

Design Services for Thomas Street Stormwater Pump Station

City of Delray Beach

RFQ No. 2020-011 Project No. 18-017

February 13, 2020



Prepared By

MOCK • ROOS

CONSULTING ENGINEERS

Celebrating
65 YEARS
1954-2019

THOMAS STREET STORMWATER PUMP STATION

SECTION 10: SOLICITATION SUMMARY

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

The City of Delray Beach
100 NW 1st Street
Delray Beach, FL 33444

PURCHASING DEPARTMENT

SOLICITATION SUMMARY**IMPORTANT NOTICE**

The information you provide on this page will be read aloud at the PUBLIC OPENING for this Solicitation. It is VERY IMPORTANT that the summary information you provide below is exactly the same information contained in your Proposal. If subsequent to the opening of Proposals, the City determines that the information contained in the electronic version of your Proposal is different from the information on this Solicitation Summary, the City reserves the right to deem your Proposal NON-RESPONSIVE and remove your Proposal from further evaluation and consideration for contract award.

PROPOSAL INFORMATION

Proposal Number: RFQ No. 2020-011

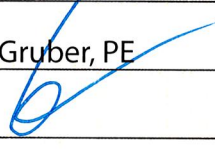
Title: Design Services for Thomas Street Stormwater Pump Station

Due Date and Time: February 13, 2020 by 2:00 p.m., ET

Name of Proposer: Mock•Roos

Address: 5720 Corporate Way, West Palm Beach, FL 33407

Contact Person: Garry Gruber, PE

Authorized Signature: 

Date: February 13, 2020

By signing and submitting this Solicitation Summary, the Proposer affirms that the information provided above is an exact and correct summary of the information contained in the electronic version of the Proposer's Proposal to the City of Delray Beach.

THIS SOLICITATION SUMMARY MUST BE SIGNED AND INCLUDED AS AN ORIGINAL HARDCOPY IN THE ENVELOPE CONTAINING YOUR PROPOSAL OR SIGNED AND UPLOADED WITH YOUR SECURE ELECTRONIC PROPOSAL SUBMITTAL THROUGH WWW.BIDSYNC.COM.

END OF SECTION 10

Tab 1. Introduction

Cover Letter 3

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Cover Letter

MOCK•ROOS CONSULTING ENGINEERS

Dear Selection Committee Member:

Mock•Roos recently celebrated its 65th anniversary serving Palm Beach County municipalities and water management agencies. We absolutely know what it takes to successfully complete local stormwater projects. We have been doing it for decades.

Through our 65 years of providing local coastal consulting engineering services, we have earned our reputation as being one of the top stormwater pump station and water control structure consultants in South Florida; delivering cost conscious, operator-friendly and low maintenance projects that reflect the character of the community. We are proud to state that we have a total of over 150 stormwater pumps in operation throughout south Florida. We have successfully provided professional services for:

- 100+ water control structures, new and rehabilitation, ranging in size up to 3,000 CFS
- 40 stormwater pump station projects, ranging in size from 10,000 gallons per minute (GPM) to over 585,000 GPM (1,300 CFS), since 2000
- Over 85 total stormwater pump station projects throughout Florida
- Hundreds of Miles of hydraulic and hydrologic modeling and design of conveyance systems

We believe that it is important to differentiate between a consultant's stormwater and wastewater pump station experience. Stormwater pump stations are very different in nature, design and purpose. The proposed 20,000 GPM stormwater pumps you are considering for this project each will have the ability to drain a 15,000-gallon residential pool within 45 seconds. Whereas a typical larger wastewater pump station pumping capacity will likely vary between 300 GPM to 1,000 GPM. While we have design 100s of wastewater pump stations, we possess a unique expertise for the specific experience the City is requesting assistance with. In fact, in our response, we offer 14 relevant stormwater pump station "reference projects" completed for 6 different clients, one of which is our current design authorization for your Marine Way Stormwater Pump Station.

Mock•Roos also has the necessary expertise with hydraulic and hydrologic (H&H) and Computational Fluid Dynamics (CFD) modeling. Our expertise with CFD modeling will be vital to appropriately evaluating the proposed trench style wetwell. While this wetwell configuration is likely necessary given the site constraints and flow requirements, its precise design requirements to meet Hydraulic Institute (HI) standards is absolute. We will perform the critical CFD modeling simulations to evaluate potential changes in relative axial velocity deviation (RAVD) and pre-swirl at the pump suction, which will allow us to accurately coordinate with pump manufacturers to get their recommendations.

In addition, we offer a local team of subconsultants based on their demonstrated excellence on similar projects as well as on previous collaborations with Mock•Roos. Key subconsultants are: Kimley-Horn, Wantman Group, RADISE International, Smith Electrical Engineering and Dennis J. Leavy & Associates. Our team offers an extensive resource pool of local professionals talented in water resources, modeling, geotechnical and construction materials testing, and civil, mechanical, structural and electrical engineering. We will draw on our team's experienced local engineers and managers to complete this project.

From a technical standpoint, our end game is simple: deliver a successful project, on schedule and within budget, while meeting all project goals! We have proven that we can achieve these results by creating solutions in collaboration with City staff through integrated and holistic approaches while providing a lasting solution with value. Key to this is our past experiences with and our flexibility in our designs.

From a human standpoint, we fully understand that there is an over-arching concern that the project be designed so that the construction work can be performed with the least amount of disruption possible for the neighbors and residents of the area. We understand that coordination with both the neighborhood as a whole and with individual property owners will be necessary to complete a successful project. It will be our goal to keep the neighborhood supportive of the project, through even the most difficult of construction circumstances.

We invite you to review our response carefully. We believe that our team has the most qualified, local specialized experts necessary to provide the City with full-service engineering design and construction management services throughout this contract. Our team brings the knowledge, local horsepower, qualifications and relevant past project experience that is best suited to meet the City's needs.

In closing, we commit to you that services provided under this contract will be a top priority for us and that the key personnel highlighted in our response will participate in your projects. We will be fully accessible throughout the project and key staff members will physically attend all meetings.

We stand ready to continue to serve you and we look forward to your positive response and the opportunity to continue to serve you. Please feel free to contact me at 561-683-3113 x 293 (or garry.gruber@mockroos.com) if you have any questions or require any additional information.

Principal Contract: Garry Gruber, PE
Address: 5270 Corporate Way
West Palm Beach, FL 33407
Phone #: 561-683-3113 x 293
Fax #: 561-478-7248
Email: garry.gruber@mockroos.com
Website: www.mockroos.com

Sincerely,
Mock•Roos



Garry Gruber, PE
Senior Vice President

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Tab 3. Minimum Qualifications

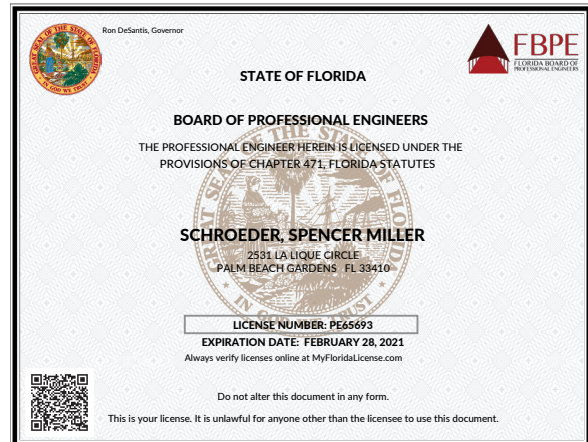
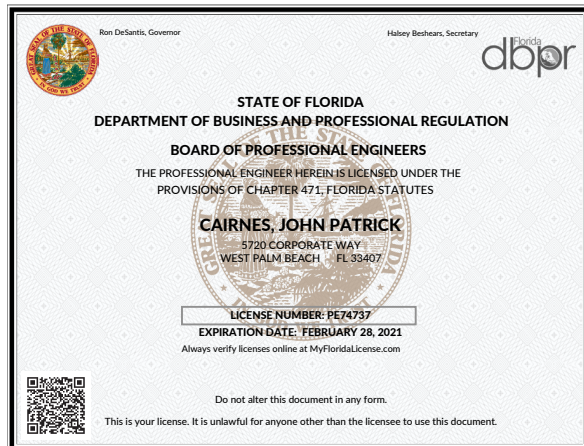
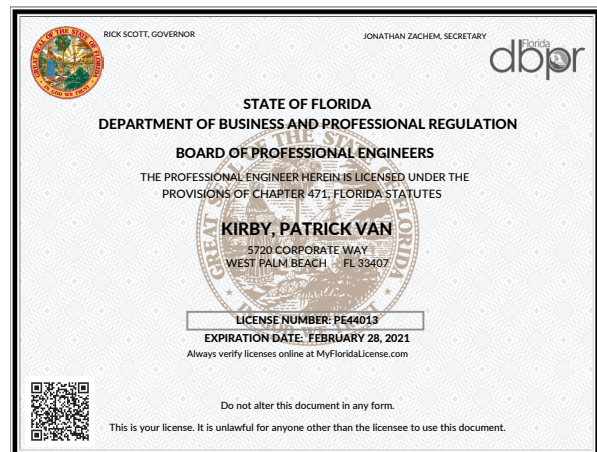
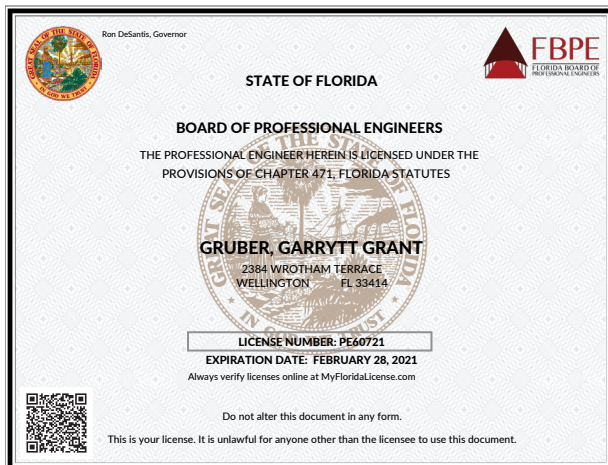
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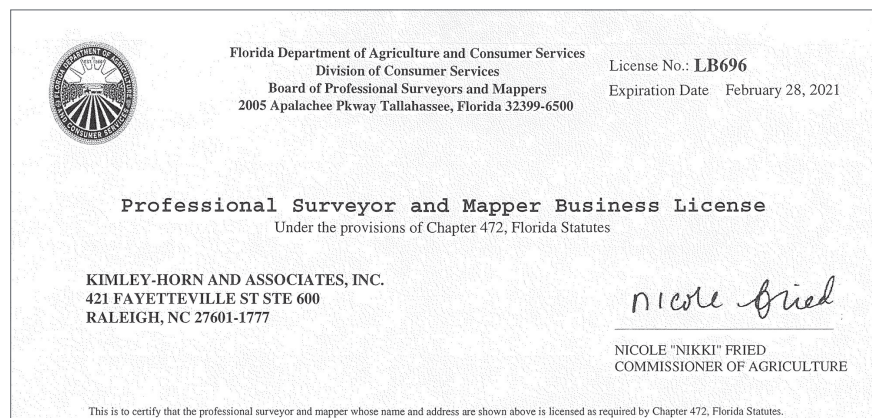
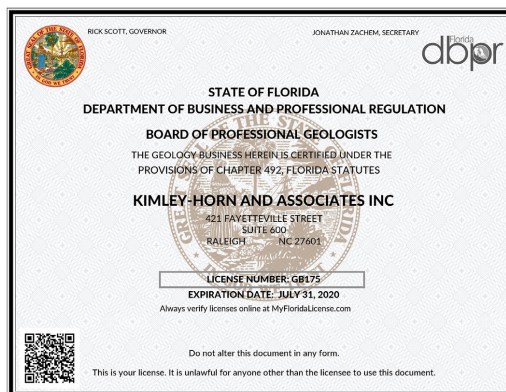
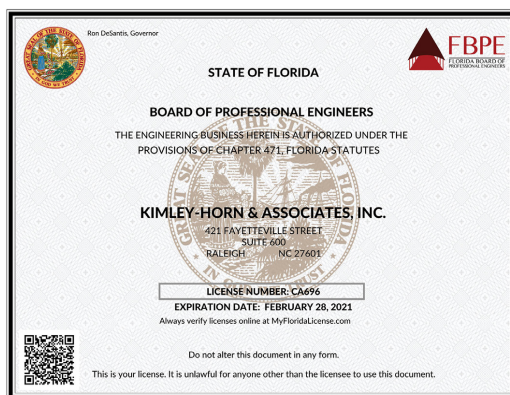
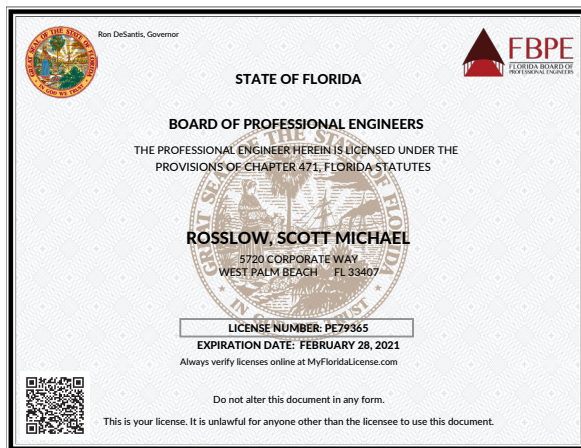
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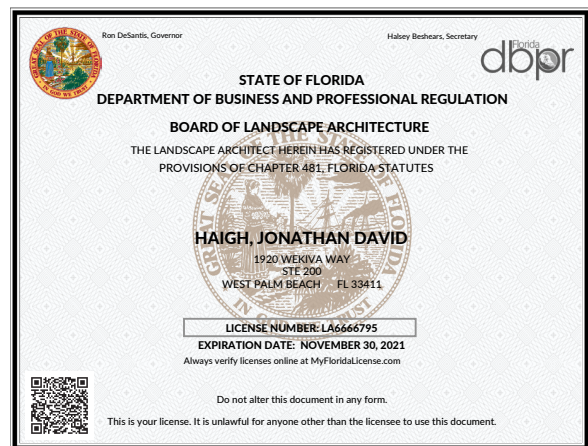
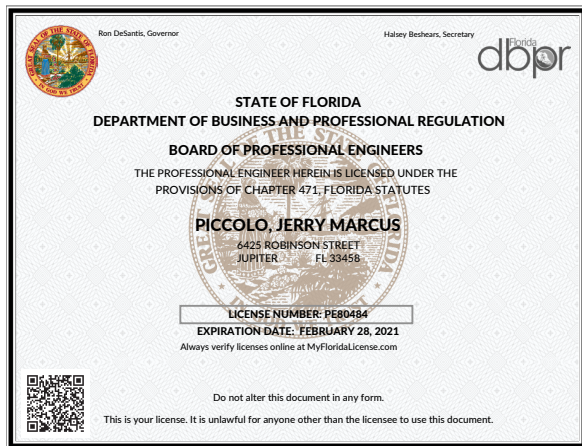
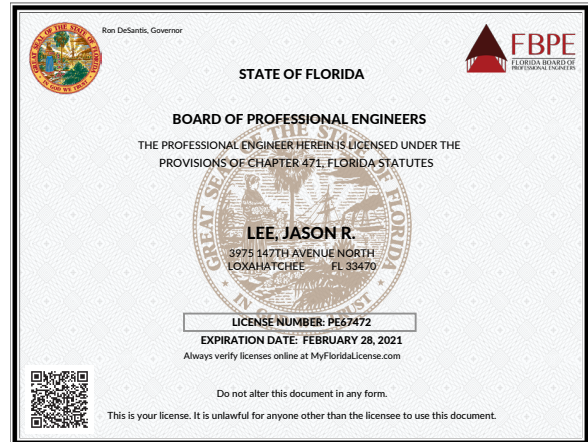
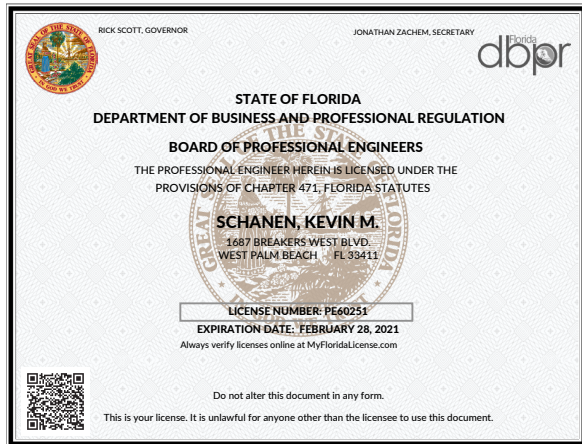
A. DBPR License

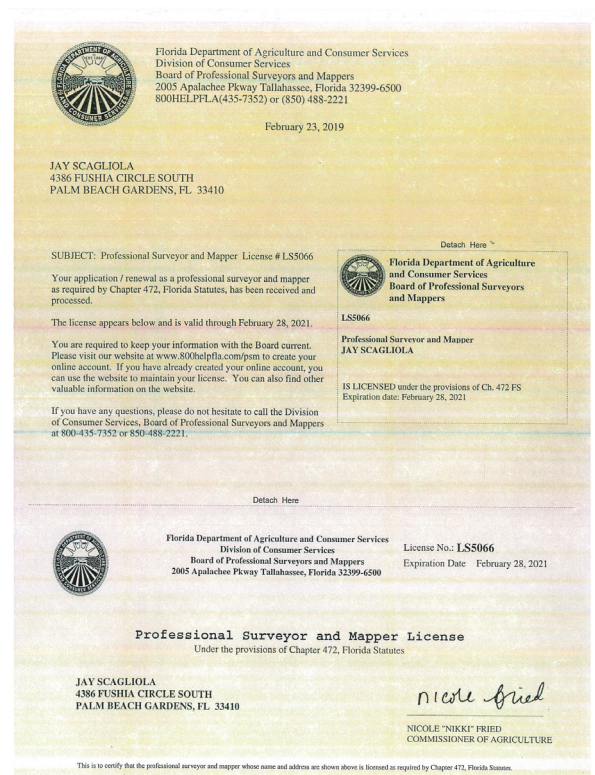
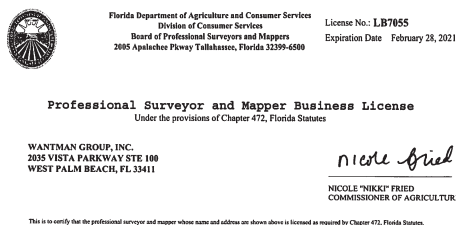
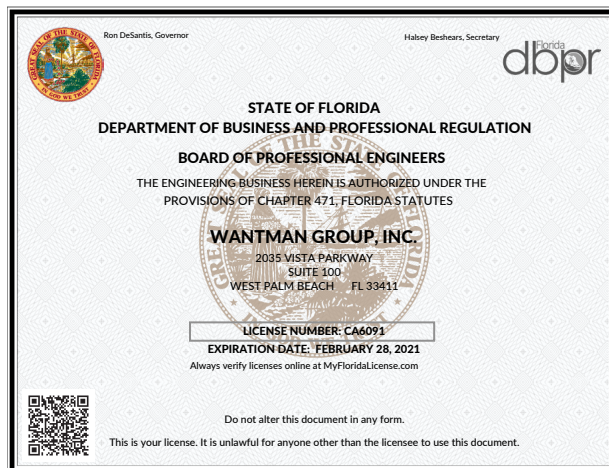
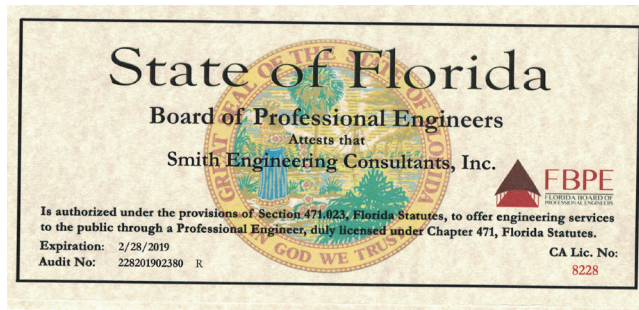


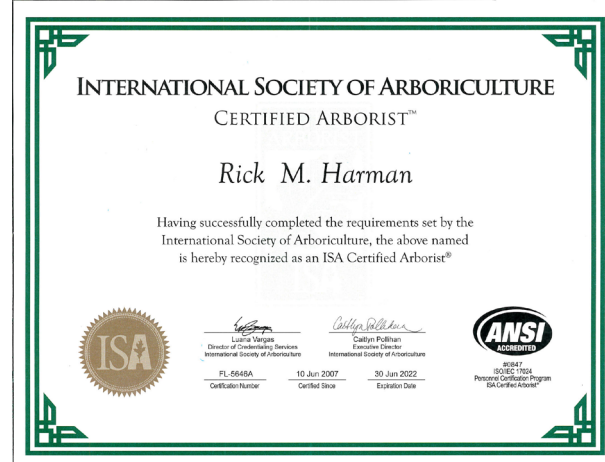
B. Engineering Licenses

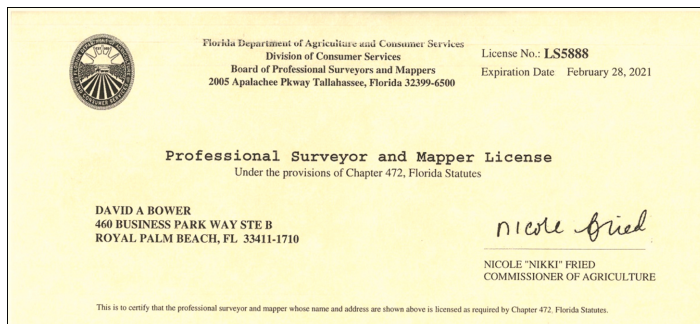
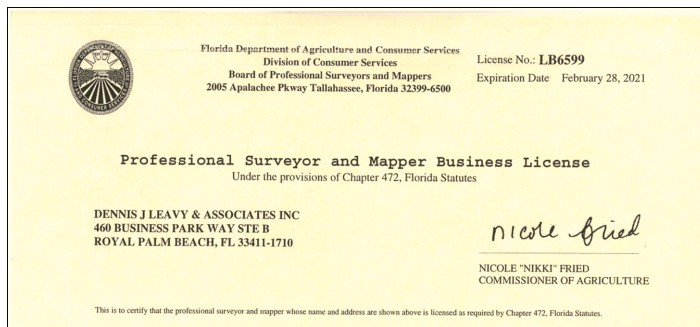
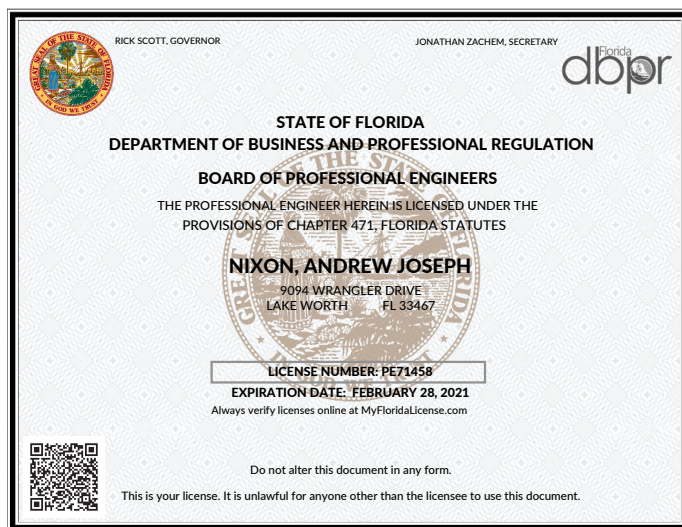
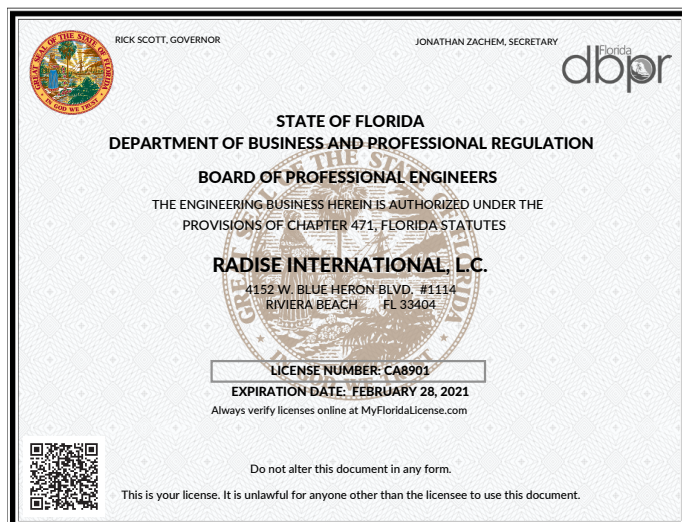












C. Stormwater Pump Station Design Project Experience

Project 1: Marine Way Stormwater Pump Station

Capacity: 54,000 GPM

Owner: Delray Beach

Contact: Issac Covner (Delray Beach) kovner@mydelraybeach.com, 561-243-7341

Brett Olford (WGI), Brett.Oldford@wginc.com, 561-839-1715

Location: Delray Beach, FL

Dates of Project: 2/2018-current

Types of Work: ☒ Stormwater Pump Station Design

☒ SCADA Systems

☒ Topographic Survey

☒ Electrical Systems

☒ Stormwater Pump Station New Design

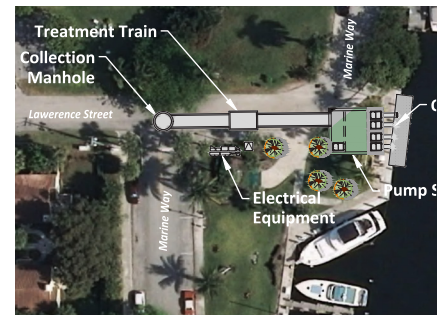
☐ Stormwater Pump Station Rehabilitation

☐ Construction Services Provided

☒ Upgrading existing Storm drain pipes, inlets/manholes

☒ Coordination with USACOE and/or SFWMD

☒ Coordination with Homeowners/Stakeholders



Project 2: SFWMD S-140 Stormwater Pump Station

Capacity: 585,000 GPM

Owner: South Florida Water Management District

Contact: Tim Carter, PE, Project Manager,
tcarter@sfwmd.gov, 561-951-2543

Location: Broward County, FL

Dates of Project: 1/2015-current

Types of Work: ☒ Stormwater Pump Station Design

☒ SCADA Systems

☒ Topographic Survey

☒ Electrical Systems

☐ Stormwater Pump Station New Design

☒ Stormwater Pump Station Rehabilitation

☒ Construction Services Provided

☐ Upgrading existing Storm drain pipes, inlets/manholes

☒ Coordination with USACOE and/or SFWMD

☐ Coordination with Homeowners/Stakeholders



Project 3: Stormwater Pump Station and Control Structure No. 9

Capacity: 40,000 GPM

Owner: Lake Worth Drainage District

Contact: Tony LasCasas, PE, Director of Facilities & Maintenance
alascasas@lwdd.net, 561-498-5363

Location: Boynton Beach, FL

Dates of Project: 11/2017-current

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☐ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 4: D-14 Stormwater Pump Station

Capacity: 129,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach, FL

Dates of Project: 3/2017-9/2019

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☒ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 5: D-8 Stormwater Pump Station

Capacity: 75,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach, FL

Dates of Project: 12/2019-current

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☐ Construction Services Provided
 - ☒ Upgrading existing Storm drain pipes, inlets/manholes
 - ☐ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 6: D-17 Stormwater Pump Station

Capacity: 34,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach, FL

Dates of Project: 4/2019-2/2019

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☐ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☐ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 7: D-2 Stormwater Pump Station

Capacity: 65,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach

Dates of Project: 2/2018-2/2019

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☐ Construction Services Provided
 - ☒ Upgrading existing Storm drain pipes, inlets/manholes
 - ☐ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 8: Stormwater Pump Station No. 5

Capacity: 39,000 GPM

Owner: City of Sunrise

Contact: Guarionex De Los Santos, Project Manager
GDeLosSantos@Sunrisefl.gov, 954-888-6077

Location: Sunrise, FL

Dates of Project: 1/2013-5/2018

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☐ Construction Services Provided
 - ☒ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders

Project 9: C-17 Stormwater Pump Station

Capacity: 50,000 GPM

Owner: City of West Palm Beach

Contact: Poonam Kalkat, PhD, Director of Utilities
pkalkat@wpb.org, 561-822-2284

Location: West Palm Beach, FL

Dates of Project: 9/2013-6/2018

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☒ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 10: D-4 Stormwater Pump Station

Capacity: 88,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach, FL

Dates of Project: 3/2015-7/2018

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 11: D-10 Stormwater Pump Station

Capacity: 94,000 GPM

Owner: Town of Palm Beach

Contact: Patricia Strayer, PE, Town Engineer
pstrayer@townofpalmbeach.com, 561-227-7056

Location: Palm Beach

Dates of Project: 3/2015-7/2018

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☐ Stormwater Pump Station New Design
 - ☒ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 12: Sunrise Stormwater Pump Station No. 2

Capacity: 50,000 GPM

Owner: City of Sunrise

Contact: Guarionex De Los Santos, Project Manager
GDeLosSantos@Sunrisefl.gov, 954-888-6077

Location: Sunrise, FL

Dates of Project: 7/2010-3/2015

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 13: Sunrise Stormwater Pump Station No. 3

Capacity: 16,000 GPM

Owner: City of Sunrise

Contact: Guarionex De Los Santos, Project Manager
GDeLosSantos@Sunrisefl.gov, 954-888-6077

Location: Sunrise, FL

Dates of Project: 1/2013-3/2015

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



Project 14: West Palm Beach Stormwater Pump Station No. 2

Capacity: 202,000 GPM

Owner: City of West Palm Beach

Contact: Poonam Kalkat, PhD, Director of Utilities
pkalkat@wpb.org, 561-822-2284

Location: West Palm Beach, FL

Dates of Project: 8/2011-10-2014

- Types of Work:
- ☒ Stormwater Pump Station Design
 - ☒ SCADA Systems
 - ☒ Topographic Survey
 - ☒ Electrical Systems
 - ☒ Stormwater Pump Station New Design
 - ☐ Stormwater Pump Station Rehabilitation
 - ☒ Construction Services Provided
 - ☐ Upgrading existing Storm drain pipes, inlets/manholes
 - ☒ Coordination with USACOE and/or SFWMD
 - ☒ Coordination with Homeowners/Stakeholders



D. Conflict of Interest

Please see the *Conflict of Interest Disclosure Form* in Tab 8 - Attachments.

