County Building permits for similar jobs containing pier repair and or pier replacement elements.

F. SPECIALIZED MARINE/COASTAL EXPERIENCE

The CEC Team has unparalleled experience with the design, permit, and construction oversight of diverse waterfront development projects for both the public and private sectors ranging from fishing piers to boat ramps to municipal yacht basins to dock modifications to mooring fields to shoreline stabilization repairs and upgrades. Our marine related projects are designed with public safety in mind. We address public safety through education, vessel draft limitations, dredge designs, and channel marking plans. State and federal rules require facilities to be designed for ADA accessibility. Our specialty is in coordinating regulatory permits as we have established excellent relationships with the FDEP and USACE local. Further, our designs have successfully minimized environmental impacts or have included appropriate mitigation plans such that the environmental agencies (e.g. FWC and FWS) respect our work product. The size of our projects has ranged from small dock modifications on the order of a few thousand dollars to minor dock repairs in the tens of thousands of dollars to major fishing pier, seawall, boat ramp, dock, and shoreline infrastructure totaling millions of dollars.

The marine and coastal engineers and geologists of CEC have over sixty years of combined experience in the inspection of marine structures including bridges, piers, seawalls, marinas, ports, and jetties. One of our Project Engineers, Mark Kincaid, has personally inspected and assessed the majority of the domestic US Naval port facilities throughout his career. Our specific tasks have included underwater structural inspections including visual and tactile observations; nondestructive and destructive testing; still photography and digital video; coring and sediment testing; submerged utility location surveys; submerged utility repairs; structure repair plans and specifications; new facility construction plans and specifications; bid services; and construction administration.

G. WORKING ON PUBLIC AND/OR GOVERNEMENT FACILITIES AND AMENITIES

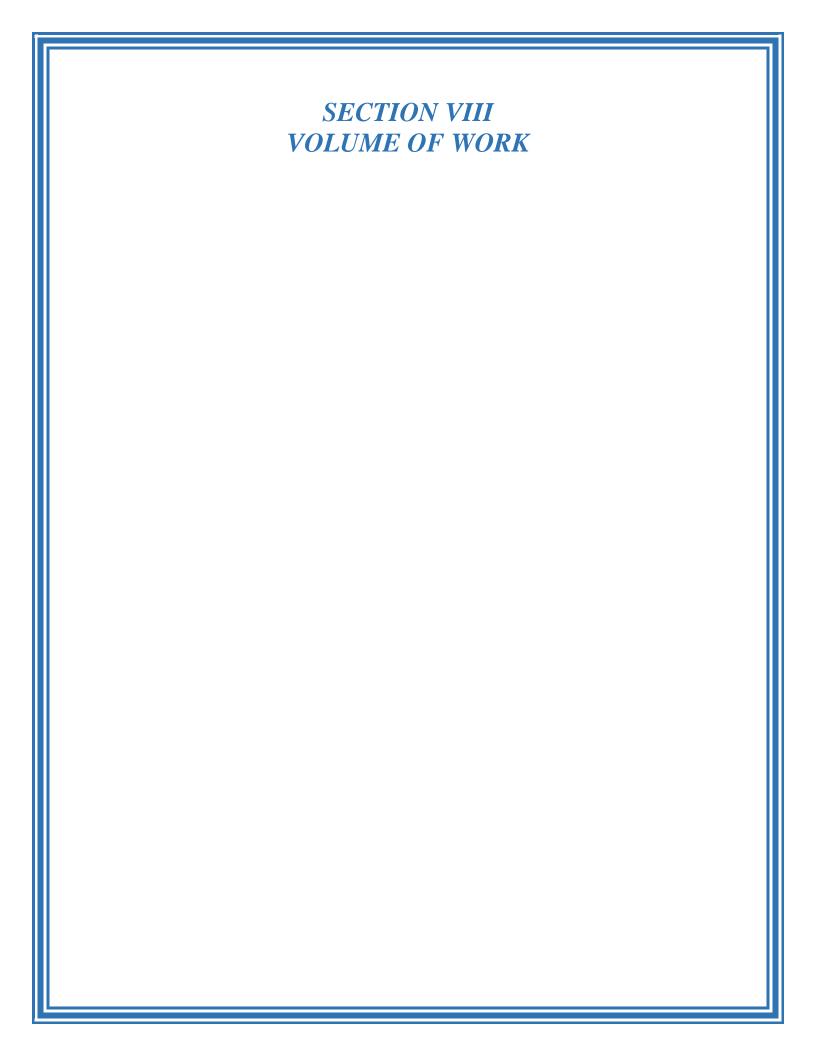
The CEC Team is well versed in working with multiple organizations specific to government facilities. In Section II "Management Plan" we detail our proposed Public Information Program that includes the residents, key stakeholders, and permit agency staff in a comprehensive manner.