ARCHITECT - ENGINEER QUALIFICATIONS

PART I - CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (CITY AND STATE)

Design Services for Thomas Street Stormwater Pump Station
Palm Beach County, FL

2. PUBLIC NOTICE DATE

January 22, 2020

3. SOLICITATION OR PROJECT NUMBER

RFQ No.: 2020-011 Project No.: 18-017

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Garry Gruber, P.E., Senior Vice President

5. NAME OF FIRM

Mock, Roos & Associates, Inc.

6. TELEPHONE NUMBER

561-683-3113

7. FAX NUMBER

561-478-7248

8. EMAIL ADDRESS

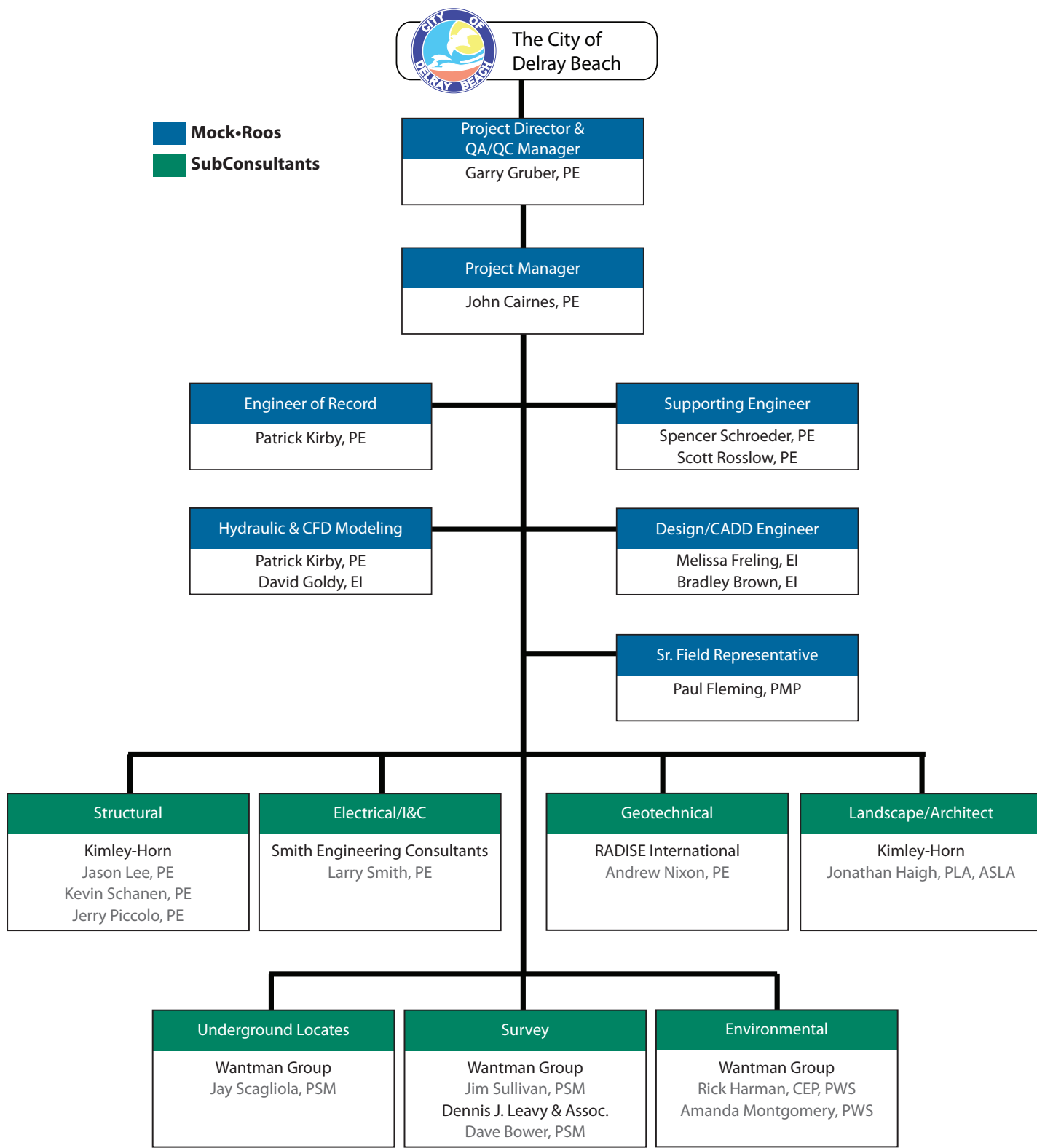
garry.gruber@mockroos.com

C. PROPOSED TEAM

(COMPLETE THIS SECTION FOR THE PRIME CONTRACTOR AND ALL KEY SUBCONTRACTORS.)

	CHECK			9. FIRM NAME	10. ADDRESS	11. ROLE IN THE CONTRACT
	PRIME	J-V	SUBCON-TRACTOR			
a.	X			Mock•Roos <input type="checkbox"/> CHECK IF BRANCH OFFICE	5720 Corporate Way West Palm Beach, FL 33407	Project Engineer
b.			X	Kimley-Horn <input type="checkbox"/> CHECK IF BRANCH OFFICE	1920 Wekiva Way, Suite 200 West Palm Beach, FL 33411	Structural, Landscape Architect
c.			X	Smith Engineering Consultants <input type="checkbox"/> CHECK IF BRANCH OFFICE	2161 Palm Beach Lakes Blvd #312, West Palm Beach, FL 33409	Electrical Engineering
d.			X	Wantman Group <input type="checkbox"/> CHECK IF BRANCH OFFICE	2035 Vista Parkway West Palm Beach, FL 33411	Environmental, Underground Utility Locates, Surveying
e.			X	Radise International <input type="checkbox"/> CHECK IF BRANCH OFFICE	4152 W Blue Heron Blvd #228 Riviera Beach, FL 33404	Geotechnical
f.			X	Dennis J. Leavy <input type="checkbox"/> CHECK IF BRANCH OFFICE	460 Business Park Way Royal Palm BEach, FL 33411	Surveying
g.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
h.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
i.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		

D. ORGANIZATIONAL CHART



N:\RFPs\Delray Beach\0005.00 Thomas St SWPS 2020-011\Tab 3. Minimum Qualifications.indd

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



12. NAME Garry G. Gruber, P.E.		13. ROLE IN THIS CONTRACT Project Director & QA/QC Manager		14. YEARS EXPERIENCE A. TOTAL 20 B. WITH CURRENT FIRM 20	
<p>Garry is a mechanical engineer with over 20 years of Project Management experience with Mock•Roos. Garry has the proven ability to manage multi-discipline and multi-million dollar construction projects and has played a key role in the design and construction of over \$325 million worth of infrastructure improvements on many premier projects in Palm Beach County.</p> <p>Garry is Mock•Roos' lead project/construction manager with experience on almost 40 Stormwater Pump Stations ranging in capacity from 7,900 to 585,000 GPM and over 125 Wastewater and Water Supply Pump Stations ranging in capacity from 100 to 14,000 GPM.</p>					
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) Bachelor of Science in Mechanical Engineering, 1996 University of Notre Dame		17. CURRENT PROFESSIONAL REGISTRATION Florida Professional Engineer, No. 60721			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Notre Dame Monogram Club, American Society of Civil Engineers, National Youth Sports Coaches Association					

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Marine Way Stormwater Pump Station Delray Beach, FL		ongoing	ongoing
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Director of the conceptual and final design of the 54,000 GPM (ultimate) stormwater pump station that will provide vital protection to the flood-plagued Marina Way and Delray Beach Marina Park area. Project includes a water quality treatment train, backflow prevention devices, back-up power and SCADA.			
D-4/D-10 Stormwater Pump Station Rehabilitations Palm Beach, FL		ongoing	ongoing
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project/Construction Director for the construction of the \$7.6 million project to renovate two of the Town's large stormwater pump stations.			
D-6/D-7 Stormwater Pump Station Rehabilitations Palm Beach, FL		2012	2012
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Director for the design/construction of the \$6.0 million project to renovate the Town's Stormwater Pump Stations - each 114,000 GPM.			
Control Structure No. 2 Replacement West Palm Beach, FL		2014	2014
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Director for the design/construction of this \$5.5 million 202,000 GPM Stormwater/Water Supply Pump Station replacement.			
Master Wastewater Pump Station Replacement Lake Worth, FL		2007	2007
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project/Construction Manager for the design/construction of this \$7.3 million replacement of a 20 MGD wastewater pump station. Construction services assist Lake Worth avoid a potential \$1 million contractor claim over contractor's issues with dewatering.			

N:\RFPs\Delray Beach\0005.00 Thomas St SWPS 2020-011\Tab 3. Minimum Qualifications.indd

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)



MOCK•ROOS

CONSULTING ENGINEERS

12. NAME John P. Cairnes, P.E.		13. ROLE IN THIS CONTRACT Project Manager		14. YEARS EXPERIENCE	
				A. TOTAL 12	B. WITH CURRENT FIRM 12

John Cairnes will be our Project Manager for this project. In his 12 years with Mock•Roos, John has gained tremendous design and construction administration experience on over \$200 million worth of infrastructure improvements in Palm Beach County.


John has design and construction experience on over 20 Stormwater Pump Stations ranging in capacity from 14,000 to 585,000 GPM and over 100 Wastewater and Water Supply Pump Stations (100 to 7,000 GPM). John's Town of Palm Beach pump station experience includes D-2, D-4, D-6, D-7, D-10, D-12, and D-14 Stormwater Pump Stations and the 21 Wastewater Ejector

15. FIRM NAME AND LOCATION (City and State)
Mock, Roos & Associates, Inc., West Palm Beach, Florida

16. EDUCATION (Degree and Specialization)
Bachelor of Science in Civil Engineering, 2007
University of Central Florida

17. CURRENT PROFESSIONAL REGISTRATION
Florida Professional Engineer, No. 74737

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
American Society of Civil Engineers




19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Marine Way Stormwater Pump Station Delray Beach, FL		ongoing	ongoing
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Manager for the conceptual and final design of the 54,000 GPM (ultimate) stormwater pump station that will provide vital protection to the flood-plagued Marina Way and Delray Beach Marina Park area. Project includes a water quality treatment train, backflow prevention devices, back-up power and SCADA.		
D-14 Stormwater Pump Station Rehabilitations Palm Beach, FL		2019	2019
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Manager for the construction of the \$7.6 million project to renovate two of the Town's 130,000 GPM stormwater pump stations.		
PBCWUD Wastewater Pump Station Rehabilitation County-Wide, FL		ongoing	ongoing
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Manager for the design and construction for the rehabilitation of 60 total PBCWUD high-priority wastewater pump stations.		
Clear Lake Pump Station and Divide Structure West Palm Beach, FL		2013	2013
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Manager for the design/construction of this \$5.0 million 45,000 GPM surface water supply pump station.		
D-6/D-7 Stormwater Pump Station Rehabilitations Palm Beach, FL		2012	2012
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Manager for the design/construction of the \$6.0 million project to renovate the Town's Stormwater Pump Stations - each 114,000 gpm.		

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



12. NAME Patrick V. Kirby, P.E.	13. ROLE IN THIS CONTRACT EOR/Hydraulic & CFD Modeling	14. YEARS EXPERIENCE A. TOTAL 33 B. WITH CURRENT FIRM 33	
<p>Pat is an agricultural engineer with over 33 years experience at Mock•Roos and has extensive experience in the design, permitting and construction of agricultural, environmental and civil projects, including the design and construction of over 60 Stormwater Pump Stations ranging in capacity from 15,000 to 585,000 gallon per minute (GPM), as well as over 50 gated water control structures.</p> <p>He has a tremendous hydraulic/hydrologic and CFD modeling experience throughout Palm Beach County.</p>			
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida			
16. EDUCATION (Degree and Specialization) Bachelor of Science in Engineering (Agricultural Engineering), 1985, University of Florida	17. CURRENT PROFESSIONAL REGISTRATION Florida Professional Engineer, No. 44013		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Agricultural & Biological Engineers, Florida Engineering Society, American Water Resources Association			

19. RELEVANT PROJECTS			
a.	(1) TITLE AND LOCATION (City and State) Marine Way Stormwater Pump Station Delray Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of Record for the conceptual and final design of the 54,000 GPM (ultimate) stormwater pump station that will provide vital protection to the flood-plagued Marina Way and Delray Beach Marina Park area. Project includes a water quality treatment train, backflow prevention devices, back-up power and SCADA.		
b.	(1) TITLE AND LOCATION (City and State) LWDD Control Structure No. 9 Replacement Palm Beach County, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of Record for the replacement of the existing control structure that has 3 - 12 foot radial gates and a pumping capacity of 40,000 GPM		
c.	(1) TITLE AND LOCATION (City and State) Stormwater Pump Station Nos. 2, 3, 5, 7 and 8 Projects Sunrise, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2016	CONSTRUCTION (if applicable) 2016
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of Record for numerous stormwater pump station rehabilitation and replacement projects ranging in size from 17,000 GPM to 200,000 GPM.		
d.	(1) TITLE AND LOCATION (City and State) D-16 Stormwater Pump Station Palm Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the design/construction of this 32,000 GPM Stormwater Pump Station located at the end of Jungle Road.		
e.	(1) TITLE AND LOCATION (City and State) SFWMD S-140 Pump Station Renovations SFWMD	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of Record for the \$11 million renovation design/construction of this existing 585,000 GPM Stormwater Pump Station.		

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



12. NAME Spencer Schroeder, P.E.		13. ROLE IN THIS CONTRACT Supporting Engineer		14. YEARS EXPERIENCE	
				A. TOTAL 17	B. WITH CURRENT FIRM 17
<p>Spencer has been with Mock•Roos for over 17 years and will be a supporting engineer. He has vast experience in the design, permitting and construction of stormwater, water, wastewater, environmental, and land development projects.</p> <p>Spencer's project experience includes over 50 pipeline projects (up to 96-inch in diameter), wastewater pump stations up to 135 MGD in capacity and alternative installation method projects, such as micro tunnelling projects up to 60-inch in diameter and over 15 stormwater pump stations up to 202,000 GPM. Spencer also has tremendous hydrologic/hydraulic and CFD modeling experience throughout Palm Beach County.</p>					
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) Bachelor of Science in Civil Engineering, 2002 University of Florida		17. CURRENT PROFESSIONAL REGISTRATION Professional Engineer Florida No. 65693			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) National Society of Professional Engineers					

19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
D-8 Stormwater Pump Station Rehab Palm Beach, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		ongoing	
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Design Engineer for the full rehabilitation of the D-8 Stormwater Pump Station which is a 75,000 GPM station located on Country Club Road and discharges into the Intracoastal Waterway.		
	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Stormwater Pump Station No. 8 Evaluation Sunrise, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2015	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Design Engineer for the study, evaluation and recommendation report evaluating Sunrise's largest stormwater pump station, 200,000 GPM in capacity.		
	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Stormwater Pump Station No. 9 Wellington, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2011	2011
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Design Engineer for the design, permitting and construction services for the 90,000 GPM stormwater pump station. This station is the inflow to the 365 AC stormwater retention area known as Section 24.		
	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Stormwater Pump Station Evaluation Palm Beach County, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2016	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer for the assessment and CIP development of all of the Town of Palm Beach's Stormwater Pump Stations. The Town owns and operates 13 stations ranging in capacity up to 129,000 GPM.		
	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Limestone Creek Water and Wastewater System Improvements Palm Beach County, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2008	2008
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer for the installation of 6,700 feet of 8-inch gravity main discharging into an 8 foot diameter, 26 foot deep lift station. The lift station discharges through 1,800 feet of 6-inch forcemain into an existing gravity collection system. Project also included the installation of 1,600 feet of 8-inch potable watermain.		
	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		

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



12. NAME Scott Rosslow, P.E.		13. ROLE IN THIS CONTRACT Supporting Engineer		14. YEARS EXPERIENCE	
				A. TOTAL 10	B. WITH CURRENT FIRM 10
<p>Scott Rosslow will be a Supporting Engineer/Construction Engineer for this project. He has been a Project Engineer with Mock•Roos for over 10 years. He has tremendous experience with the design, permitting and construction administration of stormwater, water and wastewater, environmental, pump station and street improvement projects.</p> <p>Scott has experience on over 15 Stormwater Pump Stations ranging in capacity from 16,000 to 202,000 GPM and over 25 Wastewater and Water Supply Pump Stations.</p>					
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) Bachelor of Science in Agricultural Engineering, 2009 University of Florida		17. CURRENT PROFESSIONAL REGISTRATION Professional Engineer Florida No. 79365			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Qualified Stormwater Management Inspector					

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Palm Beach County L-2 Stormwater Pump Station Palm Beach County, FL		2012	2012
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the \$3.5 million 150,000 GPM Stormwater Pump Station. <input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
Ejector Station Upgrades/Forcemain Improvements Palm Beach, FL		2013	2013
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for \$4.3 million improvements at 21 different streets thru-out the Town. Construction was completed on time and budget over 2 seasons. Included \$150,000 paving improvements on various streets associated with the Ejector Station. <input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
D-4/D-10 Stormwater Pump Station Rehabilitations Palm Beach, FL		2016	2016
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the construction of the \$7.6 million project to renovate two of the Town's large stormwater pump stations. <input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
D-6/D-7 Stormwater Pump Station Rehabilitations Palm Beach, FL		2012	2012
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the design/construction of the \$6.0 million project to renovate the Town's Stormwater Pump Stations - each 114,000 GPM. <input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
Wastewater Pump Station Nos. 3, 8 and 10 Lake Worth, FL		2018	2018
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for rehabilitation of Wastewater Pump Station Nos. 3 and 10 and replacement of Wastewater Pump Station No. 8. <input checked="" type="checkbox"/> Check if Project Performed with Current Firm		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)			MOCK•ROOS CONSULTING ENGINEERS	
12. NAME David Goldy	13. ROLE IN THIS CONTRACT H&H & CFD Modeling	14. YEARS EXPERIENCE		
		A. TOTAL 6	B. WITH CURRENT FIRM 3	
<p>David has been a Project Engineer with Mock•Roos for over 3 years (5 years total experience). He has tremendous experience with the design and permitting of stormwater, water and wastewater, and environmental projects. David is proficient in numerous design software, including AutoCAD and ESRI's Arc family of GIS products.</p> <p>David also has extensive H&H modeling experience utilizing ICPR 4. David also has recent CFD modeling experience on several projects</p>				
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida				
16. EDUCATION (Degree and Specialization) BS in Civil Engineering, 2016, Florida Atlantic University	17. CURRENT PROFESSIONAL REGISTRATION			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Civil Engineers				
19. RELEVANT PROJECTS				
(1) TITLE AND LOCATION (City and State) LWDD Control Structure/Pump Station No. 9 Replacement Palm Beach County, FL		(2) YEAR COMPLETED		
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer for replacement of a 1,750 CFS three-gate water control structure. Facility includes two 20,000 GPM water supply pumps and automated trash removal system.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) LWDD Control Structure Flow Curve and Scour Analysis Palm Beach County, FL		(2) YEAR COMPLETED		
		PROFESSIONAL SERVICES 2017	CONSTRUCTION (if applicable) 2017	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer for the development of flow rating curves and downstream scour analysis of 8 major LWDD control structures.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) PBCWUD Lift Station Rehabilitation (60 Stations) Palm Beach County, FL		(2) YEAR COMPLETED		
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the rehabilitation of 60 of PBCWUD high-priority wastewater pump stations. Services include identifying deficiencies at each station and developing contract documents to rehabilitate the stations to meet the County's minimum standards.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) LWDD Canal Hydraulic Model Palm Beach County, FL		(2) YEAR COMPLETED		
		PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable) 2019	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineering Intern for the ICPR4 surface modeling of the District's 51- mile canal system. The project will provide the District with a tool that can be used to evaluate the performance of the District's stormwater conveyance system under various rainfall events.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) SFWMD S-140 Pump Station Improvements Broward County, FL		(2) YEAR COMPLETED		
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (if applicable) 2012	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the \$10.1 million rehab which included improvements to the gates, spillway, trash rack system and fuel systems, operations bridge and back-up power.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		

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



12. NAME Melissa Freling, E.I.	13. ROLE IN THIS CONTRACT Design/CADD Engineer	14. YEARS EXPERIENCE <table border="1"> <tr> <td>A. TOTAL 4</td> <td>B. WITH CURRENT FIRM 4</td> </tr> </table>		A. TOTAL 4	B. WITH CURRENT FIRM 4
A. TOTAL 4	B. WITH CURRENT FIRM 4				
<p>Melissa Freling is a very talented young engineer who is proficient in numerous design software, including AutoCAD Civil 3D. She will be performing the design/CADD duties and will prepare all construction drawings and/or exhibits for the project.</p> <p>Melissa has almost 4 years of design and construction experience with Mock•Roos. She has gained experience with the design and construction in numerous engineering disciplines, including pump stations, pipelines, stormwater facilities, and roadways.</p>					
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) BS in Environmental Engineering, 2014, University of Central Florida	17. CURRENT PROFESSIONAL REGISTRATION				
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Civil Engineers, Qualified Stormwater Management Inspector					


19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Neighborhood Infrastructure Improvements Program Lake Worth, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		ongoing	ongoing
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the \$10 million neighborhood full corridor improvements project. The project(s) included the replacement design of over 25,000 linear feet of 12-inch watermain (up to) and 600 individual water services. Portions of the watermain were installed via pipe bursting method.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Marine Way Stormwater Pump Station Delray Beach, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		ongoing	ongoing
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Director of the conceptual and final design of the 54,000 GPM (ultimate) stormwater pump station that will provide vital protection to the flood-plagued Marina Way and Delray Beach Marina Park area. Project includes a water quality treatment train, backflow prevention devices, back-up power and SCADA.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
D-8 Stormwater Pump Station Rehab Palm Beach, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2012	2012
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Design Engineer for the full rehabilitation of the D-8 Stormwater Pump Station which is a 75,000 GPM station located on Country Club Road and discharges into the Intracoastal Waterway.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
D-14 Stormwater Pump Station Rehabilitation Palm Beach, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2017	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the design/construction of the \$6.0 million project to renovate the Town's each 255 CFS stormwater pump station.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Wastewater Pump Station No. 4 Renovation Lake Worth, FL		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		ongoing	ongoing
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Construction Engineer for the full renovation of this triplex wastewater pump station located within Lake Worth's Municipal Golf Course. The 1,000 gpm triplex pump station will have a new wetwell approximately 25 feet deep.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	

N:\RFPs\Delray Beach\0005.00 Thomas St SWPS 2020-011\Tab 3. Minimum Qualifications.indd

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section E for each key person.)			MOCK•ROOS CONSULTING ENGINEERS			
12. NAME Bradley Brown, E.I.	13. ROLE IN THIS CONTRACT Design/CADD Engineer	14. YEARS EXPERIENCE <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">A. TOTAL 1</td> <td style="width: 50%; border: none;">B. WITH CURRENT FIRM 1</td> </tr> </table>			A. TOTAL 1	B. WITH CURRENT FIRM 1
A. TOTAL 1	B. WITH CURRENT FIRM 1					
<ul style="list-style-type: none"> Over 1 Year of Design and Construction of Various Utility Projects with Mock•Roos In-Field and In-Office Construction Experience with Pipeline and Pump Station Projects Recent WUD Project Experience 						
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida						
16. EDUCATION (Degree and Specialization) BS in Environmental Engineering, 2014, University of Central Florida		17. CURRENT PROFESSIONAL REGISTRATION				
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Civil Engineers, Qualified Stormwater Management Inspector						
19. RELEVANT PROJECTS						
(1) TITLE AND LOCATION (City and State) PBCWUD Lift Station Rehabilitation (60 Stations) Palm Beach County, FL		(2) YEAR COMPLETED				
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the rehabilitation of 60 of PBCWUD high-priority wastewater pump stations. Services include identifying deficiencies at each station and developing contract documents to rehabilitate the stations to meet the County's minimum standards.		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">PROFESSIONAL SERVICES ongoing</td> <td style="width: 50%; border: none;">CONSTRUCTION (if applicable)</td> </tr> </table>			PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable)
PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable)					
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the design/construction of this 32,000 GPM Stormwater Pump Station located at the end of Jungle Road.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm				
(1) TITLE AND LOCATION (City and State) D-16 Stormwater Pump Station Palm Beach, FL		(2) YEAR COMPLETED				
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the design/construction of this 32,000 GPM Stormwater Pump Station located at the end of Jungle Road.		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">PROFESSIONAL SERVICES ongoing</td> <td style="width: 50%; border: none;">CONSTRUCTION (if applicable)</td> </tr> </table>			PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable)
PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable)					
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for the condition assessment and ultimate design of the full replacement of 6 of the Village's wastewater pump stations. Two of the sites were reconfigured to accommodate permanent generators to be installed.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm				
(1) TITLE AND LOCATION (City and State) Wastewater Pump Station No. 5, 39, 41, 44, 74, and Wellington, FL		(2) YEAR COMPLETED				
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for the condition assessment and ultimate design of the full replacement of 6 of the Village's wastewater pump stations. Two of the sites were reconfigured to accommodate permanent generators to be installed.		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">PROFESSIONAL SERVICES 2019</td> <td style="width: 50%; border: none;">CONSTRUCTION (if applicable)</td> </tr> </table>			PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable)
PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable)					
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the \$10 million neighborhood full corridor improvements project. The project(s) included the replacement design of over 25,000 linear feet of 12-inch watermain (up to) and 600 individual water services. Portions of the watermain were installed via pipe bursting method.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm				
(1) TITLE AND LOCATION (City and State) Neighborhood Infrastructure Improvements Program Lake Worth, FL		(2) YEAR COMPLETED				
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the \$10 million neighborhood full corridor improvements project. The project(s) included the replacement design of over 25,000 linear feet of 12-inch watermain (up to) and 600 individual water services. Portions of the watermain were installed via pipe bursting method.		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">PROFESSIONAL SERVICES ongoing</td> <td style="width: 50%; border: none;">CONSTRUCTION (if applicable) ongoing</td> </tr> </table>			PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing					
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the replacement of approximately 5,500 linear feet of 6-inch diameter asbestos cement (AC) pipes which have been in service for approximately 40 years.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm				
(1) TITLE AND LOCATION (City and State) Belvedere Heights Water Main Replacement Phase 1 Palm Beach County, FL		(2) YEAR COMPLETED				
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Engineer for the replacement of approximately 5,500 linear feet of 6-inch diameter asbestos cement (AC) pipes which have been in service for approximately 40 years.		<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">PROFESSIONAL SERVICES ongoing</td> <td style="width: 50%; border: none;">CONSTRUCTION (if applicable) ongoing</td> </tr> </table>			PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing
PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing					

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




12. NAME Paul Fleming, PMP		13. ROLE IN THIS CONTRACT Senior Field Representative		14. YEARS EXPERIENCE A. TOTAL 48 B. WITH CURRENT FIRM 4	
<p>Paul Fleming will be our Senior Field Representative for this project. Paul brings over 46 years of domestic and international experience in construction and project management in project, contract, construction and quality management. Paul has extensive experience in water resources, treatment and distribution, wastewater collection, pumping and treatment, reclaimed water distribution, stormwater collection, retention, control structures and pump stations, public works, transportation systems, land and site development.</p>					
15. FIRM NAME AND LOCATION (City and State) Mock, Roos & Associates, Inc., West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) Executive Program in Project Management, Florida Atlantic University, 2006			17. CURRENT PROFESSIONAL REGISTRATION		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Project Management Institute (PMI), PMI South Florida Chapter, Florida Stormwater Association, American Public Works Association, Florida Water Environmental Association					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
D-4/D-10 Stormwater Pump Station Rehabilitations Palm Beach, FL		PROFESSIONAL SERVICES 2016	CONSTRUCTION (if applicable) 2016		
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Sr. Field Representative for the construction of the \$7.6 million project to renovate two of the Town's large stormwater pump stations.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
C-17 Stormwater/Tidal Capture Pump Station West Palm Beach, FL		PROFESSIONAL SERVICES 2018	CONSTRUCTION (if applicable) 2018		
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Sr. Field Representative for the construction of this \$4.5 million Stormwater/Water Supply Pump Station.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
Stormwater Pump Station Nos. 2 and 3 Sunrise, FL		PROFESSIONAL SERVICES 2016	CONSTRUCTION (if applicable) 2016		
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Sr. Field Representative for numerous stormwater pump station rehabilitation and replacement projects ranging in size up to 200,000 GPM.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
SFWMD S-140 Pump Station Renovations SFWMD		PROFESSIONAL SERVICES ongoing	CONSTRUCTION (if applicable) ongoing		
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Sr. Field Representative for the \$11 million renovation design/construction of this existing 585,000 GPM Stormwater Pump Station.		<input type="checkbox"/> Check if Project Performed with Current Firm			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
Wastewater Pump Station No. 4 Replacement Lake Worth, FL		PROFESSIONAL SERVICES 2018	CONSTRUCTION (if applicable) 2018		
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Sr. Field Representative for the full renovation of this triplex wastewater pump station located within Lake Worth's Municipal Golf Course. The 1,000 gpm triplex pump station will have a new wetwell approximately 25 feet deep.		<input type="checkbox"/> Check if Project Performed with Current Firm			

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




12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE			
Kevin M. Schanen, PE	Structural	A. TOTAL 22	B. WITH CURRENT FIRM 21		
<p>Kevin has 22 years of diverse engineering and project management experience. He is experienced in a wide variety of municipal projects, including structures, utilities, restoration and rehabilitation, and infrastructure improvements. Kevin prepares and performs engineering analysis on a variety of civil engineering projects, including research, design calculations, field work, and observation. Kevin is overseeing numerous municipal infrastructure and utility projects, as well as a major water treatment plant construction.</p>					
<p>15. FIRM NAME AND LOCATION (City and State) Kimley-Horn and Associates, Inc., West Palm Beach, FL</p>					
<p>16. EDUCATION (Degree and Specialization) BS / Civil Engineering / University of Florida / 1998</p>	<p>17. CURRENT PROFESSIONAL REGISTRATION FL / Professional Engineer / 60251 / 2003</p>				
<p>18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Public Works Association (APWA), Florida Engineering Society, Palm Beach County League of Cities (Associate Member)</p>					
19. RELEVANT PROJECTS					
<p>(1) TITLE AND LOCATION (City and State) D-4 Stormwater Pump Station Palm Beach, FL</p>		<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2014</td> <td>CONSTRUCTION (if applicable) 2014</td> </tr> </table>		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014
PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014				
<p>a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE KH was called in to take over and update the plans on a tight timeframe to get the project out to bid for the summer construction season. The Kimley-Horn team studied and modified another consultant's original design to make key changes that saved the Town over \$300,000, eliminating road work, minimizing traffic impacts, and reducing the project construction duration.</p>		<p><input checked="" type="checkbox"/> Check if Project Performed with Current Firm</p>			
<p>(1) TITLE AND LOCATION (City and State) D-10 Stormwater Pump Station Palm Beach, FL</p>		<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2015</td> <td>CONSTRUCTION (if applicable) 2015</td> </tr> </table>		PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable) 2015
PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable) 2015				
<p>b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for the rehabilitation improvements to this stormwater pumping station which included selection of three 26,000- gpm electric submersible pumps, design of concrete wetwell and RCP outfall pipe rehabilitation, design of a new mechanical building to house electrical and mechanical support equipment.</p>		<p><input checked="" type="checkbox"/> Check if Project Performed with Current Firm</p>			
<p>(1) TITLE AND LOCATION (City and State) D-15 Stormwater Pump Station Palm Beach, FL</p>		<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2007</td> <td>CONSTRUCTION (if applicable) 2007</td> </tr> </table>		PROFESSIONAL SERVICES 2007	CONSTRUCTION (if applicable) 2007
PROFESSIONAL SERVICES 2007	CONSTRUCTION (if applicable) 2007				
<p>c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for the rehabilitation of this stormwater pump station's cooling water system. Included converting two existing cooling water wells from a suction to a pressurized system and designed heat exchanger replacements to support the cooling needs of eight diesel engine-driven hydraulic stormwater pumps and one electric generator.</p>		<p><input checked="" type="checkbox"/> Check if Project Performed with Current Firm</p>			
<p>(1) TITLE AND LOCATION (City and State) D-8 Emergency Stormwater Pumping Station and Collection System Piping Palm Beach, FL</p>		<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2006</td> <td>CONSTRUCTION (if applicable) 2006</td> </tr> </table>		PROFESSIONAL SERVICES 2006	CONSTRUCTION (if applicable) 2006
PROFESSIONAL SERVICES 2006	CONSTRUCTION (if applicable) 2006				
<p>d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project engineer for the design, bidding, and construction of this stormwater pumping station. Expanded the existing station from a capacity of 67 cfs to 231 cfs, including a new manifold header and 54" outfall pipe along with a discharge structure to the Intracoastal, expansion of mechanical building, a new SCADA system, new 750 kW and 100kW generators and associated cooling and ventilation systems.</p>		<p><input checked="" type="checkbox"/> Check if Project Performed with Current Firm</p>			
<p>(1) TITLE AND LOCATION (City and State) PGA National South Stormwater Pump Station Design Palm Beach Gardens, FL</p>		<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES 2014</td> <td>CONSTRUCTION (if applicable) 2014</td> </tr> </table>		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014
PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014				
<p>e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Designed the replacement of an existing 35,000 gpm hydraulic pump with two redundant electric submersible pumps, new wetwell with intake and outfall piping, designed a mechanical building with a three-bay garage, emergency generator, SCADA system, and design of other associated improvements.</p>		<p><input checked="" type="checkbox"/> Check if Project Performed with Current Firm</p>			

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E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
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12. NAME Jason R. Lee, P.E.	13. ROLE IN THIS CONTRACT Structural	14. YEARS EXPERIENCE A. TOTAL 16 B. WITH CURRENT FIRM 16	
<p>Jason has 16 years of experience serving as a project engineer on various municipal projects throughout Southeast Florida. He has provided designs that include HVAC systems for water plant safe rooms, ventilation and boiler system designs for condominiums, sound attenuated generator rooms, fleet fueling stations, stormwater and sanitary pump stations, and a variety of civil engineering projects. Jason is a fourth generation Floridian; his family has lived in Palm Beach County since his great grandfather first homesteaded land on Torry Island.</p>			
15. FIRM NAME AND LOCATION (City and State) Kimley-Horn and Associates, Inc., West Palm Beach, FL			
16. EDUCATION (Degree and Specialization) BS / Mechanical Engineering / Florida Atlantic University / 2003	17. CURRENT PROFESSIONAL REGISTRATION FL / Professional Engineer / 67472 / 2008		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Membrane Technology Association, American Public Works Association (APWA), American Water Works Association (AWWA)			

19. RELEVANT PROJECTS			
a.	(1) TITLE AND LOCATION (City and State) D-4 Stormwater Pump Station Palm Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE KH was called in to take over and update the plans on a tight timeframe to get the project out to bid for the summer construction season. The Kimley-Horn team studied and modified another consultant's original design to make key changes that saved the Town over \$300,000, eliminating road work, minimizing traffic impacts, and reducing the project construction duration.		
b.	(1) TITLE AND LOCATION (City and State) D-14 Stormwater Pump Station Palm Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager and engineer of record for the design and construction of this project. Responsibilities during design phase included leading the design of the structural modifications, wetwell, bulkhead, pump hoist system, building mechanical systems that include generator fuel system, generator ventilation, generator exhaust system, generator sound attenuation and building ventilation.		
c.	(1) TITLE AND LOCATION (City and State) D-9 Stormwater Pump Station Palm Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2010	CONSTRUCTION (if applicable) 2010
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of record for the design, permitting and bidding and construction phases for improvements to this stormwater pumping station. Responsibilities included modifications to the pump station building, wetwell, bulkhead, outfall pipe repairs, pump hoist system, hydraulic calculations, pump selection, building mechanical systems, generator fuel system, ventilation, exhaust system, and sound attenuation.		
d.	(1) TITLE AND LOCATION (City and State) PGA National South Pump Station Design Palm Beach Gardens, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable) 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Engineer of record for the design, permitting and bidding and construction phases for improvements to this stormwater pumping station. Responsibilities included modifications to the pump station building, wetwell, bulkhead, outfall pipe repairs, pump hoist system, hydraulic calculations, pump selection, building mechanical systems, generator fuel system, ventilation, exhaust system, and sound attenuation.		
e.	(1) TITLE AND LOCATION (City and State) D-4 and D-10 Stormwater Pump Station (SWPS) Construction Palm Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2016	CONSTRUCTION (if applicable) 2016
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for design improvements to both the D-4 and D-10 Stormwater Pump Stations. Performed design, permitting, and construction phase services for the two projects. The Town of Palm Beach utilized the construction management at risk project delivery method where both stations were constructed simultaneously.		

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12. NAME Jerry M. Piccolo, P.E.	13. ROLE IN THIS CONTRACT Structural	14. YEARS EXPERIENCE A. TOTAL 7 B. WITH CURRENT FIRM 7	
<p>Jerry is a structural engineer with seven years of experience. He provides support to senior engineers on projects that involve structural design. His responsibilities include performing calculations, plan preparation, reviewing shop drawings, observing project construction, and conducting structural inspections. He has worked on various FDOT projects including the Turnpike AET Phase 5A in Boca Raton, Indrio Road in Fort Pierce, and I-75 Segment C in Miramar. Jerry earned both his Bachelor of Science and Master of Science degrees in Civil Engineering from the University of Florida. He is a Registered Engineering Intern in Florida.</p>			
15. FIRM NAME AND LOCATION (City and State) Kimley-Horn and Associates, Inc., West Palm Beach, FL			
16. EDUCATION (Degree and Specialization) MS / Civil Engineering / University of Florida / 2012 BS / Civil Engineering / University of Florida / 2011	17. CURRENT PROFESSIONAL REGISTRATION FL / Professional Engineer / 80484 / 2016		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Seven years of experience providing structural design support for roadway improvements in South Florida, Experience includes bridge design, mast-arm design, overhead sign structures, retaining walls, noise walls, toll gantries, and construction phase services			
19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (City and State) Lowson Boulevard Pedestrian Bridges Delray Beach, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES ongoing CONSTRUCTION (if applicable) ongoing	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project manager for the construction of two pedestrian bridges for the proposed Lowson Blvd. The project also includes the preparation of a Type 1 Categorical Exclusion environmental document with permitting and coordination with LWDD and the US. Army Corps of Engineers.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Lyons Road from Clint Moore Road to Atlantic Avenue Boca Raton, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES ongoing CONSTRUCTION (if applicable) ongoing	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer, subconsultant to another firm, Kimley-Horn is providing structural design services for a new Lyons Rd bridge over the Lake Worth Drainage District (LWDD) L-38 Canal. Attention needs to be maintained when working adjacent to existing large underground utilities and overhead electric lines that may interfere with bridge pile driving.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Glades Road and Butts Road Intersection Improvements Boca Raton, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES ongoing CONSTRUCTION (if applicable) ongoing	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project engineer designing a signal replacement and second southbound turn lane on Butts Road at the intersection of SR 808/ Glades Road as part of our PBC countywide services contract. Services included signal plans, replacing mast-arm assemblies, signing and pavement marking plans, roadway and intersection design, drainage design, and environmental permitting.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Old Dixie Highway, Yamato Road to Linton Boulevard Boca Raton, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2006 CONSTRUCTION (if applicable) 2006	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Structural engineer of record, subconsultant to another firm, provided structural design and signalization services for the construction of a new three-lane urban roadway section from Yamato Road to Linton Boulevard. Scope included the design, permitting, and construction plans for 3.5 miles of Old Dixie Highway from north of Yamato Road to north of Linton Blvd.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Atlantic Boulevard Bascule Bridge Improvements Pompano Beach, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2019 CONSTRUCTION (if applicable) 2019	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE As structural engineer, incorporated safety and aesthetic improvements to this 400-foot bascule bridge over the Intracoastal Waterway. Designed replacement traffic railing to improve safety and aesthetics, as well as an under-bridge walkway to improve pedestrian access to the water.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	

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E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
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12. NAME Jonathan D. Haigh, PLA, ASLA	13. ROLE IN THIS CONTRACT Landscape Architecture	14. YEARS EXPERIENCE A. TOTAL 24 B. WITH CURRENT FIRM 15	
Jonathan is a Florida native and has 24 years of experience as a practicing professional landscape architect. He is a skilled designer, with public-sector project experience throughout the southeast United States. He has produced and directed the preparation of construction drawings, detailing, and specifications. His experience is strongest in applying a practical and budget-friendly, yet creative, design approach to each project. He has thoroughly embraced the application of sustainable principles in project design and incorporating the design of Florida-friendly landscapes and water-efficient irrigation systems.			
15. FIRM NAME AND LOCATION (City and State) Kimley-Horn and Associates, Inc., West Palm Beach, FL			
16. EDUCATION (Degree and Specialization) Bachelor of Landscape Architecture / Landscape Architecture / University of Arkansas / 1995	17. CURRENT PROFESSIONAL REGISTRATION FL / Prof Landscape Architect / 6666795 / 2005		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Society of Landscape Architects (ASLA), Past President Florida Recreation and Parks Association			
19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (City and State) Floranada Business Development Stormwater Improvements Oakland Park, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2012 CONSTRUCTION (if applicable) 2012	
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape architect for the design and construction the Floranada Business Development (FBD) and NE 6th Terrace Drainage Project. The project involved the installation of three stormwater pumping stations. The pump stations will deliver stormwater via drainage force mains to three proposed Biscayne Aquifer Wells.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Lloyd Estates Streetscape and Drainage Improvements Oakland Park, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2013 CONSTRUCTION (if applicable) 2013	
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape architect for the streetscape improvements for the Lloyd Estates Residential and Industrial Area Drainage Project. The project comprised of residential streetscape enhancements with trees, palms, new turf, and shrubs in the medians and larger islands.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) D-4 and D-10 Stormwater Pump Station (SWPS) Construction Palm Beach, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2016 CONSTRUCTION (if applicable) 2016	
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape architect for both the D-4 and D-10 Stormwater Pump Stations. Performed design, permitting, and construction phase services for the two projects. The Town of Palm Beach utilized the construction management at risk project delivery method where both stations were constructed simultaneously.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Delray Medical Center Drainage Delray Beach, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2014 CONSTRUCTION (if applicable) 2014	
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape architect. As the result of extensive site and building flooding that occurred in rainfall events during 2011, 2013, and 2014, Kimley-Horn was retained to study the cause of the flooding and make recommendations for remediation. We were subsequently retained to help implement the recommendations provided.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
(1) TITLE AND LOCATION (City and State) Federal Highway (US 1) Interim and Final Enhancements Delray Beach, FL		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2015 CONSTRUCTION (if applicable) 2015	
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Landscape architect retained by the Delray Beach CRA to design improvements to reduce north and southbound US 1 (NE 6th Ave. and NE 5th Ave.) to two lanes each way and provide on-street parking on both avenues. The improvements encourage slower speeds and a safer, more pedestrian-friendly environment.		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	

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12. NAME Larry Smith, PE	13. ROLE IN THIS CONTRACT Electrical/I&C	14. YEARS EXPERIENCE A. TOTAL 33 B. WITH CURRENT FIRM 20	
15. FIRM NAME AND LOCATION (City and State) Smith Engineering Consultants, Inc.			
16. EDUCATION (Degree and Specialization) B.S. - Electrical Engineering, 1987, Florida Atlantic University	17. CURRENT PROFESSIONAL REGISTRATION Professional Engineer, Florida No. 45997		

Larry has over 30 years of experience as an electrical engineer in the areas of electric utilities, water and wastewater utilities, solid waste, water control structures and pump stations, airport electrical systems, architectural projects, telecommunications, and roadway, sportsfield, and specialty lighting. Demonstrated skills in engineering and design, project management, client relations, and staff administration.

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Post-graduate studies at FAU in telecommunications, Tau Beta Pi (Engineering Honor Society), IEEE, Florida Engineering Society (Past President of the Palm Beach Chapter and State), Florida Building Code electrical technical advisory committee, FES state energy committee.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
SFWMD Gate Structure G-716 and Pump Station S-476 Palm Beach County, Florida	2017	2019
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Electrical design for a new, 3 gate structure within an existing stormwater treatment area (STA). This included the electrical service and distribution, controls, lighting, instrumentation, and SCADA/telemetry. The pump station consisted of 3 electric pumps with upstream and downstream water level monitoring.		
Palm Beach County Lift Stations Palm Beach County, Florida	2017	2018
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Designed the SCADA/telemetry system improvements for 50 lift stations throughout PBC's service area. New remote terminal units (RTU's), including associated antenna towers, were added to provide remote monitoring. New pump control panels were designed, and new level transducers and PLC's were provided for modernized pump control.		
City of Sunrise, Sawgrass WTP Improvements Sunrise, Florida	2015	2016
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Designed the electrical systems for improvements to the City's existing water treatment plant. This included the electrical power distribution, controls, and instrumentation. Four (4) existing transfer pumps at the clearwell were upgraded. Two (2) of the pumps received new reduced voltage starters and the other two (2) new variable frequency drives (VFD's).		
Town of Jupiter Water Treatment Plant Jupiter, Florida	2019	2020
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Worked with Jupiter on several of their recent utilities projects. We have successfully resolved power quality issues within the Nano-filtration Plant. We have made improvements to the existing high service pumps by designing new variable frequency drives (VFD's) to replace existing reduced-voltage motor starters.		
City of West Palm Beach Street Lighting West Palm Beach, Florida	2019	2021
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Designed the electrical lighting systems along Tamarind Avenue from Banyan Blvd. to Palm Beach Lakes Blvd. The electrical systems included a new electrical service and power distribution for photoelectric controlled street lights. Illumination calculations were made in accordance with city requirements, and light pole details prepared for the selected decorative lighting.		

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



12. NAME Rick Harman, CEP, PWS		13. ROLE IN THIS CONTRACT Environmental Permitting		14. YEARS EXPERIENCE A. TOTAL 17 B. WITH CURRENT FIRM 17	
Rick is responsible for upland and wetland determination, wetland delineation/permitting, maintenance and monitoring, due diligence for environmental assessment, tree mitigation, preservation, and relocation, regulatory compliance, and permitting. His responsibilities include GPS work, littoral and wetland plantings design, tabular tree lists, listed species surveys, preservation management plans, and preparation of permits and reports for clients and government agencies.					
15. FIRM NAME AND LOCATION (City and State) Wantman Group, Inc. (WGI, Inc.), West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) B.S. Biology, Wake Forest University, 2002		17. CURRENT PROFESSIONAL REGISTRATION Certified Environmental Professional (CEP) Professional Wetland Scientist (PWS)			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) FDEP Stormwater Management Inspector/FWC Authorized Gopher Tortoise Agent/ISA Certified Arborist					

19. RELEVANT PROJECTS			
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
a.	Matheson Hammock Park Miami-Dade County, FL	2019	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Environmental Scientist. Rick assisted with the assessment, permitting, and mitigation of coastal wetland impacts that are required to restore roads, culverts, shorelines, aerator pumps, and other infrastructure after hurricane Irma. Value: \$25K (Fee), N/A (Const.)		
b.	625 Island Drive Seawall and Dock Palm Beach County, FL	2019	2019
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project manager. Rick supervised the preparation of an FDEP exemption verification application with a request to review the proposed project under the State Programmatic General Permit V (SPGP V) on behalf of the USACE. He coordinated with the engineer of record for the project, FDEP staff, and USACE staff during the exemption and SPGP V review.		
c.	Districtwide Permits Consultant, FDOT District 6 Miami, FL	2022	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Permit Specialist. WGI holds a multi-year contract for the FDOT District 6 which consists of preparing federal, state and other environmental permit application packages, agency coordination, biological surveys, Rick identifies the permits that are needed for each project and prepares permit applications. Value: \$1.5M (Fee), \$N/A (Const.)		
d.	MasTec / Verizon Waterway Crossings Palm Beach, Broward, and Miami-Dade Counties, FL	2020	N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Environmental Scientist. WGI provided environmental, survey, civil, and utility services for 60 waterway crossings of fiber optic cables. Rick assisted with natural resource mapping and environmental permit applications. Permitting included local, state and federal right-of-way and environmental authorities. Value: \$100K (Fee), \$N/A (Const.)		
e.	Valencia Falls Arborist Services Palm Beach County, FL	2020	Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project manager. WGI served as a consulting ISA Certified Arborist to assist the homeowners association and the landscaping firm with street tree issues in this residential community. WGI provided an assessment of street trees, identified conflicts with HOA facilities (e.g., utilities, sidewalks, and road right-of-way), and provided recommendations for corrective actions.		