In Section III "Previous Experience of Team" we describe our relevant work history with Federal, State, and Local Governments and provide examples of our marine and coastal engineering design and permitting within a fixed price budget with government and private facilities. CEC's experience in Southwest Florida is unparalleled, providing marine engineering, design, permit, and construction management experience on 11 municipal projects plus multiple private projects over the past two decades.

In Section VI "Recently Accomplished Similar Projects" we detail several key projects for municipal and private entities and share our success stories in enhancing these public facilities, improving waterfront assets, and providing ADA access.

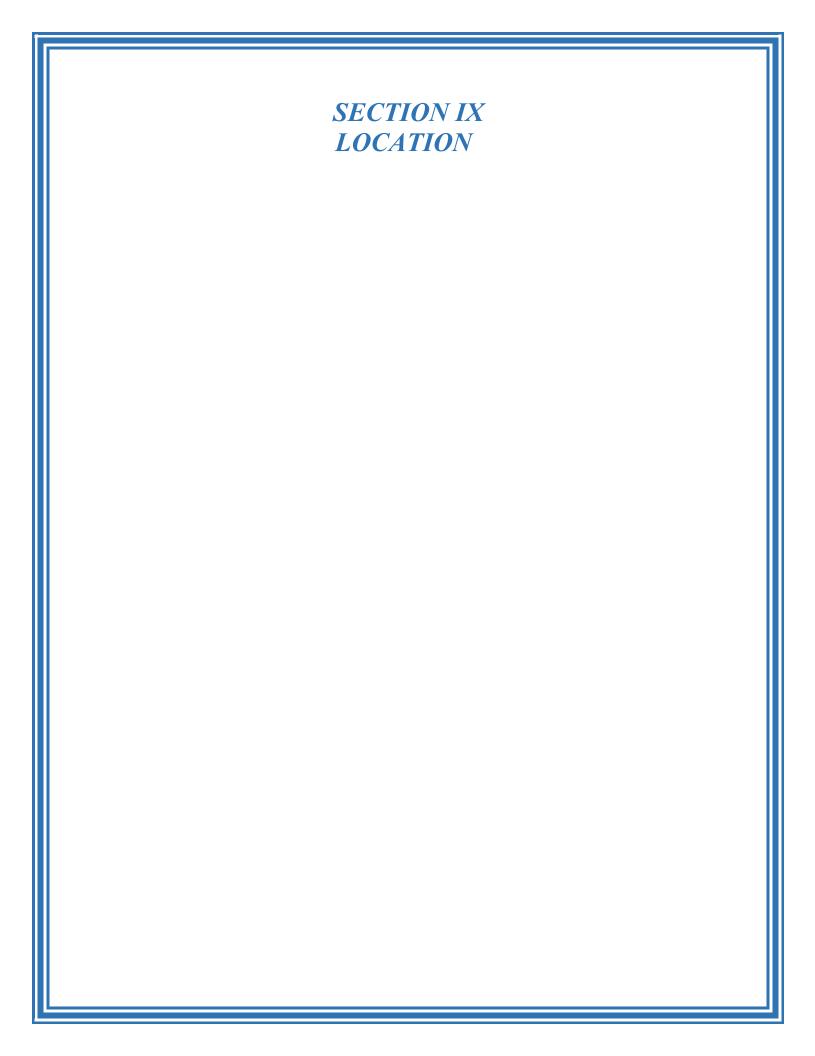
For many of our park and recreational projects located within the incorporated limits of a city, the county maintains jurisdiction over local permitting. Or we are working for a county and their park