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




12. NAME Amanda Montgomery, PWS		13. ROLE IN THIS CONTRACT Environmental Permitting		14. YEARS EXPERIENCE	
				A. TOTAL 5	B. WITH CURRENT FIRM 3
<p>Amanda has three years of experience in marine and environmental science. She is certified by the Florida Department of Environmental Protection (FDEP) as a Stormwater, Erosion, and Sedimentation Control Inspector and is certified by the American Academy of Underwater Sciences (AAUS) as a Scientific Diver. She also is knowledgeable of South Florida's seagrass, coral, and other benthic community species. Her area of expertise is in freshwater and coastal systems, with a background in environmental resource permitting and state lands authorizations.</p>					
15. FIRM NAME AND LOCATION (City and State) Wantman Group, Inc. (WGL, Inc.), West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) M.S. Marine Biology - Nova Southeastern Univ, 2016 B.S. Biological Sciences - Illinois State University, 2009		17. CURRENT PROFESSIONAL REGISTRATION Professional Wetland Scientist (PWS)			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) FDEP Stormwater Management Inspector, BOEM Protected Species Observer, SCUBA Scientific Diver Former FDEP Regulator					
19. RELEVANT PROJECTS					
(1) TITLE AND LOCATION (City and State) Thomas Street Pump Station Delray Beach, FL		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2019		CONSTRUCTION (if applicable) N/A	
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Environmental Scientist. Amanda coordinated and conducted a submerged aquatic vegetation for proposed improvements to this pump station on the intracoastal waterway. Value: \$3K (Fee), \$N/A (Const.)		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) Districtwide Permits Consultant, FDOT District 6 Miami, FL		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2022		CONSTRUCTION (if applicable) N/A	
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Permit Specialist. Amanda is the technical lead on this multi-year contract for the FDOT District 6 which consists of preparing federal, State and other environmental permit application packages, agency coordination, biological surveys, report preparation, and other related tasks on a District-wide basis. Value: \$1.5M (Fee), \$N/A (Const.)		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) Intracoastal Waterway AT&T Horizontal Directional Drill Riviera Beach, FL		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2018		CONSTRUCTION (if applicable) N/A	
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Environmental Scientist. Prior to directional drilling under the Intracoastal Waterway on the north side of the Blue Heron Bridge, Amanda conducted an underwater benthic survey of natural resources including seagrasses as a requirement for obtaining permits from the FDEP and USACE. Value: \$50K (Fee), \$N/A (Const.)		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) Fiber Optic Waterway Crossings Palm Beach, Broward, and Miami-Dade Counties, FL		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2020		CONSTRUCTION (if applicable) N/A	
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Environmental Scientist. WGL provided environmental, survey, civil, and utility services for 60 waterway crossings of fiber optic cables. Amanda led the natural resource mapping and environmental permit applications. Permitting included local, state and federal right-of-way and environmental authorities. Value: \$100K (Fee), \$N/A (Const.)		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		
(1) TITLE AND LOCATION (City and State) Beach Renourishment, Eastman Aggregate Enterprises, LLC Dania Beach, FL		(2) YEAR COMPLETED			
		PROFESSIONAL SERVICES 2019		CONSTRUCTION (if applicable) 2019	
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Environmental Scientist. A large portion of this USACE 7.2-mile beach renourishment project was within the Dr. Von D. Mizell-Eula Johnson State Park. It required some unavoidable damage to the dunes. Amanda assisted with pre- and post-construction vegetation inventories, planting plans, and protected species monitoring for seabirds and shorebirds including endangered piping plovers. Value: \$30K (Fee), ~\$100K (Const.)		<input checked="" type="checkbox"/> Check if Project Performed with Current Firm		

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



12. NAME Jim Sullivan, PSM		13. ROLE IN THIS CONTRACT Geospatial Business Development		14. YEARS EXPERIENCE A. TOTAL 22 B. WITH CURRENT FIRM 1	
Jim is a senior project manager for all phases of geospatial services offered by WGI. Jim is experienced in managing a full department of staff and projects simultaneously, and his responsibilities include project management of abstracting for title, control surveys, construction staking, boundaries, easements (sketch/legal descriptions), hydrographic surveys, laser scanning, plat/plan review, platting, right-of-way acquisitions, topographic surveys, and GIS services. He brings insight to projects by assessing a project site for possible conflicts or potential needs, based on the project's intended use. Jim works closely with clients to effectively communicate project status to meet budget and schedule, while addressing specific needs as the project progresses.					
15. FIRM NAME AND LOCATION (City and State) Wantman Group, Inc. (WGI, Inc.), West Palm Beach, Florida					
16. EDUCATION (Degree and Specialization) Bachelor of Science/Surveying and Mapping - East Tennessee State University, 2002		17. CURRENT PROFESSIONAL REGISTRATION Florida, Professional Surveyor/Mapper #LS6889; Texas, Professional Land Surveyor #6036; North Carolina, Professional Land Surveyor #L5064; Louisiana, Professional Land Surveyor #5116; Ohio, Professional Surveyor/Mapper #PS8655			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) CSX Safety; CSX eRailSafe Contractor; Florida Atlantic University Program Advisory Council; Florida Surveying and Mapping Society; National Society of Professional Surveyors; Society of American Military Engineers					

19. RELEVANT PROJECTS			
a.	(1) TITLE AND LOCATION (City and State) Village of Palm Springs Park Connector Pathway Phase Palm Springs, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Surveyor. Jim provided survey services. WGI was hired to provide landscape architecture, survey, and electrical design services for Phase 2 of the Village of Palm Springs Park Connector Pathway project, which includes approximately 1.4 miles of Davis Road. The project also includes approximately 2,600 feet of road, and 600 feet of 10th Avenue North heading east from Davis Road. WGI Total Fee: \$99K		
b.	(1) TITLE AND LOCATION (City and State) Project Institute, Lake Worth Road and Lyons Road Lake Worth, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable) 2019
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Surveyor. Jim provided boundary and platting services for a proposed 60,000-square foot medical facility situated on 39 acres in western Palm Beach County. Working with Urban Design Studios, WGI provided environmental, civil engineering, and survey services for a 60,000 square-foot medical facility with associated parking areas on a 35-acre site. WGI Total Fee: \$35K		
c.	(1) TITLE AND LOCATION (City and State) Florida Power & Light Martin Plant Water Main and Force Main Improvements Miami, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2018	CONSTRUCTION (if applicable) 2019
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Surveyor. Jim served as the project surveyor for this project and was in charge of all geospatial data acquisition required for the design of the project. WGI assisted Florida Power & Light (FPL) with the design of a six-inch force main and an eight-inch potable water main parallel to each other. This route is approximately five miles in length. WGI Total Fee: \$147.5K		
d.	(1) TITLE AND LOCATION (City and State) Hypoluxo Substation Upgrades Lake Worth Beach, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Surveyor. WGI has been engaged to provide a preliminary engineering study for the addition of protection walls at the existing Hypoluxo Electrical Substation located at Hypoluxo Road and I-95. Jim provided a boundary and topographic survey. WGI Total Fee: \$57K		
e.	(1) TITLE AND LOCATION (City and State) Rick Macci Tennis Academy Boca Raton, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2019	CONSTRUCTION (if applicable) 2019
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Project Surveyor. WGI provided design services for the Rick Macci Tennis Academy located within Palm Beach County's South County Regional Park. The project included an expansion of the existing clubhouse as well as numerous tennis and pickleball court additions. WGI provided the civil engineering design, landscape, hardscape, and irrigation design. WGI also provided survey and permitting services for this project. WGI Total Fee: \$63K		

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



12. NAME Jay Scagliola, PSM	13. ROLE IN THIS CONTRACT SUE	14. YEARS EXPERIENCE	
		A. TOTAL 47	B. WITH CURRENT FIRM 2

Jay is highly skilled in all phases of land surveying, including mapping performance standards, data collection and calculation, as well as drafting. Jay has 25 years of experience in subsurface utility locating, design and management services on major public infrastructure and site development projects including roadways and asset inventories. His widespread network of contacts and utility locating knowledge is well respected by municipal and private clients. His responsibilities include designating and utility locating coordination, quality assurance, and final project review of survey processing and computer drafting.

15. FIRM NAME AND LOCATION (City and State)
Wantman Group, Inc. (WGI, Inc.), West Palm Beach, Florida

16. EDUCATION (Degree and Specialization)

17. CURRENT PROFESSIONAL REGISTRATION
Professional Surveyor/Mapper, Florida

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Confined Space; Intermediate Maintenance of Traffic



19. RELEVANT PROJECTS			
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Watermain / Reclaimed Watermain Connection		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Delray Beach, FL		2019	N/A
a.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm SUE Manager. The City contracted WGI to provide a solution utilizing their potable water supply connection from their potable water distribution system to their existing reclaimed water system to augment reclaimed water capacity. WGI identified a location near their existing reclaimed water booster pump station where the connection could be installed. Value: \$20K		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Seacrest Corridor Utility Improvements		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Boynton Beach, FL		2017	2018
b.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm SUE Manager. Infrastructure improvement project included 60,000 linear feet of water main replacement, relocating meters, 5,000 linear feet of stormwater system upgrades, pavement reconstruction and overlay, roadside swales, driveway aprons, and sidewalks over a 50-block residential neighborhood covering 252 acres. Value: \$1.2M (Fee), \$13M (Const.)		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
24 Inch Force Main along NW 170 Street SUE Services		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Miami-Dade County, FL		2019	N/A
c.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm SUE Manager. WGI provided the County with survey and location of utility test holes using network corrected GNSS methods, along with an updated utility CAD file depicting the location of the test holes and corresponding utility data. Value: \$4K (Fee), \$N/A (Const.)		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
Kudza Road WM Relocation		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Palm Beach County, FL		2019	N/A
d.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm SUE Manager. Relocate an existing 8-inch water main and 12-inch force main to accommodate a box culvert replacement. The scope of work includes the design and permitting for the new utility relocations. In addition, WGI will be providing SUE services to perform utility locations and survey for the existing water main. Value: \$32K (Fee), \$500K (Const.)		
(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
River Walk Plaza Improvements SUE Services		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Palm Beach County, FL		2019	2019
e.	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm SUE Manager. This project included utility investigation, in order to determine the horizontal location of existing utilities with electronic depths. Utilities included telephone, fiber optic, TV cable, gas lines, electric/power, water, sanitary sewer, and drainage. Value: \$24K (Fee), \$NA (Const.)		

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



12. NAME Andrew Nixon, PE	13. ROLE IN THIS CONTRACT Geotechnical Engineer	14. YEARS EXPERIENCE	
		A. TOTAL 15	B. WITH CURRENT FIRM 5
Andrew is a Senior Geotechnical Engineer for RADISE with over 15 years of geotechnical experience. He has extensive subsurface exploration experience in Delray Beach.			
15. FIRM NAME AND LOCATION (City and State) RADISE International, L.C., Riviera Beach, FL			
16. EDUCATION (Degree and Specialization) B.S., Ocean Engineering, Florida Atlantic University, 2005	17. CURRENT PROFESSIONAL REGISTRATION Professional Engineer, Florida No. 71458		

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
 OSHA 40-hour Health and Safety / OSHA, 29 CFR 1919.120 (HAZWOPER), Qualified Stormwater Management Inspector, Inspector # 27919, Florida Engineering Society Member (FES), National Society of Professional Engineers Member (NSPE) & American Society of Civil Engineers

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
a. SFWMD East Coast Protective Levee Project Broward County, Florida	2013	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Senior Project Engineer – Provided subsurface explorations and geotechnical engineering services including field permeability tests, direct simple shear tests, pin hole permeability tests, strength testing, etc. of the levee and toe materials.		
b. SFWMD STA-1 West Expansion Area 1 Palm Beach County, Florida	Ongoing	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Senior Project Engineer – Provided subsurface explorations and geotechnical engineering services and materials testing services for the Contractor. Work included driven pile analyses, cofferdam and dewatering design, slope stability, etc.		
c. Everglades Agricultural Area A-1 Flow Equalization Basin Palm Beach County, Florida	2013	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Principal Geotechnical Engineer. Geotechnical design and EDC (engineering during construction) materials testing as well as quality assurance and inspection. Tests include specific gravity, sieve analysis, proctor, organic content, moisture content and Atterberg limits. The work involved laboratory testing for embankment construction.		
d. HDD Culverts 5A/5, 4A/3 Replacement and Rehabilitation Palm Beach and Hendry Counties, Florida	2013	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Senior Geotechnical Engineer. Construction inspection and materials testing services. The work included the demolition of existing Culverts, placement of new cast-in-place concrete culvert structures with gates and control systems and restoring the embankment and the reconstruction of new structures; and rehabilitation structure replacements for Culverts 5A and 5.		
e. Riviera Beach Marina District South Palm Beach County, Florida	2014	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if Project Performed with Current Firm Principal Geotechnical Engineer. Geotechnical and Environmental Engineering services including new construction of a Bicentennial Park, a boardwalk promenade, new streets and sidewalks, extensive utility improvements, temporary surface parking for up to 700 vehicles, and the construction of a new Newcomb Hall.		

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

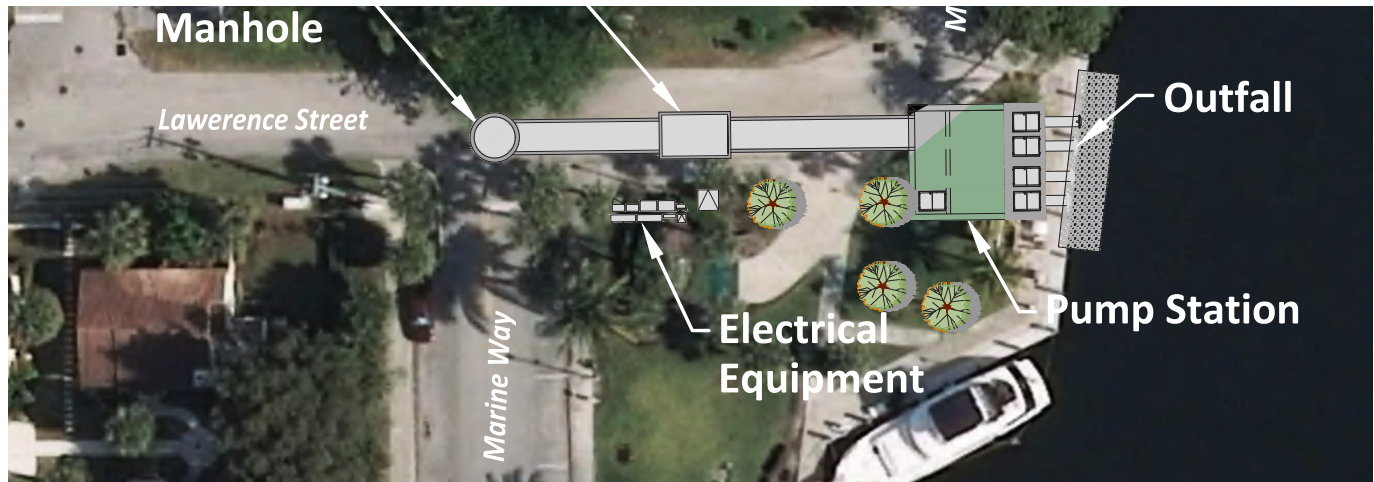


12. NAME David A. Bower, PSM	13. ROLE IN THIS CONTRACT Project Surveyor	14. YEARS EXPERIENCE	
		A. TOTAL 31	B. WITH CURRENT FIRM 16
Lead Surveyor from Dennis J. Leavy with over 30 years of land surveying and project management experience. David has over 20 years experience working with Mock•Roos on numerous stormwater and wastewater pump station and stormwater and roadway projects throughout Palm Beach County.			
15. FIRM NAME AND LOCATION (City and State) Dennis J. Leavy & Associates, Inc.			
16. EDUCATION (Degree and Specialization) Survey and Mapping, Palm Beach Community College, 1997	17. CURRENT PROFESSIONAL REGISTRATION State of Florida Professional Surveyor & Mapper, LS #5888		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)			

19. RELEVANT PROJECTS			
a.	(1) TITLE AND LOCATION (City and State) Lift Station No. 20, 26, 89, 100 Rehabilitation West Palm Beach, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager responsible for research and calculations of Plats and right-of-way maps, identification of ownership lines and platted easements; and calculations to establish baseline and control network for lift station redesign.	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
b.	(1) TITLE AND LOCATION (City and State) Lift Station No. 33 and 226 Upgrade Boca Raton, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager responsible for research and calculations of Plats and right-of-way maps, identification of ownership lines and platted easements; and calculations to establish baseline and control network for lift station redesign and force-main design.	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
c.	(1) TITLE AND LOCATION (City and State) Wastewater Lift Station Rehab Project - PHASE II (PBC WUD 11-) Boca Raton, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager responsible for research and calculations of Plats and right-of-way maps, identification of ownership lines and platted easements; and calculations to establish baseline and control network for lift station redesign.	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
d.	(1) TITLE AND LOCATION (City and State) Conversion of Dry Can Lift Stations# 941, 948, 970, 973, 1040, 1056, 1082 Palm Beach County, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2013	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager responsible for research and calculations of Plats and right-of-way maps, identification of ownership lines and platted easements; and calculations to establish baseline and control network for lift station redesign.	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	
e.	(1) TITLE AND LOCATION (City and State) Wastewater Lift Station Rehab Project (PBC WUD 11-038) Palm Beach County, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Project Manager responsible for research and calculations of Plats and right-of-way maps, identification of ownership lines and platted easements; and calculations to establish baseline and control network for lift station and forcemain redesign.	<input checked="" type="checkbox"/> Check if Project Performed with Current Firm	

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 1					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Marine Way Stormwater Pump Station Delray Beach, FL		22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION</td> </tr> <tr> <td>ongoing</td> <td>ongoing</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	ongoing	ongoing
PROFESSIONAL SERVICES	CONSTRUCTION						
ongoing	ongoing						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER City of Delray Beach		B. POINT OF CONTACT NAME Issac Kovner, PE					
		C. POINT OF CONTACT PHONE NUMBER 561-243-7341					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos developed the conceptual layouts and is currently providing final design (as a subconsultant) of the City's 54,000 GPM (ultimate) stormwater pump station that will provide vital protection to the flood-plagued Marina Way and Delray Beach Marina Park area

The proposed station will require a minimum of 2 pumps each, 18,000 GPM in capacity, to provide the City with its desired redundancy. The design will include a third pump to be installed in the future, if and when, desired/needed. Each 18,000 GPM pump will have its own individual 30-inch outfall pipe directly to the Intracoastal Waterway (requiring no valving or integral control schemes). Each discharge pipe will have backflow prevention devices. The 125 Hp electric submersible motor will require a 500 kW back-up generator and diesel fuel system that will need to be site appropriately to minimize impacts to adjacent residents.

The project will also include a water quality treatment train, electrical, instrumentation and control and SCADA improvements.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 2	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) D-14 Stormwater Pump Station Rehabilitation Palm Beach, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2019	CONSTRUCTION 2019
23. PROJECT OWNER'S INFORMATION			
A. PROJECT OWNER Town of Palm Beach		B. POINT OF CONTACT NAME Patricia Strayer, PE	
		C. POINT OF CONTACT PHONE NUMBER 561-227-7056	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos was selected through the Town's RFQ process as the most qualified Firm to provided design, permitting, bidding, and engineering during construction services for the complete rehabilitation of the Town's D-14 Pump Station. The D-14 Stormwater Pump Station is one of the Town's most critical infrastructure components as it provides vital flood protection for the entire Palm Beach Island - located between Royal Palm Way and the Breakers Golf Course/Royal Poinciana Chapel to the north. If this pumping station unexpectedly fails or if the station is not designed to function properly, millions of dollars of property would be in jeopardy.

The D-14 Stormwater Pump Station is located on the Intracoastal Waterway in the north west corner of the Society of the Four Arts parking lot adjacent to Lake Trail. An upgrade to the existing pump station was designed in 1996 that included four 31,000 gpm electric submersible pumps in a wetwell with a 5,600 gpm duty pump providing a total capacity of 129,600 GPM. Each primary pump has the ability to drain a 15,000-gallon pool within 30 seconds.

Following the completion of this over \$4.1-million-dollar project, the Pump Station have all new pumps, cans, discharge pipe, electrical components, instrumentation and controls, a generator and fuel system. These improvements will ensure that the station operated reliably for the foreseeable future.

The project was designed and constructed on an expedited schedule. All project deliverables and budgetary requirements were met.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.2em;">3</div>					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) D-4 and D-10 Stormwater Pump Station Rehabilitation Palm Beach, Florida		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PROFESSIONAL SERVICES</td> <td style="width: 50%;">CONSTRUCTION</td> </tr> <tr> <td style="text-align: center;">2016</td> <td style="text-align: center;">2016</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	2016	2016
PROFESSIONAL SERVICES	CONSTRUCTION						
2016	2016						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER Town of Palm Beach		B. POINT OF CONTACT NAME Patricia Strayer, PE					
		C. POINT OF CONTACT PHONE NUMBER 561-227-7056					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos was lead consultant providing construction administration services for rehabilitation of the Town's stormwater pump stations - D-4 and D-10 Stormwater Pump Stations. The project includes the following upgrades and refurbishments:

- New FPL electrical service and pad mounted transformer
- Conversion of the existing FPL electrical vault into the new pump station electrical room which will house the new motor control center, pump station control panel, and miscellaneous electrical equipment
- New submersible axial flow primary pumps and duty pump
- Wetwell improvements including new discharge piping, concrete divider walls between pumps, and stainless steel pump supports for each pump
- The existing electrical/mechanical room will be completely demolished and reconstructed with sound attenuating concrete blocks and acoustical ventilation silencers to meet the Town's noise ordinance
- New primary and duty generators
- Outfall improvements will include replacement of the end section of the 58"x91" elliptical concrete pipe, coating the entire length of the concrete outfall pipe will be rehabilitated with an epoxy coating and a rip-rap velocity dissipater
- Landscaping design to accommodate the resident and surrounding community

Project Highlights include:

- With Mock•Roos' thorough review of the originally submitted GMP, draft GMP resulted in over \$200,000 worth of savings to the Town

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM’S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 4	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) D-6 and D-7 Stormwater Pump Station Rehabilitation Palm Beach, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2012	CONSTRUCTION 2012
23. PROJECT OWNER’S INFORMATION			
A. PROJECT OWNER Town of Palm Beach		B. POINT OF CONTACT NAME Patricia Strayer, PE	
		C. POINT OF CONTACT PHONE NUMBER 561-227-7056	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos provided the planning, surveying, design, permitting and construction administration services for rehabilitation of the Town's two largest pump stations - both 114,000 gpm in capacity and discharge into the Intracoastal waterway. The existing pump stations are located in the high profile Lakeside Park on the Intracoastal Waterway. This project was originally designed by Mock•Roos in 1985. The existing pump stations consist of a total of 8 - 26,000 gpm hydraulically-driven pumps housed in wetwells located on either end of the park with a common engine/control building located in the middle of the park. Project Highlights include:

- At the 60-percent design interval, Mock•Roos identified and re-evaluated the existing wetwells for potential renovation rather than full replacement. Working closely with pump manufacturer's, Mock•Roos performed hydraulic modeling necessary to develop a plan to reuse the existing wetwells in lieu of constructing new wetwells. This value engineering saved the Town in excess of \$2.3 million, reducing the project to from \$8.0 to \$5.7 million.
- Mock•Roos completed the project design and permitting, which included civil, mechanical, structural, architectural and landscaping design services disciplines, within a fast-tracked 5 months schedule to facilitate construction during the summer months (Town's construction period)
- Mock•Roos provided the Town with an extensive evaluation of MWI Pumps versus Flygt pumps so that the Town could make an informed decision when choosing their pumps for the project.
- With Mock•Roos' thorough and concise construction documents, the project was awarded on February 16, 2012 for \$125,000 under the Town's reduced budget.
- The project was completed in 2012. Over \$250,000 of unused contingency was returned to the Town.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.5em;">5</div>					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) SFWMD L-8 Flow Equalization Basin (FEB) Design-Build Project Western Palm Beach County, Florida		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PROFESSIONAL SERVICES</td> <td style="width: 50%;">CONSTRUCTION</td> </tr> <tr> <td style="text-align: center;">2018</td> <td style="text-align: center;">2018</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	2018	2018
PROFESSIONAL SERVICES	CONSTRUCTION						
2018	2018						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER South Florida Water Management District		B. POINT OF CONTACT NAME David Scott, PE (Jacobs)					
		C. POINT OF CONTACT PHONE NUMBER 561-799-3855					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



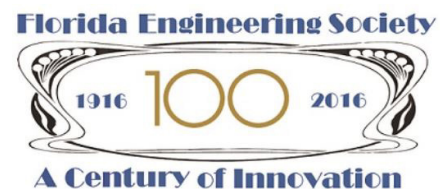
Mock•Roos, as a key civil engineering subconsultant, completed the design of the Reservoir Inflow System for the L-8 Flow Equalization Basin Project for the South Florida Water Management District (SFWMD) as part of the \$64 million Design-Build construction project team. Mock•Roos also designed all site-civil components for both the Inflow System and the Pump Station Outflow System sites.

The project improvements will allow the SFWMD to use the +/- 1,000-acre mine pit for storage of excess stormwater during rainy periods, for later discharge, during drier weather.

The Inflow System to the FEB includes a 200 foot wide intake channel, 3,000 CFS gated control structure, and a 500 foot long spillway designed to convey the super-critical flow resulting from the 50 foot vertical drop from the L-8 Canal to the floor of the basin.

The project design was completed on a fast-track schedule (2013). The project was completed in 2018.

The project was recognized in August 2016 by the Florida Engineering Society (FES) as one of the FES Engineering Projects of the Century, in honor of its 100 year celebration (1916-2016) to "A Century of Innovation".



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.2em;">6</div>			
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Stormwater Pump Station and Control Structure No. 9 Palm Beach County, Florida		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PROFESSIONAL SERVICES ongoing</td> <td style="width: 50%;">CONSTRUCTION ongoing</td> </tr> </table>		PROFESSIONAL SERVICES ongoing	CONSTRUCTION ongoing
PROFESSIONAL SERVICES ongoing	CONSTRUCTION ongoing				
23. PROJECT OWNER'S INFORMATION					
A. PROJECT OWNER Lake Worth Drainage District		B. POINT OF CONTACT NAME Tony LasCasas, PE			
		C. POINT OF CONTACT PHONE NUMBER 561-498-5365			

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos was lead consultant completing the evaluation, design and permitting of the replacement of LWDD's Stormwater Pump Station and Control Structure No. 9. The estimated \$6.0 million project was advertised for bids in February 2020.

Improvements include:

- Complete new water control structure with three (3) 12-foot wide tainter radial gates and ogee weirs
- Two (2) 20,000 GPM electrically driven water supply pumps designed in separate wetwells with automated trash removal systems
- Full electrical, SCADA system and site lighting improvements
- Innovate seepage collection system to accommodate fluctuations in water levels due to structure relocation
- Extensive site access and security considerations
- Temporary phasing and Demolition of the existing structure and facilities

The replacement structure is anticipated to be completed by mid-2021 and will greatly improve reliability and future maintenance concerns. Mock•Roos is under contract to provide Engineering During Construction services for the project.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 7	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) SFWMD S-140 Pump Station Improvements Broward County, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES ongoing	CONSTRUCTION ongoing
23. PROJECT OWNER'S INFORMATION			
A. PROJECT OWNER South Florida Water Management District		B. POINT OF CONTACT NAME Tim Carter, PE	
		C. POINT OF CONTACT PHONE NUMBER 561-951-2543	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos was lead consultant for the design and Engineering During Construction of the District's \$10.1 million renovation to its S-140 Pump Station, which is located in Broward County, approximately 40 miles west of the City of Weston, and 40 miles south of the City of Clewiston.

The proposed facility improvements include:

Gate and Spillway Systems

- Replace pump backflow (3) and spillway gate systems, gate operators, motors/gearboxes, shafts and stems

Trash Rack System

- Construct upstream bridge and install automated HydroComponents trash removal system (including rack, rake, and debris dump areas)
- Construct appropriate access road to and from the new bridge
- Provide electrical wiring/communication for automation

Fuel System

- Replace existing fuel tanks and piping, install day tanks in the engine room and replace existing tanker truck fuel fill area
- Inspect/repair/recoat existing concrete containment area

Emergency Generators

- Construct emergency generator building (in conjunction with skid steer storage)
- Install Convault fuel supply/storage tank for emergency generators

Site/General/Other

- Numerous miscellaneous items including site paving, construct stop log storage area and providing stilling wells, staff gauges, tuff boom, and signage

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.2em;">8</div>					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Stormwater Pump Station No. 2 Sunrise, FL		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PROFESSIONAL SERVICES</td> <td style="width: 50%;">CONSTRUCTION</td> </tr> <tr> <td style="text-align: center;">2017</td> <td style="text-align: center;">2017</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	2017	2017
PROFESSIONAL SERVICES	CONSTRUCTION						
2017	2017						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER City of Sunrise		B. POINT OF CONTACT NAME Guarionex De Los Santos					
		C. POINT OF CONTACT PHONE NUMBER 954-888-6077					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos provided design, permitting, and engineering during construction services for the replacement of the City of Sunrise's Pump Station No. 2.

Sunrise Pump Station No. 2 is a 50,000 gpm total capacity station located in a canal behind a residential neighborhood. The pump station was designed to fit within the existing limited canal right of way. The main components of the Pump Station include:

- (2) 25,000 gpm electric submersible pumps
- 6'x6' gated gravity outfall
- Concrete Intake Structure
- Automated Trash removal system
- 450KW Natural Gas Generator
- Generator and Control Building
- Complete Automation, Telemetry and SCADA

The Pump Station included provisions for temporary by-pass pumping during the construction to protect existing facilities. The station was successfully completed in March 2017 for \$3.3 million.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 24pt;">9</div>			
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Stormwater Pump Station No. 3 Sunrise, FL		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">PROFESSIONAL SERVICES 2017</td> <td style="width: 50%; text-align: center;">CONSTRUCTION 2017</td> </tr> </table>		PROFESSIONAL SERVICES 2017	CONSTRUCTION 2017
PROFESSIONAL SERVICES 2017	CONSTRUCTION 2017				
23. PROJECT OWNER'S INFORMATION					
A. PROJECT OWNER City of Sunrise		B. POINT OF CONTACT NAME Guarionex De Los Santos			
		C. POINT OF CONTACT PHONE NUMBER 954-888-6077			

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos provided design, permitting, and engineering during construction services for the replacement of the City of Sunrise's Pump Station No. 3.