property is located within the jurisdiction of the city. Yet a third example is working for a county and the county is required to self-permit the project as they are the local jurisdiction. In these examples we must abide by the governing authority and process site development approvals accordingly. The keys to success are education and communication.



VIII. VOLUME OF WORK

The total amount of payments received from Charlotte County within twenty-four months is \$2,096,379.



IX. LOCATION

A. OFFICE LOCATIONS

Coastal Engineering Consultants, Inc.

28421 Bonita Crossings Blvd. Bonita Springs, Florida 34135 Telephone: (239) 643-2324 Fax: (239) 643-1143

Internet:http://www.coastalengineering.com

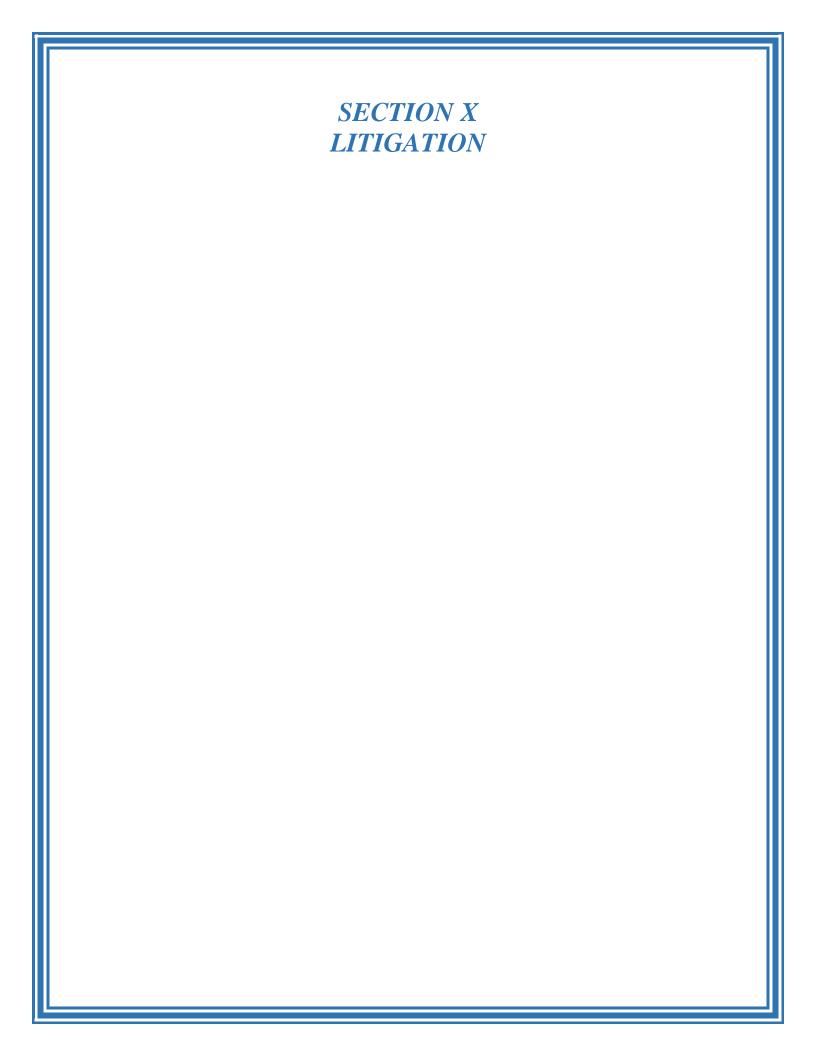
Contact: Michael T. Poff, P.E., President