Sunrise Pump Station No. 3 is a 16,000 gpm total capacity station located in a 40' canal right of way that is sandwiched between two condos. The main components of the Pump Station include:

- 16,000 gpm electric submersible pumps
- 42"x42" gated gravity outfall
- Pre-Cast Concrete Intake Structure
- Manual Trash Removal System
- Generator Receptacle for Back-up Power
- Electrical Controls and Complete Automation with Telemetry and SCADA

The Pump Station included provisions for temporary by-pass pumping during the construction to protect existing facilities. The station was successfully completed in March 2017 for \$1.5 million.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 10	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Clear Lake Surface Water Pump Station and Divide Structures West Palm Beach, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2018	CONSTRUCTION 2018
23. PROJECT OWNER'S INFORMATION			
A. PROJECT OWNER City of West Palm Beach		B. POINT OF CONTACT NAME Poonam Kalkat, PhD	
		C. POINT OF CONTACT PHONE NUMBER 561-822-2284	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



As a primary drought management tool for the City of West Palm Beach, Mock•Roos planned, designed, permitted and provided construction administration services for the Clear Lake Pump Station and Divide Structure.

Divide Structure

The permanent gated Divide Structure is located just west of the Australian Avenue Bridge. This structure generally consists of a steel sheet pile cutoff wall with the upper section encased in concrete, a concrete cap, two 6'X6' upward opening slide gates, one 6'x9' multiple disc slide gate, electric actuators, telemetry, and a video surveillance system. Each of the three gates fully open is capable of matching the daily flow of the water treatment plant at a velocity under 1 fps.

Pump Station

The transfer Pump Station is located 600 feet south of the bridge (north of Banyan Boulevard). The 25' wide 280' long intake channel leads to a 25' wide 18' long intake bay that is over 35' deep. Within the intake bay are three 15,000 GPM electric submersible pumps that were installed with formed suction intakes to reduce the required depth of the intake bay. Each of the pumps discharges to a 36" pipe that was jacked and bored under Australian Avenue. The pipes were installed via the jack and bore method to avoid existing utilities and keep the road open during the construction. The pump station has electrical controls for automation, telemetry, an MTS with a generator receptacle for back-up power, and a video surveillance system.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.2em;">11</div>	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Surface Water Pump Station No. 2 West Palm Beach, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES <div style="text-align: center;">2014</div>	CONSTRUCTION <div style="text-align: center;">2014</div>
23. PROJECT OWNER'S INFORMATION			
A. PROJECT OWNER City of West Palm Beach		B. POINT OF CONTACT NAME Poonam Kalkat, PhD	
		C. POINT OF CONTACT PHONE NUMBER 561-822-2284	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Control Structure No. 2 is used by the City to supply Regional Water Supply from the L-8 Tieback to the City's Grassy Waters Preserve. The City has an authorized average annual allocation of up to 67.0 MGD from this structure. Mock•Roos provided design, permitting and full construction management services for this \$5.5 million project. The new facility came online in October 2014.

Due to its age and deteriorated condition, Mock•Roos originally designed and permitted a new facility with a rated capacity (including back-up pumps) of 202,000 GPM. However, the City moved forward with constructing this fully modernized facility with a rated capacity of 135,000 gpm. The facility includes 4 - 33,600 gpm electric submersible pumps (variable frequency driven) housed in a large concrete intake structure, an automated trash rake removal system, a 500 kW diesel back-up generator housed in an electrical building, 42-inch discharge pipes, slope stabilization, a large metering vault facility, and video surveillance equipment meeting the intent of the City's vulnerability assessment report recommendations. Extensive pumping considerations were evaluated and the final pump configuration split the flow across 4 pumps to reduce the depth of the wetwell and provide operation flexibility.

The design included a by-pass system to allow the existing facility to remain operational throughout construction of the new facility. The by-pass system installed for construction purposes remains in place as an emergency discharge structure (allowing discharge back to the L-8 Canal) to provide post-storm flood control following large storm or hurricane events, particularly during the wet season.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER <div style="text-align: center; font-size: 1.2em;">12</div>			
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Palm Beach County L-2 Stormwater Pump Station Palm Beach, Florida		22. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">PROFESSIONAL SERVICES 2013</td> <td style="width: 50%; text-align: center;">CONSTRUCTION 2013</td> </tr> </table>		PROFESSIONAL SERVICES 2013	CONSTRUCTION 2013
PROFESSIONAL SERVICES 2013	CONSTRUCTION 2013				
23. PROJECT OWNER'S INFORMATION					
A. PROJECT OWNER Palm Beach County		B. POINT OF CONTACT NAME 			
		C. POINT OF CONTACT PHONE NUMBER 			

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos provided the planning, surveying, design, permitting and construction administration services for Palm Beach County's L-2 Stormwater Pump Station project.

Improvements included installation of three-50,000 gpm electric belt driven vertical axial flow discharge pumps, concrete intake and discharge bays, a 750-kW diesel back up generator system and building, 42-inch discharge pipes, canal and trash rack/rake improvements, and electrical and telemetry improvements.

The \$3.0 million project included water distribution and access roadway improvements. The intake structure was also designed around an existing drainage facility. In addition, discharge conveyance modeling was performed to appropriate select bank slope protection for the adjacent roadway bridge located just downstream of the pump station.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 13					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) D-2 and D-17 Pump Station Rehabilitations Palm Beach, Florida		22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION</td> </tr> <tr> <td>2019</td> <td>2019</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	2019	2019
PROFESSIONAL SERVICES	CONSTRUCTION						
2019	2019						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER Town of Palm Beach		B. POINT OF CONTACT NAME Patricia Strayer, PE					
		C. POINT OF CONTACT PHONE NUMBER 561-227-7056					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos completed the Town of Palm Beach's Stormwater Pump Station Assessment Report in December of 2015 and provided planning and design services for the rehabilitation of the Town's D-2 and D-17 Stormwater Pump Stations, both of which discharge into the Intracoastal waterway.

The D-2 Stormwater Pump Station is located on the north side of Palmo Way east of North Lake Way and is comprised of four electric submersible pumps, three main pumps (19,130 gpm) and a duty pump (7,420 gpm). The pump station accepts stormwater runoff from the collection system from Angler Avenue south to La Puerta Way, approximately 96 acres.

The D-17 Stormwater Pump Station is located on the Intracoastal Waterway at the west end of Clarendon Avenue and consist of two 15,000 gpm electric submersible pumps and one 4,000 gpm electric submersible duty pump. The pump station accepts stormwater runoff from approximately 16.7 acres through the collection system within the boundaries of Vita Serena, Lake Park Drive, and Clarendon Avenue (all west of South Ocean Boulevard).

The design of the rehabilitation of the D-2 and D-17 Pump Stations was completed to improve the operational reliability of each of the pump stations, increase access to critical pump station components, and reduce maintenance issues at the stations. Mock•Roos will be completing the design in time for the project to be bid in September of 2018 to allow the Town to award the project, pre-order materials, and complete the construction during the Town's 2019 Construction Season. Mock•Roos' coordination with the Town's O&M Staff and extensive history with pump station rehabilitation will provide the Town with an on budget, complete and custom design that reduces long term maintenance issues and increase the reliability of the stations for years to come.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM’S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 14	
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Ejector Station, Forcemain and Air Line Upgrades Palm Beach, Florida		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION 2014
23. PROJECT OWNER’S INFORMATION			
A. PROJECT OWNER Town of Palm Beach		B. POINT OF CONTACT NAME Patricia Strayer, PE	
		C. POINT OF CONTACT PHONE NUMBER 561-227-7056	

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos provided full range construction phase services for the construction of restoration improvements to 21 wastewater ejector stations, 11,000 feet of 4, 6, and 8-inch force mains and 9,000 feet of 1-1/4 inch and 2-inch air supply piping throughout Palm Beach.

Most of the south central part of the Town of Palm Beach is a narrow band of land bordered by the Atlantic Ocean on the east and the Intracoastal Waterway on the west. The major thoroughfare is South Ocean Boulevard (A1A) that is constructed on the ridge bordered with large estate houses constructed on each side of the road. Since the main road is on a ridge, wastewater must be pumped up to the ridge where the central force main system is constructed. This is accomplished by using compressed air ejector stations to move the wastewater up to the main road level and through the central force main and eventually to the A-7 Pump Station.

The \$4,200,000 project was constructed over 2 separate construction seasons. Mock•Roos also designed pavement restoration for both public and private roadways (total of 16) as part of the project. Project was completed in 2014.

NOTE: Fifteen of the stations are located at the end of private residential streets and required constant coordination with residents to minimize impacts.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)		20. EXAMPLE PROJECT KEY NUMBER 15					
21. TITLE AND LOCATION LOCATION (CITY AND STATE) Regional Wastewater Pump Station Replacement Lake Worth Beach, Florida		22. YEAR COMPLETED <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION</td> </tr> <tr> <td>2007</td> <td>2007</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION	2007	2007
PROFESSIONAL SERVICES	CONSTRUCTION						
2007	2007						
23. PROJECT OWNER'S INFORMATION							
A. PROJECT OWNER City of Lake Worth Beach		B. POINT OF CONTACT NAME Brian Shields, PE					
		C. POINT OF CONTACT PHONE NUMBER 561-586-1798					

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT



Mock•Roos and its consultants (structural, mechanical, electrical, architectural, landscaping) provided the planning, design, permitting and construction administration services for the \$7.3 million facility that collects and pumps wastewater produced in Lake Worth and seven surrounding communities from Bryant Park for treatment at the East Central Regional Water Reclamation Facility (ECRWRF).

The new facility features dual wetwells, four 400-horsepower submersible pumps, a 1750-kW backup generator, a 10,000-gallon secondary contained fuel tank, a 2,200-sq. ft. building, extensive large piping, up to 42-inch and state-of-the-art odor control and security systems. The facility is designed to pump 12.5 MGD, but has the capacity to pump in excess of 20 MGD. The new facility was constructed directly adjacent to the existing facility. The existing facility remained fully operational throughout the construction of the new facility through phased construction, demolition and salvage plans.

- Mock•Roos' expertise on obtaining grant money enabled Lake Worth to secure a \$750,000 grant from FDEP to help fund the project
- Improved pumping capacity compensates for changes in the PBC Regional System
- Improved operation and maintenance capabilities
- Improved expected lifespan through innovative wetwell design and addition of concrete liners to protect against hydrogen sulfide attack
- Improved reliability with 100-percent backup power to reduce possibility of overflow
- Improved odor control system and reliability with the addition of a wet-scrubber system and a back-up carbon adsorption system
- Improved facility aesthetics with extensive architectural, and landscaping features.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
A. (1) FIRM NAME Mock•Roos	(2) FIRM LOCATION West Palm Beach, FL	(3) ROLE Engineering

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

[illegible]

29. EXAMPLE PROJECTS KEY

NO.	CO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	CO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	MR	Marine Way Stormwater Pump Station	11	MR	Surface Water Pump Station No. 2
2	MR	D-14 Stormwater Pump Station Rehabilitation	12	MR	Palm Beach County L-2 Stormwater Pump Station
3	MR	D-4 and D-10 Stormwater Pump Station Rehabilitation	13	MR	D-2 and D-17 Pump Station Rehabilitations
4	MR	D-6 and D-7 Stormwater Pump Station Rehabilitation	14	MR	Ejector Station, Forcemain and Air Line Upgrades
5	MR	SFWMD L-8 Flow Equalization Basin (FEB) Design-Build Project	15	MR	Regional Wastewater Pump Station Replacement
6	MR	LWDD Pump Station and Control Structure No. 9	16	MR	
7	MR	SFWMD S-140 Pump Station Improvements	17	MR	
8	MR	Stormwater Pump Station No. 2	18	MR	
9	MR	Stormwater Pump Station No. 3	19	MR	
10	MR	West Palm Beach Clear Lake Pump Station and Divide Structure	20	MR	

H. ADDITIONAL INFORMATION

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

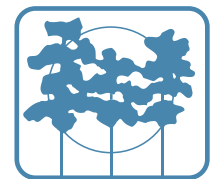
Client References

Mock•Roos continues to maintain numerous long-term client relationships, many of which date back to the 1960s and 1970s. As such, over the years our projects, project workloads, staff assignments and annual contract values vary greatly from year to year. The following pages offer several client references that we encourage you to contact regarding our abilities to complete their projects on schedule and within budget.

Name of Company: Town of Palm Beach
Address: 951 Old Okeechobee Rd., Palm Beach, FL 33401
Contact Name and Title: Patricia Strayer, PE, Town Engineer
Contact Phone: 561-227-7056 Contact Fax: No Fax
Contact Email: pstrayer@townofpalmbeach.com
Date Contract Began: 2008 Length of Contract Term: on-going



Name of Company: Village of Wellington
Address: 12300 Forest Hill Boulevard
Contact Name and Title: Shannon LaRocque, PE, Utilities Director
Contact Phone: 561-791-4008 Contact Fax: 561-753-2429
Contact Email: slarocque@wellingtonfl.gov
Date Contract Began: 1994 Length of Contract Term: on-going



Name of Company: City of Lake Worth
Address: 301 College Street, Lake Worth, Florida, 33460
Contact Name and Title: Brian Shields, PE, City Engineer/Water Utilities Director
Contact Phone: 561-586-1675 Contact Fax: No Fax
Contact Email: bshields@lakeworth.org
Date Contract Began: 1959 Length of Contract Term: on-going



Name of Company: City of West Palm Beach
Address: 401 Clematis Street, West Palm Beach, FL 33401
Contact Name and Title: Poonam Kalkat, PhD, Director of Public Utilities
Contact Phone: 561-822-2284 Contact Fax: No Fax
Contact Email: pkalkat@wpb.org
Date Contract Began: 1997 Length of Contract Term: on-going



Name of Company: Palm Beach County Water Utilities Department
Address: 8100 Forest Hill Boulevard, West Palm Beach, FL 33413
Contact Name and Title: Jim Stiles, Department Director
Contact Phone: 561-493-6214 Contact Fax: No Fax
Contact Email: jstiles@pbcwater.com
Date Contract Began: 2007 Length of Contract Term: on-going



Name of Company: Northern Palm Beach County Improvement District
Address: 359 Hiatt Dr, Palm Beach Gardens, FL 33418
Contact Name and Title: O'neal Bardin, Executive Director
Contact Phone: 561-624-7830 Contact Fax: No Fax
Contact Email: onealb@npbcid.org
Date Contract Began: 1959 Length of Contract Term: on-going



Name of Company: Palm Beach County Roadway Department
Address: 2300 North Jog Road, West Palm Beach, FL 33411
Contact Name and Title: Omelio Fernandes, P.E., Director
Contact Phone: 561-684-4150 Contact Fax: No Fax
Contact Email: ofernandes@pbcgov.org
Date Contract Began: 2014 Length of Contract Term: on-going



Name of Company: City of Boca Raton
Address: 2500 NW 1st Ave, Boca Raton, FL 33431
Contact Name and Title: Maurice (Moe) Morel, City Civil Engineer
Contact Phone: 561-416-3425 Contact Fax: No Fax
Contact Email: MMorel@ci.boca-raton.fl.us
Date Contract Began: 2007 Length of Contract Term: on-going



Name of Company: South Florida Water Management District
Address: 3301 Gun Club Road
Contact Name and Title: Sandra Smith, PE, LEED AP
Contact Phone: 561-682-6510 Contact Fax: No Fax
Contact Email: sasmith@sfwmd.gov
Date Contract Began: 2014 Length of Contract Term: on-going



Name of Company: Lake Worth Drainage District
Address: 13081 S. Military Trail
Contact Name and Title: Tommy Strowd
Contact Phone: 561-498-5363 Contact Fax: 561-495-9694
Contact Email: tstrowd@lwdd.net
Date Contract Began: 2017 Length of Contract Term: on-going





Patricia Strayer, PE, Town Engineer

Town of Palm Beach

561-227-7056

951 Old Okeechobee Rd.

Palm Beach, FL 33401

pstrayer@townofpalmbeach.com

Scope of Work - Wastewater Pumping and Collection, Stormwater Pumping, Collection and Outfall Systems, Roadway/Streets/Streetscape and Other Public Works Projects

Number of Staff Assigned - Typically ranges between 3-8 staff members

Number of months providing service - 10 years (approximately)

Annual Value of Contract - Varies based on work authorizations at that time (up to \$700,000)

Mock•Roos has provided engineering services to the Town of Palm Beach since the 1970s and has recently been providing continuing engineering services to the Town since 2009. Recent services include planning, permitting, modeling, design and construction services for water resources; stormwater and wastewater pump stations; force-main assessments, replacements and rehabilitations; sanitary sewer assessments, replacements and rehabilitations, stormwater system replacements, sunny-day tidal influence backflow prevention, easement assistance and various street improvement projects.

Mock•Roos is currently working as a subconsultant to Kimley-Horn on the 8-year \$100 million Town-wide underground program which includes watermain (West Palm-owned) and roadway improvements. Past projects since 2009 have included:

Streets/Roadway Improvements

- Bradley Place Pavement Rehabilitation
- S. Ocean Boulevard Roadway Reconstruction
- Via Marina Roadway Reconstruction
- Ibis Way and Ibis Island
- Via Agape
- Parc Monceau
- Ocean Cir/Via Fontana
- Seagrape Circle
- Lagomar Road
- Ocean View Road
- Regents Park Road
- Woodbridge Road
- Kings Road
- Via Palma and Via Del Lago
- Via Bellaria / Clarendon Avenue
- Via Del Mar, El Bravo and Travers Way
- Island Road and Island Drive
- North Woods Road

Wastewater System Improvements

- Various system hydraulic modeling
- A-7 to Hammon Ave. Forcemain Replacement
- Pinewalk (A-4) Forcemain Replacement
- Ejector Pump Station Improvements
- E-6 Wastewater Pump Station Improvements
- E-6 Forcemain Rehabilitation
- E-3 Forcemain Rehabilitation

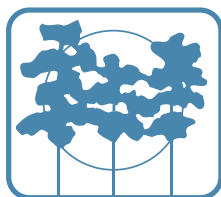
- Royal Palm Way Forcemain Rehabilitation
- Royal Poinciana Way Forcemain Rehabilitation
- North County Road Forcemain Rehabilitation
- Pump Station Condition Assessments

Stormwater System Improvements

- Various Basin H/H modeling
- D-2 Stormwater Pump Station Renovations
- D-4 Stormwater Pump Station Renovations
- D-6 Stormwater Pump Station Renovations
- D-7 Stormwater Pump Station Renovations
- D-10 Stormwater Pump Station Renovations
- D-14 Stormwater Pump Station Renovation
- D-17 Stormwater Pump Station Renovation
- D-4 Stormwater Outfall Rehabilitation
- D-10 Stormwater Outfall Rehabilitation
- Town-wide stormwater pipe Replacement
- Pump Station Condition Assessments
- Everglades Road and Atlantic Avenue
- Dunbar Road and Wells Road
- Southland Road
- Tangier Avenue

Street Light Improvements

- Northend Street Light Replacements
- Southend Street Light Replacements
- Phipps Park



Shannon LaRocque, PE, Utilities Director

Village of Wellington

561-791-4008

12300 Forest Hill Boulevard

Wellington, FL 33414

slarocque@wellingtonfl.gov

Scope of Work - Water Distribution, Wastewater Pumping and Collection, Stormwater Systems, Roadways/Streets and Parks and Recreation facilities

Number of Staff Assigned - Typically ranges between 3-6 staff members

Number of months providing service - 24 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$400,000)

Mock•Roos has been providing continuing engineering services to Wellington since 1994. In the past 24 years, Mock•Roos has assisted Wellington in implementing over \$60 million worth of infrastructure improvements.

Services

- Stormwater Master Planning and System-wide Hydrologic/Hydraulic Modeling
- Water and Wastewater Master Planning and System-wide Hydraulic Modeling
- Forcemain Replacements
- Roadway and Intersection Improvements
- Traffic/Signalization Engineering Assistance
- Drainage/Stormwater Improvements
- Culvert Up-sizing Improvements
- Athletic Field Improvements (Village Park)
- Wellington Amphitheater
- Scott's Place (Outdoor boundless playground)
- Community and Tennis Centers
- Stormwater and Wastewater Pump Stations
- Water Control Structures
- Large-Scale Impoundments and Preserves
- Large-Scale Lake Bank Erosion Projects
- Nature and Equestrian Trails
- Environmental Preserve Parking Lot Facilities
- Environmental Preserve Observation Tower
- FEMA Mapping Assistance
- Infrastructure Needs Assessments
- NPDES Permit Compliance
- Water Quality Monitoring and Improvements
- Water Control Plans
- Policy Guidance (Ordinances and Codes)
- Feasibility Studies
- Grant Applications and Assistance
- GIS Assistance
- Mapping (Equestrian Trails, Comprehensive Plan)
- Drainage and Plat Reviews (18+ Years)

Projects

- \$45 Million Basin B Stormwater Master Plan and Modeling
- C-8 Canal Culvert Crossing Replacement
- C-11 and C-15 Canal Culvert Crossing Improvements and Equestrian Trails
- System-wide Wastewater Lift Station Evaluation (107 total)
- Water Distribution System Hydraulic Model
- Wastewater System Hydraulic Model
- Flying Cow Road Improvements
- Forest Hill Boulevard Widening
- Pierson Road Extension
- Wellington Environmental Preserve and Passive Park (Section 24 Impoundment)
- Wellington Tennis Center
- Wellington Community Center
- Scott's Place and Wellington Amphitheater
- Village Park
- Village Park Second Entrance
- Stormwater Pump Station No. 2 Renovation
- Stormwater Pump Station Nos. 3 and 4 Renovation
- Stormwater Pump Station No. 5
- Stormwater Pump Station No. 6
- Stormwater Pump Station No. 7
- Stormwater Pump Station No. 8
- Stormwater Pump Station No. 9
- Pierson Road Control Structures
- FEMA Modeling and Mapping
- Lake Wellington and Lake Greenview Shores Erosion Control



Brian Shields, PE, City Engineer/Water Utility Director
City of Lake Worth
561-586-1675
301 College Street
Lake Worth, FL
bshields@LakeWorth.org

Scope of Work - Water Treatment and Distribution, Wastewater Pumping and Collection, Stormwater and Outfall Systems, Roadway/Streets/Streetscape

Number of Staff Assigned - Typically ranges between 3-6 staff members

Number of months providing service - 60 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$580,000)

Mock•Roos has been providing full service continuing engineering services to the City of Lake Worth since 1959. Services have been provided on a continuous basis for the Utilities, Public Services, and Administrative Departments. For brevity, the following is a list of the types of projects performed for the City over the many years:

- Wastewater Pump Stations
- Water and Repump Stations
- Policy Guidance (Ordinances and Codes)
- Utility Annual Reports
- Rate Studies
- Financial/Feasibility Studies
- Bond Issue Program Assistance
- Infrastructure Needs Assessments
- Elevated Storage Tanks
- Water Distribution and Wastewater Collection Capital Improvements
- Water Distribution and Wastewater R&R
- Regional Wastewater Customer Assistance
- Water Treatment Plant Projects
- Reverse Osmosis Water Treatment Plant
- Water Use Permitting
- Surficial Aquifer Wellfield
- Floridan Aquifer Wellfield
- Lake Worth Lake Fill Closure and Compliance
- Stormwater Master Planning
- Drainage Improvements
- Water Quality Improvement Projects
- Stormwater Outfall Improvements
- NPDES Permit Compliance
- Drainage Reviews (25+ Years)
- Grant Applications and Assistance
- Mapping (Trash Pick-Up/Trash Route, Bus Route, City Owned Properties, Trolley Route)
- Lake Worth Pier Rehabilitation and Repairs
- Lake Worth Beach and Casino Retaining Wall Improvements
- Roadway and Streets Improvements
- Alley and Sidewalk Improvements
- Transit Alley Studies
- Traffic Calming Studies and Improvements
- Northwest Ballfield Improvements
- GIS/Mapping



Poonam Kalkat, PhD, Director of Utilities
City of West Palm Beach
561-822-2284
401 Clematis Street
West Palm Beach, Florida 33401
pkalkat@wpb.org

Scope of Work - Wastewater Pumping and Collection, Stormwater Pumping, Collection and Outfall Systems, Roadway/Streets/Streetscape, Other Public Works Projects, and Parks and Recreation

Number of Staff Assigned - Typically ranges between 3-8 staff members

Number of months providing service - 21 years (approximately)

Annual Value of Contract - Varies based on work authorizations at that time (up to \$800,000)

Mock•Roos has provided engineering services to the City of Palm Beach since the 1970s and has recently been providing continuing engineering services to the City since 1997. Since 2008 Mock•Roos has worked closely with numerous City staff members on the planning, design, permitting and construction of almost \$40 million worth of related projects. Previous project include:

Stormwater System Improvements

- Award Winning Renaissance Project
- City Stormwater Master Plan and GIS
- 7700 Flager Drive Outfall Replacement
- Lake Worth Lagoon Outfall Dredging Permitting
- Award Winning Garden Avenue Stormwater
- 29th Street Outfall Pipe Bursting
- 16th Avenue Stormwater Sewer Replacement
- Stormwater Pump Station No. 2 Replacement
- Control Structure No. 4 Replacement
- Emergency Australian Bridge Pump Station
- Emergency C-17 Canal Pump Station
- Clear Lake Pump Station and Divide Structure
- C-17 Canal Stormwater Pump Station
- Ironhorse Stormwater Pump Stations
- Renaissance Intake Headwall Improvements
- Boyd Street and Caroline Street Structure Improvements
- Big Mound Structure Replacement
- Renaissance Water Supply Modeling/Evaluation/Report

Utility Improvements

- Phipps Park Water Pump Station Pump/Piping Improvements
- Lift Station Nos. 88, 91 and 93
- Chase Sanitary Sewer Replacement
- WTP Access Driveway Improvements
- Vehicle Access Restriction Devices
- Riverwalk Lake System Evaluation
- FPL Evernia Feed, Finished Water and Washwater Pipeline

Water Resources

- Control Structure No. 3 Flow Monitoring Device
- 1,400 acre Wetland Expansion Permit/Design
- Horizontal Directional Drill Specifications
- Water Supply Alternatives Evaluations
- SFWMD Stipulated Agreement Assistance
- Short and Long Term Water Supply Planning
- Additional Regional Water Supply Evaluation
- Water Use Permitting
- Groundwater Modeling Assistance
- G161 Operational Protocol and MOU Assistance
- Water Catchment Area Water Conservation Study
- Bond Feasibility Reports
- Surficial Aquifer Test Production Well and Exploratory Wells
- Surficial Aquifer and Upper Floridan Aquifer Water Supply Modeling
- Eastern Wellfield (10 surficial aquifer wells)
- ASR Well Carver Canal Discharge Piping
- Floridan Aquifer Monitoring Well
- Raw Water Pump Station No. 2 Improvements
- AWT Wetland Distribution System Improvements
- Clear Lake and Lake Mangonia Buffer and Erosion Investigation and Design
- ASR Well Evaluation and Cycle Testing Assistance

Parks and Recreation

- Dreher Park Improvements (numerous projects over 3 decades)
- Currie Park
- Gaines Park



Jim Stiles, Department Director
Palm Beach County Water Utilities Department
561-493-6214
8100 Forest Hill Boulevard
West Palm Beach, FL 33413
Jstiles@pbcwater.com

Scope of Work - Water Distribution, Wastewater Pumping and Collection, Hydraulic Modeling

Number of Staff Assigned - Typically ranges between 3-6 staff members

Number of months providing service - 11 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$400,000)

Our in-house team members have performed on pipeline projects under our WUD Pipeline Engineering Contract for the past 4 years. Projects have included the Design and Permitting of over 12 Miles of Pipeline, including reclaimed water, water and wastewater projects. We also perform the evaluation and route study for over 19.0 miles of re-claimed watermain. We also recently completed the design of the renovation of 30 wastewater pump stations and will begin the design of another 30 in late 2018. Projects included:

Type of Project	Length	Dia.
Raw Watermains		
System No. 9 Raw Watermain Improvements	6,500'	12-36"
Reclaimed Watermains		
Broward/Palm Beach Co. Reclaimed Watermain Route Study	74,500'	8-30"
Reclaimed Watermain Extension at Emerald Dunes Golf Course	1,000'	16"
Reclaimed Watermain Extension along SID M2 Canal	4,200'	16"
Potable Watermains		
South County Watermain Replacement - Phases 4	9,350'	4-8"
South County Watermain Replacement - Phases 5	16,350'	4-8"
Gator Boulevard Watermain Extension	4,500'	6-12"
Runyon Village Watermain Improvements	2,000'	6"
Watermain Extension to Rosenwald Elementary School	2,200'	12"
NW 1st Ave Watermain Improvements	5,600'	8-16"
Wastewater/Forcemains		
Pump Station 5229 Piping Improvements	1,400'	42-48"
40th Street N. Emergency Forcemain Replacement	1,000'	30"
Sherwood Forest Boulevard Forcemain Improvements	220'	4"
Sansbury Way Forcemain Improvements at LWDD L-2 Canal	140'	12"
Runyon Village Forcemain Improvements	4,300'	3-4"
NW 1st Ave Wastewater Improvements	6,000'	12-24"
Wastewater Lift Station Rehabilitations (total of 30)	-	-



O'Neal Bardin, Executive Director
Northern Palm Beach County Improvement District
561-624-7830
359 Hiatt Drive
Palm Beach Gardens, Florida 33418
OnealB@npbcid.org

Scope of Work - Stormwater Pump Stations, Water Control Structures, Roadway Improvements, Large Land Development Communities, Surface Water and Stormwater Management Systems, Utility Infrastructure, NPDES MS4 Permit Leader

Number of Staff Assigned - Typically ranges between 3-8 staff members

Number of months providing service - 57 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$500,000)

Mock•Roos has a long history of effectively serving Northern's needs; as District Engineer (1961-2002), and as a Project and Consulting Engineer (2002-present).

Mock•Roos has assisted Northern implement 100s of millions of dollars worth of infrastructure improvements, including the new construction of, and in many cases the subsequent renovation/replacement of, all of Northern's 15 Stormwater Pump Stations. Projects have included:

- Professional services for 15 pump stations and 50 control structures and dozens of water control facility rehabilitations
- Development of Northern's original Technical, Engineering and Quality Control Standards
- Preparation of 44 Water Control Plans or Plans of Improvements
- Preparation of over 14 Reports of Engineer and conducted hundreds of permit and plat reviews
- Evaluation of 1,000's of acres of Northern's extensive surface water management system using computer modeling techniques.
- Permitting, design, and fully administered the construction services for several of the larger land development projects in Northern's jurisdiction. These broad range of engineering services included:
 - planning, permitting and surveying
 - surface water management and stormwater system modeling and design
 - water distribution systems, wastewater collection system, and reclaimed water system modeling and design
 - stormwater pump stations and lift stations
 - roadways, platting, and easements



Omelio Fernandes, P.E., Director
Palm Beach County Roadway Production Division
561-684-4150
2300 North Jog Road
West Palm Beach, Florida 33411
OFernand@pbcgov.org

Scope of Work - Major highways, local residential streets, pavement design, intersection plateauing, traffic operations, signalization, pavement markings, maintenance of traffic phasing, permitting, and stormwater design

Number of Staff Assigned - Typically ranges between 3-4 staff members

Number of months providing service - 35+ years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$300,000)

Mock•Roos has been provided roadway related services to Palm Beach County for the past several decades. Past Thoroughfares include:

- Roebuck Road Widening - Jog Road to Haverhill Road
- PGA Boulevard Expansion - Ryder Cup Boulevard to Florida's Turnpike
- Boutewell Road Widening - 10th Avenue N to 2nd Avenue N
- Jog Road - PGA Boulevard to Hood Road
- Forest Hill Boulevard Widening - Montauk Drive to Birkdale Drive
- Jog Road – Lake Ida Road to Boynton Beach Boulevard
- Jog Road – Okeechobee Boulevard to Montclair Lakes
- Pierson Road Extension and Re-alignment - Fairlane Farms Road to State Road 7 (US 441)
- Melaleuca Lane - Jog Road to Military Trail
- Lantana Rd - Lyons Rd to Hagen Ranch Rd and Lyons Rd/Lantana Rd Intersection
- Linton Boulevard – Jog Road to Military Trail
- Haverhill Road/Community Drive Intersection Improvements
- Haverhill Road – Hypoluxo Road to Lantana Road
- Gateway Boulevard Widening – Military Trail to Congress Ave.
- Woolbright Road – Military Trail to Congress Avenue



Tommy Strowd, Director of Operations and Maintenance

Lake Worth Drainage District

561-498-5363

13081 S. Military Trail

Delray Beach, FL 33484

tstrowd@lwdd.net

Scope of Work - Stormwater Pump Stations, Water Control Structures, Hydraulic/Hydrologic Modeling and Engineering During Construction

Number of Staff Assigned - Typically ranges between 3-4 staff members

Number of months providing service - 18 months (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$500,000)

Mock•Roos' involvement with the LWDD dates back to the 1960s when we performed a study and report on the proposed rehabilitation of the District's channel systems (south of Okeechobee Boulevard, north of Hillsboro Canal, west of the Coastal Ridge and generally east of State Road 7). Other projects include:

- Control Structure No. 9 Replacement
- Control Structure No. 19 Rehabilitation
- Control Structure No. 20 Rehabilitation
- 2014 Water Control Plan
- Hydraulic/Hydrologic Models of 511 Miles of Canals in the District
- Water Management Plan for Hillsboro, C-15, C-16 and C-51 Basins
- Water Control Structure No. 1 Replacement
- District Interbasin Study
- Preparation of R/W Maps for District Canals



Maurice (Moe) Morel, City Civil Engineer

City of Boca Raton
561-416-3425
2500 NW 1st Avenue
Boca Raton, FL 33431
MMorel@ci.boca-raton.fl.us

Scope of Work - formal Stormwater Management Master Plan, FEMA Modeling and Mapping, Stormwater Improvements Projects, NPDES Assistance and other miscellaneous stormwater related services

Number of Staff Assigned - Typically ranges between 3-4 staff members

Number of months providing service - 11 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$400,000)

Mock•Roos has been providing continuing stormwater engineering services to the City of Boca Raton since 2007. Services include performing a formal Stormwater Management Master Plan, FEMA Modeling and Mapping, Stormwater Improvements Projects, NPDES Assistance and other miscellaneous stormwater related services.

- 2017 Stormwater Management Master Plan
- 2007 Stormwater Management Master Plan
- FEMA Modeling/Mapping
- MS4 NPDES Permit Compliance
- EPA TMDL Response Assistance
- FDEP TMDL Evaluation Data Assistance
- Pervious Pavement Study and Evaluation

Stormwater Improvements at:

- NW 5th Ave. at NW Spanish River Blvd
- NW 5th Ave at NW 35th St
- NW 36th Ct at NW 4th Ave
- NW 3rd Ave and NW 35th St
- NE 7th Drive
- NE 6th Drive
- NW 25th Terrace
- NE 5th Ave and NE 23rd Way
- New Floresta Neighborhood
- Palm Beach Farms
- Por La Mar Neighborhood
- University Gardens Neighborhood
- Blue Lake Drainage Basin
- Harbour Island Neighborhood



Sandra Smith, PE, LEED AP, Engineering Design Section Administrator
South Florida Water Management District
561-682-6510
3301 Gun Club Road
West Palm Beach, FL 33406
sasmith@sfwmd.gov

Scope of Work - Stormwater Pump Stations, Water Control Structures, Hydraulic/Hydrologic Modeling, Canal Improvements and Engineering During Construction

Number of Staff Assigned - Typically ranges between 3-4 staff members

Number of months providing service - 4 years (approximately)

Annual Value of Contract - Varies based on ongoing authorizations at that time (up to \$600,000)

Mock•Roos has relevant South Florida Water Management District dates back to the 1980s. We have held a continuing contract for Operations, Maintenance, Repair, Rehabilitation and Replacement of Stormwater Pump Stations and Control Structures since 2014. Past and current projects include:

- L-8 Reservoir Flow Equalization Basin (FEB) Inflow Water Control and Spillway Structures
- S-140 Pump Station Rehabilitation
- L-8 Canal/Dupius Control Structure Replacements
- Loxahatchee Slough G-160 Control Structure
- Lakeside Ranch Stormwater Treatment Area (LRSTA) project
- L-63S/L-64 Canal Widening and Improvements
- BMPs for Dairies in the Taylor Creek/Nubbin Slough Basins Discharging into Lake Okeechobee
- Western Basins Environmental Assessment
- Canal Conveyance Capacity Program C-5108 Dade County Canals C-100, C-100B and C-1W
- Sediment Removal Feasibility Study
- Bolles Canal Improvements
- Phosphorus Budget/Loading Analysis for Lake O, Lake Istokpoga and Upper Kissimmee Watersheds
- Everglades Protection Project – Evaluation of Stormwater Treatment Area Alternatives
- Proposed Water Supply Potential for Area “B” – Everglades Buffer Strip in the Hillsboro Basin

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

A. SIGNATURE

B. DATE

February 13, 2020

C. NAME AND TITLE

Garry Gruber, P.E., Vice President

MOCK•ROOS

[illegible]


MOCK•ROOS

ARCHITECT - ENGINEER QUALIFICATIONS					1. SOLICITATION NUMBER (IF ANY) 2020-011	
PART II - GENERAL QUALIFICATIONS (If a firm has branch offices, complete for each specific branch office seeking work.)						
2A. FIRM (OR BRANCH & ASSOCIATES, INC.) WGI, Inc.				3. YEAR ESTABLISHED 1991		4. DUNS NUMBER 938414349
2B. STREET 2035 Vista Parkway				5. OWNERSHIP		
2C. CITY West Palm Beach		2D. STATE FL	2E. ZIP CODE 33411	A. TYPE Corporation		
6A. POINT OF CONTACT NAME AND TITLE Brian LaMotte, PE/Vice President				B. SMALL BUSINESS STATUS N/A		
6B. TELEPHONE NUMBER 561-687-2220		6C. EMAIL ADDRESS brian.lamotte@WGIInc.com		7. NAME OF FIRM (If block 2a is a branch office)		
8A. FORMER FIRM NAME(S) (IF ANY)				8B. YR. ESTABLISHED		8C. DUNS NUMBER
9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
A. FUNCTION CODE	B. DISCIPLINE	C. NO. OF EMPLOYEES		A. PROFILE CODE	B. EXPERIENCE	C. REVENUE INDEX NUMBER (SEE BELOW)
		(1) FIRM	(2) BRANCH			
02	Administration	100	53	A02	Aerial Photograph; Airborne Data and Imagery Collection and Analysis	1
06	Architect	6	0	A06	Airports; Terminals and Hangars; Freight Handling	1
07	Biologist	4	3	B02	Bridges	7
08	CADD Tech	44	10	C01	Cartography	1
12	Civil Engineer	53	14	C02	Cemeteries (Planning & Relocation)	1
21	Electrical Engineer	2	0	C06	Churches; Chapels	1
24	Environmental Scientist	3	3	C07	Coastal Engineering	1
29	GIS Specialist	2	1	C10	Commercial Building (Low-Rise); Shopping Centers	4
30	Geologist	1	1	C11	Community Facilities	5
38	Land Surveyor	158	77	C14	Conservation and Resource Management	1
39	Landscape Architect	13	9	C16	Construction Survey	6
42	Mechanical Engineer	3	0	C17	Corrosion Control; Cathodic Protection; Electrolysis	2
46	Photogrammetrist	1	0	C18	Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	5
47	Planner: Urban/Regional	14	9	D04	Design-Build – Preparation of RFP's	5
57	Structural Engineer	43	4	D07	Dining Halls; Clubs; Restaurants	4
60	Transportation Engineer	46	16	E01	Ecological & Archaeological Investigations	2
	Engineer Intern	57	14	E09	Environmental Impact Studies, Assessments or Statements	4
	Parking Planner	4	0	E10	Environmental & Natural Resource Mapping	2
	Other Employees	9	5	E11	Environmental Planning	2
				E12	Environmental Remediation	3
				E13	Environmental Testing and Analysis	3
				G01	Garages; Vehicle Maintenance Facilities; Parking Decks	6
				G03	Geodetic Surveying: Ground and Airborne	2
				G04	Geographic Information System Services: Development, Analysis, and Data Collection	2
				H01	Harbors; Jetties; Piers, Ship Terminal Facilities	3
				H07		8
				H09	Hospital & Medical Facilities	4
				H13	Hydrographic Surveying	5
				I04	Intelligent Transportation Systems	3
				I06	Irrigation; Drainage	4
				L02	Land Surveying	8
				L03	Landscape Architecture	6
				L04	Libraries; Museums; Galleries	1
				L06	Lighting (Exteriors; Streets; Memorials; Athletic Fields, Etc.)	2

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				O01	Office Buildings; Industrial Parks	3
				P03	Photogrammetry	1
				P05	Planning (Community, Regional, Areawide and State)	2
				P06	Planning (Site, Installation, and Project)	6
				P13	Public Safety Facilities	2
				R04	Recreation Facilities (Parks, Marinas, Etc.)	2
				R06	Rehabilitation (Buildings; Structures; Facilities)	6
				R11	Rivers; Canals; Waterways; Flood Cnt	5
				S03	Seismic Designs & Studies	6
				S04	Sewage Collection, Treat & Disp	5
				S09	Structural Design; Special Structures	6
				S10	Surveying; Platting; Mapping; Flood Plain Studies	7
				S11	Sustainable Design	1
				S13	Storm Water Handling & Facilities	2
				T03	Traffic & Transportation Engineering	6
				T04	Topographic Surveying & Mapping	7
				T05	Towers (Self-Supporting & Guyed Systems)	4
				U02	Urban Renewals; Community Development	1
				V01	Value Analysis; Life-Cycle Costing	3
				W01	Warehouses & Depots	1
				W02	Water Resources; Hydrology; Ground Water	2
				W03	Water Supply; Treatment and Distribution	3
				Z01	Zoning, Land Use Studies	2
			Total	563	218	

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (insert revenue index number shown at right)		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
A. FEDERAL WORK	4	1. Less than \$100,000.	6. \$2 million to less than \$5 million
B. NON-FEDERAL WORK	9	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
C. TOTAL WORK	10	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.	
A. SIGNATURE 	B. DATE February 13, 2020
C. NAME AND TITLE David Wantman, PE / CEO	

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MOCK•ROOS

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Tab 4. Proposers Information

Proposers Information..... 85

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- a. Legal contracting name including any doing business as.
Mock, Roos and Associates, Inc.
- b. State of organization or incorporation.
Florida
- c. Ownership structure of Proposer's company.
Corporation
- d. Federal Identification Number.
59-0878800
- e. Contact information for Proposer's Corporate headquarters.
 - i. 5720 Corporate Way
 - ii. West Palm Beach, FL 33407
 - iii. 561-683-3113
- f. Contact information for Proposer's Local office (if any).
 - i. 5720 Corporate Way
 - ii. West Palm Beach, FL 33407
 - iii. 561-683-3113
- g. Years in business
65 Years
- h. List of officers, owners and/or partners, or managers of the firm. Include names, addresses, email addresses, and phone numbers.

CMP

Zimmerman, Dale Wm.
5720 Corporate Way, West Palm Beach, FL
33407-9004
dale.zimmerman@mockroos.com
561-683-3113

Secretary

Mccray, Debra C
5720 Corporate .Way, West Palm Beach, FL
33407-9004
debbie.mccray@mockroos.com
561-683-3113

Exec. Vice President

Biggs, Thomas A.
5720 Corporate Way, West Palm Beach, FL
33407-9004
thomas.biggs@mockroos.com
561-683-3113

Treasurer

Ford, John P.
5720 Corporate Way, West Palm Beach, FL
33407-9004
561-683-3113

Vice President

Clodfelter, Mary H.
5720 Corporate Way, West Palm Beach, FL
33407-9004
561-683-3113

Sr. Vice President

Gruber, Garrytt G.
5720 Corporate Way, West Palm Beach, FL
33407-9004
garry.gruber@mockroos.com
561-683-3113

Vice President

Wertepny, Alan D.
5720 Corporate Way, West Palm Beach, FL
33407
alan.wertepny@mockroos.com
561-683-3113

Vice President

Zimmerman, Derek L.
5720 Corporate Way, West Palm Beach, FL
33407
derek.zimmerman@mockroos.com
561-683-3113

i. Any additional organizational information that Proposer wishes to supply to augment its proposal.

Mock•Roos has one office location, all 30 employees work at this location.

j. Contact information for Proposer's Primary representative during this RFQ process.

i. Garry Gruber, PE, Project Director

ii. 561-722-9185 (cell)

iii. garry.gruber@mockroos.com

iv. 5720 Corporate Way

v. West Palm Beach, FL 33407

k. Contact information for Proposer's Secondary representative during this RFQ process.

i. John Cairnes, PE, Project Manager

ii. 561-371-5695 (cell)

iii. john.cairnes@mockroos.com

iv. 5720 Corporate Way

v. West Palm Beach, FL 33407

g. Provide details of any ownership changes to Proposer's organization in the past three years or changes anticipated within six months of the Due Date and Time (e.g., mergers, acquisitions, changes in executive leadership).

There have been no changes. There are no anticipated changes.

h. Provide the names of the persons who are principals of the company.

Zimmerman, Dale Wm.

i. Provide information on any lawsuits pending or any judgments, in the last five (5) years, which are concerned directly with the firm, the staff, or any part of the Proposer's organization, which are proposed to perform on this contract.

1. FREE MYERS (Myers) , Plaintiff V Defendants, Mock•Roos & Associates (Mock•Roos), and the Town of Palm Beach (Town), et al circuit court of the 15th Judicial Circuit in and for PALM BEACH COUNTY, FLORIDA; CASE # 502016 CA013418 MB DIVISION:In this case, Mr. Myers ("Myers") filed a Complaint on 12/01/2016, against Mock•Roos & Associates, Inc ("Mock•Roos") and the Town of Palm Beach, FL ("Town") for damages allegedly suffered by Myers on 10/14/2014 when Myers was working in a manhole for CFI, a subcontractor to the Hinterland Group, Inc ("Hinterland"), the general contractor to the Town on the E-3 Force Main Rehabilitation Project.

Mock•Roos was served with the Summons and Complaint on 12/9/2016. Mock•Roos designed the Project for its client, the Town. Mock•Roos vigorously defended against the allegations in this case and filed the appropriate Motions to Dismiss the Complaint. The case was dismissed with prejudice in late 2018.

Tab 5. Experience, Background, References

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A. Mock•Roos Company Profile and Overall Background

Firm Overview

Mock•Roos is a locally owned corporation, established in Lake Worth, Florida in 1954. We have been a corporate resident of the City of West Palm Beach since 1959. Since 1982, Mock•Roos has been located at 5720 Corporate Way in West Palm Beach. We have been providing full service engineering, construction and project management services to Palm Beach County municipalities/governmental entities, as well as select private sector clients, for over 65 years.



Kenneth Mock, PLS, PE



Edward Roos, PLS

Kenneth (K.C.) Mock and Edward Roos, the founders of Mock•Roos, were both Professional Surveyor and Mappers (with Mr. Mock also being a Professional Engineer). Our founders were truly specialists in accomplishing the goals of creating quality, practical approaches, and solutions to engineering-related projects in the Florida environment. Their professional passion and intense focus on providing quality products and services to the people we serve has made Mock•Roos one of the premier consulting firms in Palm Beach County.

In 1985, an expanse of State Road 80 was dedicated as the Kenneth C. Mock Memorial Highway. Stretching from South Bay to the Town of Palm Beach, it is a lasting testimony to the Mock•Roos co-founder whose sense of responsibility led to safer travel.

Firm's General Expertise

Mock•Roos offers significant experience and qualifications on thousands of infrastructure projects throughout South Florida. Our team members possess wide-ranging diversity in their technical abilities, eliminating the organizational structure of "specific" departments. Mock•Roos provides consulting expertise in several disciplines, including:

- Project/Construction Management
- Stormwater Pump Stations
- Wastewater Pump Stations
- Hydrogolic/Hydraulic Modeling
- Transportation Systems
- Water Resources/Surface Water Management
- Stormwater Management

- Water and Wastewater Utilities
- Parks and Recreational Facilities
- Land and Site Development
- Public Services
- Environmental and Agricultural Engineering

In-House Resources

Mock•Roos' president, Dale Zimmerman, P.E., who started at Mock•Roos in 1969, continues to carry on our founders' traditions (integrity, client service, quality work products) allowing us to remain a very viable and stable company. Our inhouse experts include:

- 31 employees
- 14 Registered Professional Engineers
- 7 Engineering Interns
- Full-Time Senior Field Representative
- Registered Professional Surveyor
- 3 LEED Certified employees
- Microsoft Certified Systems Engineer

All staff members work at one office, at 5720 Corporate Way, West Palm Beach, which stream-lines production activities, and facilitates better local client service.

Typical Project Size / Construction Cost

Mock•Roos has the expertise and the ability to manage projects of all sizes. We have maintained dozens of continuing contract's for several decades and many of those construction projects range in cost from \$300,000 to \$2 million dollars in value. Our largest Project construction cost to date was the 2011 Lake Worth Reverse Osmosis Treatment Plan Improvements project that we successfully delivered that project on a fast-track schedule under the original budget, whereas:

Original Contract Price –	\$21,647,195.00
Change Order Amounts –	<u>(\$105,452.32)</u>
Final Contract Amount –	\$21,541,742.68

Many of our projects that we are awarded (above the CCNA general threshold) range in construction cost between \$3 million to \$6 million. Our largest project currently under contract is the SFWMD S-140 Stormwater Pump Station rehabilitation project, which is valued at \$10.1 million. We also recently completed the Town of Palm Beach D-14 Stormwater Pump Station project valued at \$5.1 million (2019) and West Palm Beach's C-17 Stormwater Pump Station valued at \$4.5 million (2018). Our Pump Station and Control Structure No. 9

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project for the Lake Worth Drainage District is currently being advertised for bid and is estimated at \$6.0 million.

Also under construction is PBC's Roebuck Road extension, valued at \$4 million, as well as Lake Worth's Park of Commerce project, which has a construction cost of \$5 million.

We are also in Phase 6 of 8 in assisting Kimley-Horn design the \$90 million Town of Palm Beach Utility Undergrounding Program.

Finally, we designed and provided construction assistance for approximately \$8 million worth of pipeline and treatment process improvements at the ECRWRF as part of the \$100 million Biosolids Improvement Project.

Making the City Successful

We believe strongly in providing "face-to-face" communication with the City staff, which has allowed us to build and maintain personalized professional relationships. We fully understand that in an era of rising maintenance costs and limited funding, it has become even more important for projected results to meet expectations.

We know from experience that there is a valuable opportunity to collaborate with City staff to benefit from their and our lessons learned, experience, and develop design solutions that are affordable, sustainable and maintainable over time.

Our office is less than 30 minutes away which we fully take advantage of to work closely with City staff, as well as with regulatory agencies, to successfully plan, permit and implement projects throughout ranging from simple and small in size to some of the largest and complex management strategies.

Project Team Philosophy

Mock•Roos' project team philosophy is one of true teamwork, which has resulted in our staff members becoming very diverse in their experience and expertise. The comprehensive skills of our talented professionals create a supportive work environment that has no boundaries on where our staff's talent can lead them.

Our spirit of teamwork and cooperation, paired with our focus on production of the work product and our ability to adapt to client needs using malleable approaches, allows us to provide each client with the best in value on each and every project.

Our team philosophy has created an environment for our people to flourish and experience satisfaction. This is proudly reflected in the fact that our current average employee tenure is over 20 years.

Understanding Transparency

We completely understand the environment of public accountability and the associated responsibility of transparent public procurement that the



City staff must operate within. With this understanding, we will provide careful and clear communication and thorough and complete planning, cost estimating, contract documents as well as the proper project documentation and reporting necessary to ensure each project is a success.

We understand the City's current policies and procedures and work hard to assist the City work within its approved project guidelines as necessary to meet or exceed all audit requirements.



Leading with Business Ethics

Since its inception, Mock•Roos has had at its core a strong commitment to indisputable business ethics and remarkable professional integrity. From the top down, both personal and professional principals are strongly emphasized and practiced. We have been tagged as "old-fashioned" at times, for our unwavering commitment to do the right thing for our clients, for the public, and for our profession. We take this commitment very seriously.

The integrity of Mock•Roos has been recognized by the local engineering community and by the State of Florida. Dale Zimmerman, PE, President of Mock•Roos, served two terms on the Florida State Board of Professional Engineers. Being asked to serve to either of these Boards is both an honor and an important responsibility - acting as oversight committees for the professional conduct of licensed professionals.

Mock•Roos is proud to continue to offer the Town the confidence and reassurance that can be found in a firm that adheres to the rules, regulations, laws and directives that apply to the engineering profession.

Long-Term Client Relationships

Mock•Roos has always prided itself on maintaining long-term client relationships. We are successful at this by providing clients with timely and exceptional quality services for a fair and reasonable fee. Some of our client relationships date back to the 1950s and 1960s.

Over the years, we have amassed an intimate and unique knowledge of water and wastewater utility systems, as well as water resource/stormwater and roadway infrastructure, which benefits the projects we undertake.

Mock•Roos staff has provided decades of full range solutions to the following entities:

- Town of Palm Beach
- City of West Palm Beach
- City of Delray Beach
- East Central Regional Reclamation Facility
- Palm Beach County Water Utilities
- Palm Beach County
- City of Palm Beach Gardens
- City of Lake Worth Utilities
- City of Lake Worth
- City of Wellington
- Seacoast Utility Authority
- Northern Palm Beach County Improvement District
- Town of Manalapan
- South Florida Water Management District
- Lake Worth Drainage District
- Loxahatchee River District
- City of Boynton Beach
- Village of Tequesta
- Town of Jupiter
- City of Riviera Beach
- City of Boca Raton
- City of Sunrise

Our Current Continuing Municipal Contracts

In addition to providing many clients with project specific services, Mock•Roos provides “as-needed” services on a continuing basis under several continuing engineering contracts. Several of our current contracts include:

Town of Palm Beach

- Project Management
- Stormwater and Wastewater Engineering

- Pumping and Collection Systems
- Street Improvements
- Pubic Works Services
- General Civil Services

South Florida Water Management District

- Stormwater Pump Station Rehabilitation
- Water Control Structure Rehabilitation

City of West Palm Beach

- Water Resources
- Storm Sewer Design
- Water Dist/Sewer Collect/System Force Main Design
- Lift & Pump Station Design
- Mechanical Engineering
- Civil Engineering

Lake Worth Drainage District

- Stormwater Pump Station Rehabilitation
- Water Control Structure Rehabilitation

Palm Beach County Water Utilities

- Wastewater Pump Station Renovation
- General Pipeline Consulting

Palm Beach County

- General Civil Contract
- Various Roadway Projects

East Central Regional Water Reclamation Facility

- General Consulting
- Biosolids Project

City of Lake Worth

- Water Treatment
- Water Pumping and Distribution
- Wastewater Pumping and Collection
- Pubic Works Services
- Stormwater Management

City of Boca Raton

- Stormwater Engineering

City of Palm Beach Gardens

- General Civil Services

Northern Palm Beach County Improvement District

- General Civil Services

City of Sunrise

- Stormwater Pump Stations

Town of Manalapan

- Water Treatment
- Water Pumping and Distribution
- Wastewater Pumping and Collection
- General Civil Services

City of Wellington

- Water Resources/Stormwater
- General Civil Services

- Water and Wastewater Utilities

Village of Golf

- Water Treatment
- Water Pumping and Distribution
- Wastewater Pumping and Collection
- General Civil Services

B. Proposer's Specific Project Experience



Dale Zimmerman, PE, in 1965

Mock•Roos is regarded as one of the premier Stormwater Pump Station Consultants in South Florida - a reputation we have earned.