mpoff@cecifl.com

B. RESPONSIVENESS

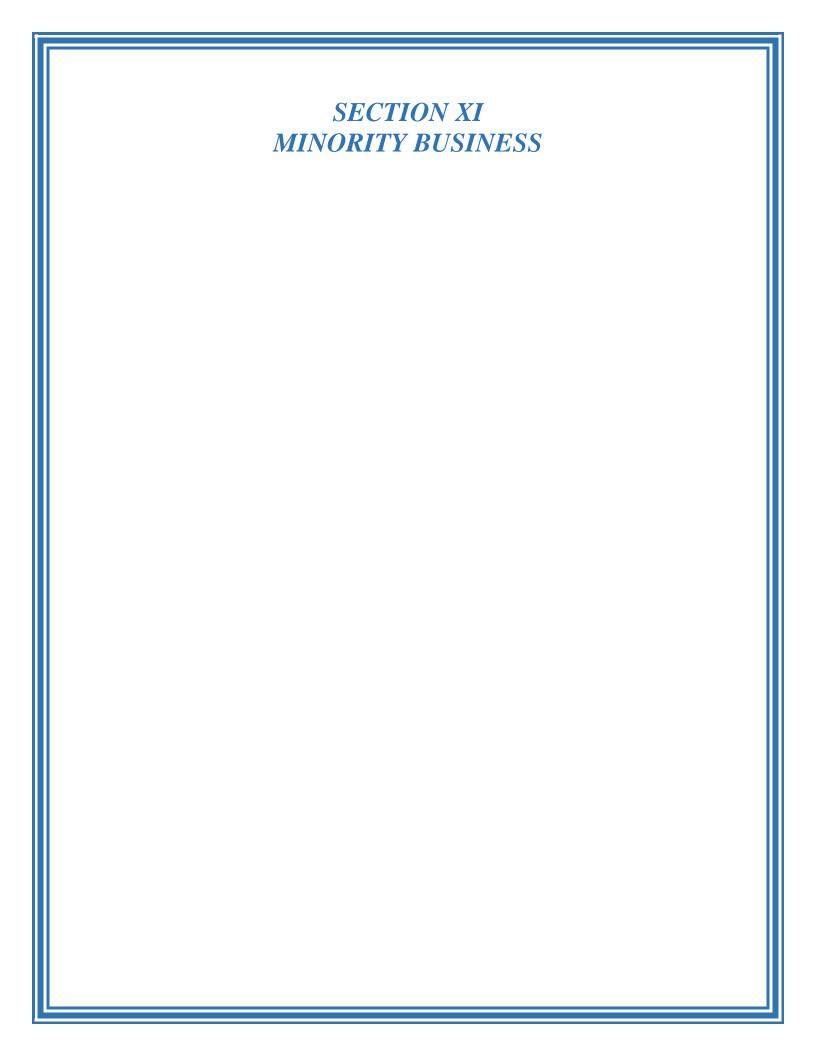
CEC's office is located in Bonita Springs Florida and has been established since 1977. While we are not "local" by our address, Charlotte County is our firm's number one client in Florida. We are actively working for the County on twenty-two (22) coastal, marine and environmental projects on your behalf, and we consider ourselves "local."

We have developed positive relationships with the areas' residents, environmental organizations, and agency staff, and have established a **level of trust** for which to build on as the projects develop and advance into the implementation stages. CEC has the **local presence by virtue of our active projects with the County** necessary to provide **timely and cost-effective** services. CEC has an excellent track record of completing tasks on schedule and within budget.



X. STATEMENT OF LITIGATION

CEC has not been involved in any litigation in the last five years.



XI. MINORITY BUSINESS

Although CEC is not Minority Business, we strongly support equal opportunity employment.