Following graduation in 1965, Mock•Roos president Dale Zimmerman, worked at a stormwater pump manufacturer in Deerfield Beach where he designed over 50 Stormwater Pump Stations (in 4 years). In 1969, Dale

brought his expertise in the stormwater pump station field to Mock•Roos and built our reputation as the top stormwater pump station consultant in South Florida. We are proud to state that by the end of 2019, we will have over 150 stormwater pumps in operation throughout south Florida.

Today, Mock•Roos continues to earn its reputation by designing state-of-the-art stormwater pump stations. In the last 20+ years alone, we have provided engineering services on over 40 stormwater pump stations in South Florida, these pump stations range in capacity from 7,900 to 585,000 gallons per minute (GPM). (See "Stormwater Pump Station Experience Since 2000" on page 93 and "Stormwater Pump Station Experience Past 7 Years" on page 94).

We have also recently been re-selected through the CCNA process by the two largest water managements districts in our area (the South Florida Water Management District and Lake Worth Drainage District) to provide engineering and construction services for their operation, maintenance, replacement, and rehabilitation of their Stormwater Pump Station and Water Control Structure projects (being selected over several nationally recognized consulting firms).

Stormwater Collection Systems

- Mock•Roos is proud to be recognized throughout South Florida for its stormwater management (and water resource) expertise, extensive knowledge of local and regional issues and our proactive planning and permitting approaches
- Our Stormwater Expertise includes:
 - Hydraulic Analysis of Stormwater Systems
 - Surface Water/Stormwater Quality Treatment
 - Coastal Resiliency
 - Outfall Replacement/Rehabilitation
 - Tidal Influence Devices
 - Stormwater/Tidal Management
 - Stormwater/Tidal Pumping Facilities
 - Water Quality Baffle Boxes
- Mock•Roos has implemented hundreds of miles of stormwater collection improvements for local municipalities. We fully understand that almost every project requires the consideration of how stormwater runoff will be managed.
- Many of our projects include investigating existing systems and performing H&H system modeling to recommend storm drain upsizing and outfall improvements. We currently have 4 staff members who regularly use ICPR 4
- We have implemented many aggressive water quality improvement approaches such as nutrient separating baffle boxes and extensive use of underground storage and exfiltration trenches
- We are the authority on the Palm Beach County MS4 National Pollutant Discharge Elimination System (NPDES) issues, as we continue to be the lead consultant coordinating the entire Palm Beach County Joint Permit Program for 41 governmental (since 1990)
- We have provided stormwater master planning for:

Continued on page 96

Stormwater Pump Station Experience Since 2000

The following table highlights our tremendous Stormwater Pump Station experience, over 40 projects since 2000 alone. The table highlights each project by name, capacity, completion date as well as type of project.

Stormwater Pump Station Project Name	Capacity (GPM)	Capacity (CFS)	Completion Date	Type
Wellington Pump Station No. 2	150,000	335	NTP May 2020	Renovation
Delray Beach Marine Way Stormwater Pump Station	58,000	129	Dec. 2020	New
SFWMD S-140 Pump Station	585,000	1,300	ongoing	Renovation
LWDD Pump Station and Control Structure No. 9	40,000	90	ongoing	Replacement
Palm Beach D-14 Pump Station	129,000	261	ongoing	Renovation
Palm Beach D-17 Pump Station	34,000	75	ongoing	Renovation
Palm Beach D-2 Pump Station	65,000	145	ongoing	Renovation
Sunrise Pump Station No. 5	39,000	87	ongoing	Replacement
West Palm Beach C-17 Tidal Capture Pump Station	50,000	120	2018	New
Palm Beach SW Pump Station Assessment (13 Total)	up to 129,600	261	2016	Renovation
Palm Beach D-4 Pump Station	88,000	196	2016	Renovation
Palm Beach D-10 Pump Station	94,000	210	2016	Renovation
Sunrise Pump Station No. 2	50,000	120	2016	Replacement
Sunrise Pump Station No. 3	16,000	40	2016	Replacement
Sunrise Pump Station No. 8 (Study)	200,000	300	2015	Renovation
West Palm Beach Pump Station No. 2	202,000	300	2014	Replacement
West Palm Beach Clear Lake Pump Station	45,000	100	2013	New
Palm Beach D-6 Pump Station	114,000	255	2012	Renovation
Palm Beach D-7 Pump Station	114,000	255	2012	Renovation
Palm Beach County L-2 Canal Pump Station	180,000	410	2012	New
West Palm Beach Clear Lake Emergency Pump Station	50,000	120	2011	New
West Palm Beach C-17 Emergency Pump Station	42,000	94	2011	New
Wellington Pump Station No. 9	90,000	200	2011	New
West Palm Beach Ironhorse Pump Station No. 1	14,800	33	2011	New
West Palm Beach Ironhorse Pump Station No. 2	14,800	33	2011	New
Sunrise Pump Station No. 7	25,000	56	2009	Replacement
Wellington Pump Station No. 2 (Not Constructed)	150,000	335	2007	Renovation
Palm Beach County Mecca Farms Pump Station	24,000	54	2007	New
Wellington Pump Station No. 8	120,000	268	2006	New
West Palm Beach Renaissance Pump Station Trash Rake	112,000	250	2006	Renovation
Wellington Pump Station No. 4	120,000	268	2006	Renovation
Scripps (at Mecca Farms) Pump Station	42,000	94	2005	New
Wellington Pump Station No. 3	120,000	268	2005	Renovation
West Palm Beach Dreher Park Pump Station	15,000	34	2004	New
Wellington Pump Station No. 6	120,000	268	2003	New
PGA Central Pump Station	110,000	245	2002	Renovation
West Palm Beach Renaissance Pump Station	112,000	250	2002	New
West Palm Beach Rena Divide Structure Pump Station	7,900	18	2002	New

N:\RFPs\Delray Beach\C0005.00 Thomas St SWPS 2020-011\Tab 5. Experience, Background, References.indd

Stormwater Pump Station Experience Past 7 Years

The following table highlights our tremendous Stormwater Pump Station experience in the past 7 years. The table again highlights each project by name, capacity, completion date as well as type of project. Projects highlighted in light blue are Town of Palm Beach projects, which are very similar to the Thomas Street Stormwater Pump Station project, as they are located in public right-of-ways adjacent to private residents along the Intracoastal Waterway.

Stormwater Pump Station Project Name	Capacity (GPM)	Capacity (CFS)	Completion Date	Type
Wellington Pump Station No. 2	150,000	335	NTP Nov. 2019	Renovation
Wellington Pump Station No. 5	20,000	45	NTP Nov. 2019	Renovation
SFWMD S-140 Pump Station	585,000	1,300	ongoing	Renovation
LWDD Pump Station and Control Structure No. 9	40,000	90	ongoing	Replacement
Palm Beach D-14 Pump Station	129,000	261	ongoing	Renovation
Palm Beach D-17 Pump Station	34,000	75	ongoing	Renovation
Palm Beach D-2 Pump Station	65,000	145	ongoing	Renovation
Sunrise Pump Station No. 5	39,000	87	ongoing	Replacement
West Palm Beach C-17 Tidal Capture Pump Station	50,000	120	2018	New
Palm Beach SW Pump Station Assessment (13 Total)	up to 129,600	261	2016	Renovation
Palm Beach D-4 Pump Station	88,000	196	2016	Renovation
Palm Beach D-10 Pump Station	94,000	210	2016	Renovation
Sunrise Pump Station No. 2	50,000	120	2016	Replacement
Sunrise Pump Station No. 3	16,000	40	2016	Replacement
Sunrise Pump Station No. 8 (Study)	200,000	300	2015	Renovation
West Palm Beach Pump Station No. 2	202,000	300	2014	Replacement
West Palm Beach Clear Lake Pump Station	45,000	100	2013	New
Palm Beach D-6 Pump Station	114,000	255	2012	Renovation
Palm Beach D-7 Pump Station	114,000	255	2012	Renovation
Palm Beach County L-2 Canal Pump Station	180,000	410	2012	New
West Palm Beach Clear Lake Emergency Pump Station	50,000	120	2011	New
West Palm Beach C-17 Emergency Pump Station	42,000	94	2011	New
Wellington Pump Station No. 9	90,000	200	2011	New
West Palm Beach Ironhorse Pump Station No. 1	14,800	33	2011	New
West Palm Beach Ironhorse Pump Station No. 2	14,800	33	2011	New

The below table summarizes the various services provided by Mock•Roos for the above listed Stormwater Pump Station projects. We provided various phases of services for many of the pump stations.

	Study Phase	Design Phase	Construction Phase	Ongoing Project	Future
Totals	15	21	17	6	2

Stormwater/Surface Pump Station Performance Examples

Below are some examples of Stormwater/Surface Water Pump Station projects (up to 150,000 GPM - 335 CFS) completed for the Village of Wellington. Of note, Pump Station Nos. 7 and 9 were completed for Wellington through an MOU with the District where the District provide 100% funding. As can be seen, our cost estimating was very accurate and provided our client(s) with the ability to accurately plan funding for the projects. Also of note, we provided full construction management services on these projects which resulted in the very low project change order percentages.

Project Name	Contract Award	Engineer's Opinion ¹	Final Contract	High Bidder	Change Order Percentage
Pump Station No. 6	\$1,068,000	\$1,210,000	\$1,068,000	\$1,365,000	0%
Pump Station No. 3 Renovation	\$1,268,000	\$1,420,000	\$1,288,773	\$2,053,000	1.6%
Pumps Station No. 4 Renovation	\$1,708,000	\$1,830,000	\$1,740,000	\$1,891,000	1.90%
Pump Station No. 8	\$1,774,000	\$1,940,000	\$1,783,837	\$1,975,697	< 1%
Control Structures (5)	\$3,092,000	\$3,083,000	\$2,879,850	\$3,092,000 ²	Saved \$212,1503
Pump Station No. 7 ⁴	\$4,400,000	-	\$4,400,000	-	0%
Pump Station No. 9	\$2,948,000	\$3,300,000	\$2,978,000 ⁵	3,700,000	1.02%

¹ includes 10 % Contingencies, Engineering, Legal, and Administrative

² only one bidder. Project awarded as it was within budget

³ Encountered differing site conditions and redesigned structures with cost benefits to avoid conflicts

⁴ Project declared emergency. Project designed in only 45 days. Contract was negotiated with Contractor. Project was \$1.4 million less than SFWMD budget

⁵ Project budget from SFWMD was \$5,000,000. Project savings were in excess of \$2,000,000

Below are some examples of Stormwater/Surface Water Pump Station projects completed for the City of West Palm Beach. As can be seen from the table, Mock•Roos' Engineer's Opinions were very accurate and were a reliable budgeting tool for the City to use in planning each project.

Project Name	Original Construction Cost	Engineer's Opinion ¹	High Bidder
Control Structure No. 2 Replacement	\$5,318,000	\$5,258,691	\$6,164,530
Clear Lake Pump Station and Divide Structure	\$4,938,000	\$5,585,000	\$7,170,000

¹ includes 10 % Contingencies, Engineering, Legal, and Administrative

- Palm Beach
- Northern Palm Beach County Improvement District
- Lake Worth
- Palm Beach County International Airport
- Boca Raton
- West Palm Beach
- Wellington
- Boynton Beach
- Delray Beach
- Riviera Beach

Recent Stormwater Projects (Past 7 Years):

Palm Beach

- Town-wide Corrugated Metal Pipe Replacement
- Everglades Road
- Altantic Avenue
- Dunbar Road
- Wells Road
- Southland Road
- Tangier Avenue

West Palm Beach

- Washington Road and Outfall Improvements
- Flagler Drive North Stormwater Outfalls
- 29th Street Stormwater Outfall
- 16th Avenue Stormwater Improvements
- Fern Street
- Evernia Street
- Downtown Alleys (8 blocks)

Boca Raton

- Neighborhood Improvements (20 Streets)
- Mira Flores Drive
- Por La Mar Neighborhood
- Old Floresta Neighborhood
- New Floresta/Potomac Road
- Palm Beach Farms
- Blue Lake Improvements
- University Gardens
- Harbour Island/NE 8th Drive
- Pervious Pavement Study

Transportation Systems

- Mock•Roos is Pre-Qualified for:

FDOT

Minor Highway and
Major Highway Design

Palm Beach County Multi-Lane Highway Design (General and Limited Access)



- Our in-house experts have conceptualized, planned, designed, permitted and been involved with the construction of hundreds of roadway projects within Palm Beach County
- Mock•Roos is extremely experienced with the issues regarding reconstruction of aging roadways within an established corridor and/or constrained by limited rights of way. Improving the operational characteristics is a key roadway design component necessary to ensure an acceptable level of service
- Many of our local municipal streets projects include addressing ADA issues, localized ponding, pedestrian access and dealing with sidewalk and driveways, especially during construction
- Our solutions preserve the residential lifestyles that currently exist in specific neighborhood

Major Thoroughfare Projects in Palm Beach County (Most Recent):

- **Boutwell Road**-Lake Worth Rd to 10th Ave N.
- **Roebuck Road** -Jog Rd. to Haverhill Rd.
- **10th Ave. N. and Boutwell Rd. Intersection**
- **PGA Boulevard Expansion**-Ryder Cup Boulevard to Florida's Turnpike
- **Forest Hill Blvd**-Montauk Drive to Birkdale Drive

Major Thoroughfare Projects in Palm Beach County (Over 7 Years Old):

- **Jog Road**-PGA Boulevard to Hood Road
- **Jog Road**-Lake Ida Rd to Boynton Beach Blvd
- **Jog Road**-Okeechobee Blvd to Montclair Lakes
- **Stribling Road**-Fairlane Farms Road to US 441
- **Melaleuca Lane**-Jog Road to Military Trail
- **Lantana Rd**-Lyons Rd to Hagen Ranch Rd and Lyons Rd/Lantana Rd Intersection
- **Linton Boulevard**-Jog Road to Military Trail
- **Haverhill Rd/Community Dr** Intersection
- **Haverhill Road**-Hypoluxo Rd to Lantana Rd
- **Gateway Blvd**-Military Trail to Congress Ave.
- **Woolbright Road**-Military Tr to Congress Ave

Other Recent Streets Improvements Projects (Past 7 Years):

Lake Worth Neighborhood Street Program

- Over 45 Streets in Past 3 years

Delray Beach

- 12th Avenue North Beautification Project
- Alleys 19 and 20 Paving Improvements

West Palm Beach

- IBIS Golf and Country Club Roadway Rehabilitation
- WTP Access Road Relocation/Replacement

Village of Golf

- Village-wide Paving Improvements

Manalapan

- Town-wide Paving Improvements
- Audubon Bridge Paving Improvements

Palm Beach Gardens

- Alamanda Drive Bridge Paving Improvements
- Lighthouse Drive Bridge Paving Improvements

Palm Beach

- Bradley Place Pavement Rehabilitation
- Ibis Way and Ibis Island
- Via Agape
- Parc Monceau
- Ocean Cir/Via Fontana
- Seagrape Circle
- Lagomar Road
- Ocean View Road
- Regents Park Road
- Woodbridge Road
- Kings Road
- Via Palma
- Via Del Lago
- Via Bellaria
- Clarendon Avenue
- Via Del Mar
- El Bravo Way
- Travers Way
- Island Road and Island Drive
- North Woods Road

Wastewater Systems

- We have extensive experience with various sanitary system components (for over 20 entities in Palm Beach County) including collection systems,

interceptor systems, pump stations from a small simplex neighborhood lift (pump) station to major transmission lift stations, and manifolded forcemain systems (See our Wastewater Pump Station Project List, p. 10, this section).



- Pipelines up to 96-inch in diameter and Pump Stations up to 135 MGD
- We have assisted clients with needs analysis, multi-year CIPs, and assessing existing system conditions and countless renovation and replacement programs for their wastewater pump stations
- We assist our clients develop programs to address aging sanitary sewer pipelines by identifying the appropriate rehabilitation method based on local conditions, traffic impacts and cost effectiveness
- Alternative Construction Methods:
 - Aerial Crossings (up to 42")
 - Directional Drill (up to 36")
 - Bore and Jack (up to 84")
 - Micro-Tunnel (up to 60")
 - Cured-In-Place Liner (up to 20")
 - Pipe Bursting
 - Slip-lining

Recent Wastewater System Projects (Past 7 Years):

Palm Beach

- Town-wide Pump Station Assessment
- 21 Ejector Rehabilitations
- Wastewater Pump Station No. 6 Rehab
- Town-wide Ejector Station Forcemain Replacement (11,000 feet)
- Via Marina/South Ocean Boulevard Forcemain Replacement
- E-2, E-3 and E-6 Forcemain Rehabilitations
- Royal Palm Way Forcemain Rehabilitation
- Royal Poiciana Way Forcemain Rehabilitation
- South County Road Forcemain Rehabilitation
- The Breakers' Forcemain Replacement
- Australian Avenue Sanitary Sewer Improvements

Lake Worth

Wastewater/Water Pump Station Experience Past 7+ Years

The following table highlights our tremendous Water and Wastewater Pump Station experience in the past 7 years. The table highlights each project by name, capacity, completion date as well as type of project. Projects highlighted in light green are Town of Palm Beach projects.

WasteWater Pump Station Project Name	Capacity (GPM)	Completion Date	Type
Wellington Wastewater Pump Stations 10, 48, 65, 76, 79	2,400	NTP May 2019	Renovation
PBCWUD County-wide Lift Stations - Phase 2 (30 Total Stations)	1,200	ongoing	Renovation
Wellington Wastewater Pump Stations 5, 39, 44, 41, 74, 85	1,740	ongoing	Renovation
PBCWUD County-wide Lift Stations - Phase 1 (30 Total Stations)	1,100	ongoing	Renovations
West Palm Beach Lift Station No. 40, 88 and 91	up to 1,100	ongoing	Renovation
Wellington-wide Wastewater Pump Station Assessment (104 Total)	2,400	2018	Study
Lake Worth Pump Station No. 16	1,100	2018	Renovation
Lake Worth Pump Station No. 4	1,000	2018	Replacement
Manalapan Town Hall Pump Station	25	2017	Renovation
Palm Beach-wide Wastewater Pump Station Assessment (21 Total)	varies	2016	Renovation
Palm Beach Wastewater Pump Station E-6	2,400	2016	Renovation
Palm Beach Ejector Stations	100	2014	Replace
ECRWRF Regional Effluent Pump Station Mechanical and Electrical	90,000	2014	Renovation
Lake Worth WTP Backwash Pump Station	300	2014	New
Lake Worth Beach and Casino Lift Station	150	2013	New
Lake Worth Pump Station Nos. 3 and 10	120	2013	Renovation
Lake Worth Pump Station No. 8	500	2013	Replacement
Jupiter Farms Shopping Plaza (Jupiter)	120	2012	Renovation
Sierra Square Shopping Plaza (Jupiter)	70	2012	Replacement
Lake Worth RO Concentrate Disposal Pump Station	1,350	2011	New
Manalapan Water Treatment Plant Lift Station	70	2010	New

Water Pump Station Project Name	Capacity (MGD)	Completion Date	Type
Lake Worth High Service Pump Nos. 3 and 4	2,000 / 4,000	2017	Replacement
Lake Worth Backwash Pump No. 1	8,300	2017	Replacement
West Palm Beach WTP Raw Water Pump Station No. 2	28,000	2012	Renovation
Phipps Park (Palm Beach) Water Booster Pump Station	6,900	2011	Renovation

The below table summarizes the various services provided by Mock•Roos for the above listed Water and Wastewater Pump Station projects. We provided various phases of services for many of the pump stations.

	Study Phase	Design Phase	Construction Phase	Ongoing Project	Future
Totals	105	56	48	39	35

- Regional Forcemain Air Release Valve and Man-hole Replacement Project
- 11th Avenue North Sanitary Sewer Rehabilitation
- Lake Worth Beach and Casino Wastewater System Improvements
- Wastewater Pump Station Nos. 3, 8, 10, and 15 Replacements
- Wastewater Pump Station Nos. 4 Rehabilitation

Palm Beach County Water Utilities

- 60 Wastewater Pump Station Rehabilitations
- Pump Station 5229 Forcemain Improvements
- Ruynon Village Wastewater Improvements
- South Bay - NW 1st Ave. Forcemain
- Forcemain Replacement in 40th Street North
- Lake Worth Road/Sherwood Forest Wastewater Improvements

ECRWRF

- Biosolids Project
- Biosolids Yard Piping Improvements (29,000 LF)

Jupiter

- Western Indiantown Rd Forcemain Improvements

West Palm Beach

- Chase Street Sanitary Sewer System Replacement
- Wastewater Pump Stations 40, 73 and 88

Wellington

- Wastewater Distribution System Hydraulic Model
- Wastewater Pump Station Assessment (104 Total)
- Wastewater Pump Stations 5, 39, 41, 44, 74, 85

Manalapan

- Booster Pump Station Replacement

Water Distribution Systems

- We have extensive experience in the design of 100s of miles of water transmission mains (2-inch to 66-inch) to over 20 different municipalities/utility authorities
- Our skilled staff have decades of experience providing services for all engineering phases from conceptual studies, routing studies,



easement needs analysis, system modeling, prioritizing project needs, multi-year CIPs, and existing system conditions assessment and improvement programs as well as, permitting with a variety of agencies, and oversight during the construction

- Our projects have included ground and elevated water storage tanks and booster pump stations located within the distribution system
- Our designs have included projects located in difficult congested areas requiring complicated construction methods such as jack and bore, directional drilling, and cured in place pipe (CIPP) liner
- We have developed numerous calibrated hydraulic models of utility systems, including for Lake Worth, Manalapan, Wellington and Seacoast. These models continue to be used to evaluate hydrant flow capacity, identify needed system improvements and provide a link to GIS
- Current Palm Beach County Water Utilities Department Pipeline Consultant

Recent Water Distribution System Projects (Past 7 Years):

Lake Worth

- High Service Pump Replacement
- Park of Commerce Water Distribution System
- Lake Worth Beach and Casino Water Distribution
- City-wide Watermain Replacement
- Neighborhood Streets Infrastructure Improvements
- 2nd Avenue North Watermain

Palm Beach County Water Utilities

- S. County Watermain Replacement Phases 4 and 5
- Broward/Palm Beach County Reclaimed Watermain Route Study
- Rosenwald Elementary School Watermain Ext.
- Reclaimed Watermain Extension within Emerald Dunes Golf Course
- South Bay - NW 1st Avenue Improvements
- Ruynon Village Water Improvements
- System No. 9 Raw Watermain Improvements

Jupiter

- Western Indiantown Rd Watermain Improvements

West Palm Beach

- Via Marina/South Ocean Boulevard Watermain Replacement (in Palm Beach)
- Wetlands Based Reclamation Distribution System

Manalapan

- A1A Watermain Improvements
- System-wide Watermain Project

Village of Golf

- Village-wide Reclaimed Watermain Improvements

Wellington

- Water Distribution System Hydraulic Model

Parks and Recreation

For decades Mock•Roos has provided planning, design and services during construction for park, recreation and open air venues which provide social benefits such as improved physical and psychological health, while strengthening our local communities by making our cities and neighborhoods more attractive places to live and work.



Projects have ranged from:

- Large central open-air performance venue spaces for various concerts, theatrical performances and other gathering opportunities, such as the Cruzan Amphitheater (formally Coral Sky)
- Revitalization of urban areas, such as the development of CityPlace; the premier shopping, dining and entertainment destination in PBC
- Open air park expansion improvements to West Palm Beach's Dreher Park to facilitate the expansion of the Palm Beach Zoo
- Creating unique experiences for children of varying abilities to come together in a safe and enriching environment, such as Wellington's Scott's Place; a playground where disabled children can play, as independently as possible, with their able-bodied friends
- Prestigious hotel renovations, such as the reconstruction of the Cabanas Improvements associated with the expansion of the Ocean Grill at The Breakers Hotel, which included 9 cabanas, an outdoor pavilion, a luxury pool, and an activity pool
- Community-wide recreational parks, such as Wellington's 93-acre Village Park, which includes 4 baseball/softball fields, 16 football/soccer fields, two roller hockey rinks, five concession/restroom

buildings, a two-story scorekeepers building, a multi-purpose gymnasium, open air pavilions and playground areas

Recent Parks and Recreations Projects (Past 7 Years):

Palm Beach Gardens

- N. County Park

Wellington

- Wellington Community and Tennis Centers
- Wellington Amphitheatre and Scott's Place

Large Land Development Projects

Mock•Roos has built a reputation for solving tough permitting and construction related issues encountered during land development projects. From developing technically and functionally sound

site plans, to completing designs that continually adapt to the ever-changing regulatory climate and technical advances, Mock•Roos has proven itself to be a leader in its field.



Large land development projects typically possess a myriad of issues and design challenges requiring a broad range of engineering services including: planning, permitting, surveying, surface water management, stormwater system modeling and design, water distribution systems modeling and design, wastewater collection system modeling and design, reclaimed water system design, stormwater pump stations, lift stations, roadways, platting, easements, and construction phase services. Mock•Roos has repeatedly demonstrated its diverse range of engineering services required for large, complex land development projects.

Several of Mock•Roos' larger land development projects include:

- Mirasol
- Ibis Golf and Country Club
- Eastpointe
- Palm Beach Park of Commerce
- Winston Trails
- Addison Reserve
- PGA National
- BallenIsles
- Harbour Ridge
- Ballantrae

- Journey's End
- Abacoa

Local Permitting Expertise

Mock•Roos has over 65 years of extensive experience and a thorough understanding of the regulations, statutes, and guidelines in South Florida. Compliance with the pertinent regulations and successful negotiations with the agencies is an important aspect of any project.

Early coordination with permitting agencies to identify permitting "hurdles" that a project will face is extremely important. Many times great conceptual ideas may have permitting issues that could consume the project schedule. Our past experiences, working relationships, and proactive permitting approach will ensure your projects are feasible and are successfully permitted in a timely manner. Majority of permitting required on your projects will be with the following agencies:

- South Florida Water Management District
- Florida Department of Environmental Protection
- US Army Corps of Engineers
- Building Department Permit

We have tremendous experience working with agencies regarding improvements within or adjacent to Intracoastal Waterways. We understand the various permitting process(es) may include bathymetric survey, sea grass mapping, design and mitigation plan development, and extensive coordination with several permitting agencies.

We successfully worked with West Palm Beach to obtain a dredging permit from FDEP for maintenance activities at several existing outfalls in the Lake Worth Lagoon. Also for West Palm Beach, on their Washington Road project, we successfully permitted the abandonment of several existing outfalls and the upsizing and addition of other outfalls to the Intracoastal Waterway.

Finally, we are currently assisting the Town of Manalapan obtain FDEP and US Army Corp permits for an Intracoastal Waterway watermain crossing.

Construction Management

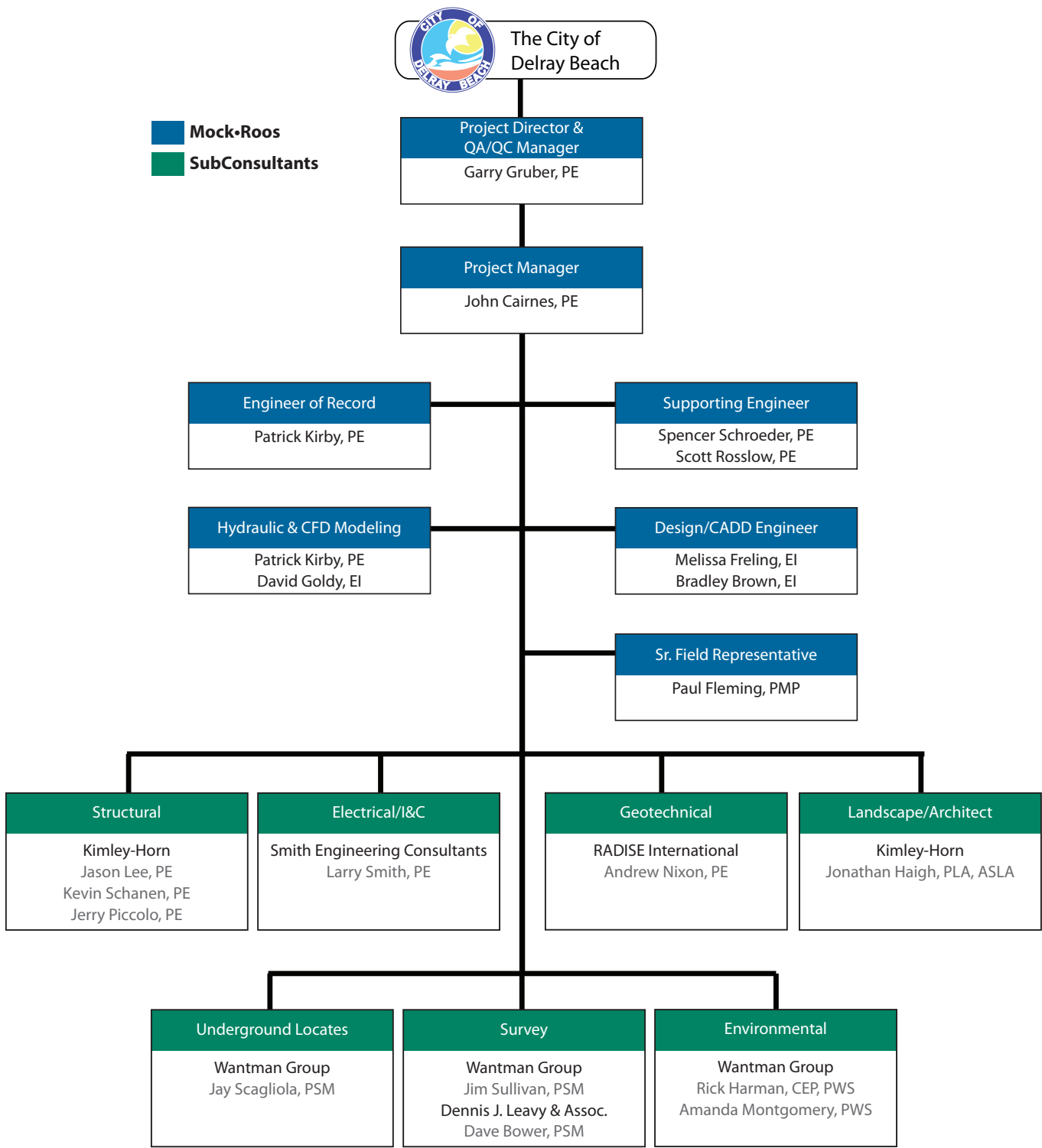
- We have the highly experienced staff, and depth, to provide outstanding contract administration services and related project controls to ensure that contractors are held accountable and are meeting their contractual obligations
- Our knowledgeable construction management

team has tremendous experience throughout Palm Beach County on 100s of millions of dollars worth of infrastructure improvement projects

- We are essential in assisting with maintaining project schedules, realizing potential cost reductions, minimizing construction impacts, and gaining public support. We will also assist in conflict resolution and field decisions
- Our key Senior Field Representative, Paul Fleming, has 46 years of experience on domestic and international construction projects. He is very detail oriented and he will protect your interests!
- Our involvement can be tailored to be full-time, part-time or less, depending on project budgets and desires
- We have taken on construction management services for many municipal clients where the design engineer was another firm. We fully understand how to make this transition of responsibility
- We pride ourselves on helping bring projects to completion on or under budget. For example, for the Lake Worth Reverse Osmosis Water Treatment Plant (2011) project we worked closely with City staff and the City's contractor throughout each phase of the project. The \$21.7 million project was completed on time for only \$21.5 million.

C. Key Personnel

Team Organizational Chart



N:\RFPs\Delray Beach\0005.00 Thomas St SWPS 2020-011\Tab 5. Experience, Background, References.indd

Mock•Roos Key Personnel

Without a doubt, our proposed team has the depth and ability within our organization to provide you with the level of service that you demand. For brevity, please see 330 Resumes under Tab 3 for our Key Personnel bios and experience, as well as our specific subconsultants. These individuals names below will ABSOLUTELY participate in your project.

Primary Key Personnel and Firm Roles

Mock•Roos

Garry Gruber, PE – Project Director responsible for assisting the City develop the scope of services and award the engineering contract. During the project, Garry will allocate inhouse resources to the project as well as assisting with communication with City staff members. Garry has been a Mock•Roos Principal In Charge/Project Manager for the past decade. He will also lead our internal QA/QC and constructability reviews.

John Cairnes, PE – Project Manager responsible for managing our overall engineering services, including subconsultant coordination. During the project, John will be the point of contact for the City, the the Residents and other Stakeholders. He will responsible for monitoring the project schedule and budgets and ensure all deliverables are met.

Patrick Kirby, PE – Senior Project Engineer acting as the Engineer of Record for the project. He will lead our engineer team with the civil and mechanical design calculations, layouts, development of contract documents and specifications and cost estimates. He will lead engineer for the H&H and CFD Modeling efforts.

Spencer Schroeder, PE and Scott Rosslow, PE – Senior Project Engineers acting as a Support Engineers for the project. They will assist our engineer team with the design calculations, layouts, development of contract documents and specifications and cost estimates.

Melissa Freling, EI and Bradley, EI – Design/CADD Engineers responsible for the design layouts and development of CADD Drawings and cost estimates.

Paul Fleming, PMP – Senior Field Presentative responsible for being “the boots on the ground” during construction phase of the project. He will be performing daily monitoring and reporting the Contractor’s quality of work. Paul will be an important point of contact for residents during construction. Paul will also provide his insight in the Constructibility and Value Engineering

Reviews during design.

Kimley-Horn

Jason Lee, PE, Kevin Schanen, PE and Jerry Piccolo, PE – Senior Project Engineers responsible for structural design calculations, layouts, development of contract documents and specifications and cost estimates.

Jonathan Haigh, PLA, ASLA – Landscape Architect responsible for landscape design, layouts, development of contract documents and specifications and cost estimates.

Wantman Group (WGI)

Rick Harmon, CEP, PWS and Amanda Montgomery, PWS – Environmental Consultants responsible for completing environment investigations, such as seagrass study updates, and coordination with permit agencies.

Jim Sullivan, PSM – Project Manager responsible for the management and coordination of topographic surveys. Depending on availability, WGI and/or Dennis Leavy will complete this task.

Jay Scagoli, PSM – Project Manager responsible for the management and coordination of subsurface locate services.

RADISE International

Andrew Nixon, PE – Senior Project Engineers responsible for management and coordination of the geotechnical field exploratory investigations, testing and recommendations.

Smith Engineering Consultants

Larry Smith, PE – President responsible for electrical, instrumentation and controls and SCADA design calculations, layouts, development of contract documents and specifications and cost estimates.

Dennis J. Leavy & Assoc.

Dave Bower, PSM – Project Manager responsible for the management and coordination of topographic surveys. Depending on availability, WGI and/or Dennis Leavy will complete this task.

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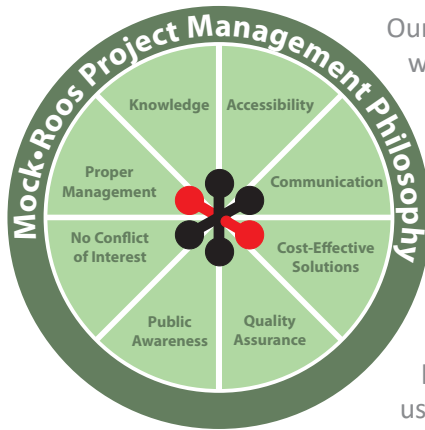
 Bid Phase Services 121

 Construction Phase Services..... 121

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Management Capability



Our team has worked with virtually every Palm Beach County coastal municipality on a variety of stormwater and resiliency projects for several decades. These intimate experiences have empowered us with a thorough understanding of the required

project management procedures and implementation processes. With this knowledge, we have merged our internal procedures and policies to facilitate a seamless working relationship within the our team, as well as with our client staff.

Effective project management is an essential element of our success and our ability to build and maintain excellent working relationships with the City.

Our working experience and knowledge of the coastal municipalities enable us to initiate and conduct projects efficiently, thereby saving time and effort that is better spent accomplishing the technical and production oriented tasks of each project.

We have made significant investments in software, training, and staff in order to provide outstanding project management on projects of all types, size, and complexity. These investments have resulted in excellent quality of work, cost control, and schedule compliance.

Our project management plan, created and tailored specifically for each project, will set forth our strategy for each component of a project and is designed to maximize the efficient execution of each task and to ensure your satisfaction. Our management process has proven to be very successful for controlling numerous activities in a timely and cost effective manner.

Project Management Approach



We fully understand that the City expects great communication, great quality and responsive service; quite simply put - results.

With that understanding, our project management process stems from a proactive project management philosophy that balances the undeniably

inter-related relationship between schedule, cost and quality.

Our project management approach is as follows:

- Provide Staff Accessibility (without question)
- Establish the project goals and requirements
- Develop appropriate Scope of Services
- Assign the Right Key Personnel
- Set the basis for controlling scope, schedule, and budget for the project tasks
- Promote cooperative and interactive project designs with City staff
- Ensure timing feedback from City staff on operations, limitations and preferences
- Promote design flexibility with understanding of construction cost impacts
- Provide vigilant oversight of project progress
- Provide the City with reliable information so that informed decisions can be made
- Perform proper subconsultant coordination
- Meet or exceed deadline requirements
- Produce designs that meet project goals within established budget
- Perform accurate cost estimating
- Communicate, communicate, communicate
- Meet all City audit requirements

Our team members understand the necessity of successfully completing project goals within the predetermined schedule and budget in order to get additional work authorizations from the City. Our team's experience on similar projects throughout South Florida, has proven to help ensure our proper coordination of your project(s).

We take great pride in providing value - which we believe means providing timely and quality services for a fair and reasonable consulting fee. We are very successful in accomplishing this through maintaining the appropriate project management “checks-n-balances” while focusing attention on “production of the work”. We do not believe in creating additional “management duties”, unless they have specific purpose and offer you additional value.

Project Management Team

Effective management must be facilitated by an effective, quality oriented and focused management team. Garry Gruber, PE will serve as our overall Project Director and John Cairnes, PE will serve as Project Manager. They will be the primary points of contact with the City and will be responsible for managing and executing requested services from the City.

Garry and John have over 30 years of local experience and have proven themselves on over \$300 million worth of infrastructure improvements in South Florida, including on over 30 local stormwater pump station projects with capacities up to 585,000 gallons per minute (GPM).

They will be a “hands-on” managers and will be involved in all aspects of your project and will be 100% accessible and available to you. John will coordinate with City staff and guide the project through the technical review process, permit agencies, residents and stakeholders. His effective project management skills will be an essential element in our commitment to serve the City. Garry will serve as a key linkage between John and our project team and will ensure that all staffing commitments are adhered to throughout the duration of the project.

“Garry Gruber and staff were extremely accessible and worked closely with Town staff to develop alternatives and provide value engineering on numerous components of the project. This resulted in a project that meets the Town’s objectives within a reduced budget.”

Jim Bowser, PE
Previous Palm Beach Town Engineer

“The (Wellington) Pump Station No. 7 project was completed within a very impressive timeframe and the final construction cost was well over \$1 million under the project budget. I also worked closely with Garry Gruber on the Pump Station No. 9 project design and have found him to be very competent as a professional engineer and project manager”

Jorge A. Jaramillo, PE
SFWMD Principal Engineer

As

Our project management duties will include:

- Project planning and coordination
- Process management, staff resource allocation and project monitoring
- Define and negotiate the work authorization with the City
- Review and implementation of City project standards
- Ensure consultant contract obligations and requirements are being met
- Manage project budget and schedule
- Coordinate inter-disciplinary cross checks
- Develop QA/QC Plan and QA/QC Review Team
- Project reporting to the City
- Invoicing
- Coordinate with Senior Technical Advisors as necessary throughout the project

Project Management Framework

We believe that it is critical that our project management process be focused on the effective coordination and combination of the project elements and services required to successfully complete the project. A practical understanding of both the technical and non-technical aspects are essential to the efficient execution of complex projects.



Maintain a “Team” Atmosphere

Our previous experiences gives us a high level of awareness of the methods necessary to best assist the City move this type of neighborhood stormwater improvement project forward. We will work closely with City’s Project Manager with the understanding that we are truly there to help them accomplish your goals and literally make your lives easier in the process.



We will be there to fully support the City’s PM to ensure that they:

- are involved in the project (as necessary)
- are kept up to date regarding any issues and progress and budgets
- have the support they need to succeed on the project

Provide the City with Effective Communication

We believe that it is our responsibility to provide you with reliable information so that you can make informed decisions. We know that frequent and thorough communication with your staff is critical to achieving project satisfaction.



We know from experience that their is a valuable opportunity to collaborate with City staff to benefit from their and our lessons learned, experience, and develop design solutions that are affordable, sustainable and maintainable over time.

As such, we commit that we will maintain a high level of communication with, and consistent accessibility to, your staff and our team members, allowing us to provide you with very timely recommendations, answers, and solutions. Our office is less than 30 minutes from your

office. This close proximity will prove to be invaluable in facilitating our ability to quickly respond and assist City staff in resolving construction related issues, or simply participate in an informal unscheduled City staff discussion.

As in the past, we will perform the following on each and every project:

- Communicate with City staff in the early phases of each project to help ensure that project goals and expectations are fully understood
- Maintain routine communications to identify potential project hurdles and manage coordination issues before they become problems, including:
 1. Weekly project status report
 2. Regular progress meetings
 3. Face-to-face interaction
 4. Monthly project update meetings
- Provide you with reliable information so that you can make informed decisions
- Be extremely responsive, versatile and cooperative
- Assist City staff in communicating with stakeholders, residents and permitting agencies
- Maintain comprehensive project files and document all discussions/decisions with City staff, subconsultants and Contractors as we fully understand the importance of project reporting and that project progress must be well documented
- Prepare and distribute meeting minutes following each meeting. Action items resulting from the meeting will be identified, including a responsible individual for the action and a date when the action is to be completed. We will track action items on a continuous basis
- Coordinate to get timely feedback from City staff so that our technical team members can be efficient and projects remain on schedule
- Promote that a little additional time spent between a consultant and City staff communicating throughout the project will have a big impact on a project’s ability to meet budget and schedule goals

Identify Goals, Develop the Right Scope of Services and Assign the Right Experienced Key Personnel

Once selected, understanding the City’s vision of the project goals, schedule and budget is imperative so that

work products will meet the City's needs and expectations. We will conduct necessary preliminary research and discussions to have an informative pre-proposal kick-off meeting to:

- Discuss the project purpose and goals
- Define team member roles and responsibilities
- Identify the necessary key participants
- Identify proper resources
- Identify specific project components
- Establish design criteria necessary to meet goals

Once the project's goals have been established, we will develop the appropriate the Scope of Services. Designing projects to be constructed between private residents along the Intracoastal Waterway presents some unique considerations and our previous experience on similar projects will help ensure appropriate Scopes of Services are developed.

We know that the general scope will include:

- Topographic Surveying and Easement Assistance
- Subsurface Utility Locates
- Structural, civil, mechanical, and electrical engineering
- System Improvements and Wetwell Modeling (H&H and CFD modeling)
- Stormwater Pump Selection and Coordination with Manufacturers
- Water Quality Treatment Train design
- SCADA System
- Standby Generator with belly fuel tank
- Site Lighting
- Public Outreach Program
- Value Engineering

An important facet of developing the final Scope of Services will be identifying reasonable timeframes for project deliverables. Allocating sufficient time to perform project designs will allow sufficient time for:

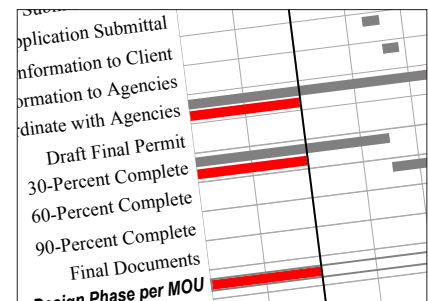
- Appropriate planning
- Proper investigations and evaluations
- City collaboration
- Reducing probability of scope creep
- Cross discipline cross-checking
- Value Engineering
- Reducing probability of errors or omissions

We will work closely with City staff to fully identify an overall project understanding so that the completed product meets estimated budgets and timeframes, including:

- Establishing reasonable project goals
- Approving appropriate Scopes of Services to meet those goals
- Establishing reasonable timeframes for completion of design
- Constructing improvements that adhere to the estimated budgets

Establish Project Management Plan (PMP)

At the beginning of the project, we will prepare a project specific PMP. The PMP outlines the specific project information, including project location, project duration, approved scope and budgets, key staff members assigned to the project as well as identifying all subconsultants, their services and fees.



The PMP also outlines the project objectives, key project issues, project stakeholders and establishes the project schedule identifying key project milestones. Finally, the PMP documents the standards, procedures, project design standards and our proposed project specific QA/QC Plan to be implemented for the project.

Establish and Manage the Project Schedule

Schedule management includes responding to the changing needs and requirements of the project and making adjustments as needed to maintain a workable and achievable schedule. The schedule, submitted with the PMP, must be reviewed on a routine basis, and all team members will be notified of any adjustments to ensure all schedule requirements are met.

Our PMP will set forth the process to be used for reviewing, evaluating, and adjusting schedule baselines for projects.

Manage Our Team of Experts

Mock•Roos believes that it is the most qualified local

engineering consulting firm to offer the City the most comprehensive team of in-house experts and subconsultants necessary to quickly respond to your project engineering needs.

Our local team members include:

- Kimley-Horn
- Wantman Group
- Smith Electrical Engineering
- RADISE International
- Dennis J. Leavy & Associates

We will take advantage of each of our team's in-house expertise, our tremendous pool of resources and our collective professional experience with local municipalities on similar projects to ensure that this project is appropriately managed to completion.

Our speciality subconsultants bring a tremendous amount of project specific experience and expertise that will be instrumental in supporting our in-house expertise. Subconsultants will be regularly engaged in projects. Our subconsultants will be regularly involved in project team communications and we will clearly define their assignments, project schedules and budgets and our QA/QC requirements.

As with every team member, accountability is critical for a successful project. Mock•Roos will take full responsibility for our subconsultant's performance and quality of work and we will ensure and/or correct if necessary our work products to the full satisfaction of the City.

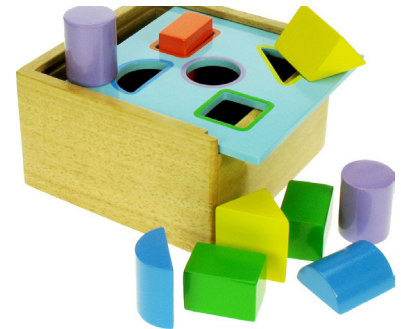
We will manage our team by:

- Maintain management level "hands-on" involvement in all aspects of a project to ensure efficient production of the work.
- Clearly define general standards, details and specific requirements for deliverables prior to starting work products
- Promote teamwork/partnering so that everyone understands and is engaged in the process
- Promote frequent interface
- Conduct project team meetings on a regular basis, providing an opportunity to share project information and identify potential problems and head them off before they become schedule stoppers
- Use our proven, customized systems for monitoring and controlling project cost and schedule

- Sequence work activities as necessary to meet deliverable deadlines
- Provide frequent team interaction on project tasks, deliverables, and challenges
- Adjust levels of staff involvement based on budget and schedule needs
- Provide continuity of staff on project tasks and development of "project teams"

Manage the Work

Managing the work is one of the most important parts of any project. The optimum solution will be the option that is safe, has lowest long term costs, can be implemented in a timely fashion and meets the project goals. We will ensure we are providing quality services and products to the City and we will:



- Incorporate ideas by evaluating alternatives, effectiveness, construction cost, O&M costs and schedule impacts. Quality does not mean the project will be over budget
- Meet early on with City staff to establish requirements of each deliverable, whether it be a construction document or a study and report
- Conduct workshops and/or work sessions as needed
- Coordinate with permitting agencies, stakeholders, residents, etc. to ensure timely approvals
- Provide timely answers to subconsultant's questions and resolve any conflicts that arise
- Ensure that data and information that subconsultants require for their work products is delivered in a timely manner
- Perform interim reviews between formal deliverables
- Complete design project components that meet the City's budget requirements
- Perform timely QA/QC Review Team reviews
- Minimize City staff review comments by utilizing our previous experiences on past projects
- Keep project needs in perspective and openly discuss how adding "bells and whistles" will affect project schedule and cost

- Meet scheduled deliverable dates
- Deliver final contract documents that will be:
 1. functional
 2. cost-effective
 3. biddable
 4. constructible
 5. maintainable

Manage the Quality

As mentioned above, our proactive project management philosophy balances the undeniably inter-related relationship between schedule, cost and quality. We believe that quality is the least flexible of these aspects and is most closely tied to Health and Welfare of the Public (safety). Cost and schedule are typically more flexible and can often be adjusted while remaining within confines of project boundaries. However, quality cannot be compromised and made up somewhere else!

Our team is committed to executing Quality Assurance and Quality Control procedures throughout the life of a project. We take extreme pride in the “end products” that we produce, as we fully understand that producing quality design documents will:

- Promote efficient designs by reducing the need for changes
- Produce more competitive construction bids
- Reduce potential for change orders (unknowns, conflicts, errors or omissions)
- Facilitate timely construction
- Reduce facility O&M costs

We believe that quality control is a system of routine administrative and technical activities to measure, manage and control the work product to ensure integrity of data, identify and address errors and omissions, to document and archive data, and to record all QA/QC activities.

Our team will blend numerous procedures into a customized project-specific process which will be described in our PMP. This process will be a comprehensive tool that establishes protocols and procedures for project activities and will ensure that the projects meet the estab-

lished City submittal requirements and design standards. It will include the typical day-to-day quality control efforts as well as identification of activities and milestones to ensure that processes are occurring as planned.

Our QA/QC plan will ensure, that prior to any submission to the City for technical review, the project has undergone a thorough and complete review and that the project meets each submittal requirement. We have found through practical experience with previous projects that it is essential to have technically qualified professionals other than the Project Engineer(s) review the project’s technical approach as well as the details incorporated into the work product.

Senior level professionals will be identified to participate in these independent inter-disciplinary review processes along with our Senior Field Representative, Paul Fleming. These reviews provide an unbiased test of whether the product will meet the City’s expectations. However, critical to this process is again the clearly defined project goals and objectives, as well as allocated schedules and budgets.

If executed properly, these reviews will identify and correct potential issues during the process that will avoid costly and time consuming backtracking in subsequent elements of the work plan.

In addition to identifying errors and omissions, reviewers will perform a value engineering exercise by evaluating the efficiency and effectiveness of every project component. This review will solidify the overall design and includes the following key activities:

- Detailed evaluation of major systems
- Constructability review
- Operability and optimization review
- Revised construction cost estimate

QA/QC Review Team reviews will be held at the 30%, 60%, 90%, and final design stages for all work products.

It should be noted that specific project QA/QC plans may change during the course of a project should the need arise. This may occur due to concerns that the project requires additional safeguards for maximizing the success of the project. Our team will monitor, adjust, improve, communicate and manage the process to again ensure that the project meets the established requirements of the City.



Manage Our Workload and Tracking Project Costs

Mock•Roos uses a custom project management software, from *Andelain Softworks*, to provide its Project Managers with a detailed easy-to-use interface for the scheduling and budgeting for their team member and projects. Our accounting software, *Deltek Vision*, is closely tied to our project management software. All personnel are required to complete time sheets on a daily basis helping maintain a higher level of accuracy. This allows Project Managers to have the most up-to-date project information available when they need it.

Current Accounting Period is 04/2014 Most Recent Timesheet Posting is for 4/28/2014									
Project Progress Report for 99076.05									
Project Name: LUMINUS General CPS					Project Status: Inactive				
Client Code: 190					Start Date: 4/15/2003				
Client Name: Lake Worth Utilities, City of					End Date: 12/2/2005				
Billing Manager: Doug, Thomas A.					Tot. Labor Fee: (\$0.00)				
Project Manager: Gabe, Garrytt G.					Tot. Reimb. Fee: \$213,102				
Director: Tom, Tom					Tot. Costs, Fee: \$213,102				
Budget Performance									
		Job Spent	Budget		% Used		Remaining		
		hrs	\$s	hrs	\$s	hrs	\$s		
Admin / 1	37	\$2,124	46	\$2,553	80%	83%	9	\$429	
PM / 2	214	\$25,080	127	\$16,296	100%	152%	-87	(\$6,288)	
Field / 3	955	\$61,257	1,256	\$97,864	55%	63%	579	\$36,107	
Field / 4									
Surf / 5									
Drain / 6	15	\$1,018	32	\$2,654	48%	49%	17	\$1,040	
Field / 7									
Labor	955	\$60,980	1,464	\$118,506	65%	79%	508	\$27,526	
Int-house		\$1,126		\$12,297		12%		\$10,779	
Outside		\$48						\$48	
Consultant		\$80,941		\$81,900		100%		(\$959)	
Totals	955	\$177,203	1,464	\$213,102	65%	83%	508	\$35,727	
Financial Analysis									
Total Bill		Spent		Raw Profit		Raw Profit %		Raw Eff. Mult.	A/R
		\$177,203		-\$175,997				-2.87	
Project Progress Report for 99076.05									
Current Accounting Period is 04/2014 Most Recent Timesheet Posting is for 4/28/2014									

Our project management systems provide an interactive tool (shown above) for our managers to query and review up-to-the date project status at all times with staff hours to date and project costs updated on a daily basis. The information will be used to track labor efficiency and to determine if the level of effort and results achieved are consistent with the approved budget and scheduled deliverables.

In addition, Mock•Roos conducts a formal weekly company-wide production meeting on Monday mornings (and a brief “stand-up meeting” on Thursdays) to identify potential conflicts between upcoming project schedules and personnel assigned to multiple projects. This coordination helps eliminate overloading or under staffing a given project. Team Meetings, as needed, are then held to monitor and discuss schedules and activities. Typically, project managers handle between two and five projects at one time.

A weekly marketing meeting is also conducted with appropriate Mock•Roos staff to identify current work under contract, proposals submitted (and status), and future work needed. Again, this information is taken into consideration based on the production needs and availability of staff.

Manage the Project Construction Budget

Accurate cost estimating is an essential skill that a consultant must possess to facilitate proper planning and project budget control. Cost estimating is typically used for project budgeting and funding allocation as well as final “business” decisions regarding what components may be included in a project. If an Engineer’s Opinion of Probable Construction Cost (EOPCC) is identified as exceeding the project budget goals, we will work with the City to identify areas where costs can potentially be reduced without affecting the overall function of the proposed improvement(s).

We will prepare an EOPCC at the 30%, 60%, 90% and final submittal intervals. For each EOPCC we will:

- Perform a detailed quantity take-off
- Research data-bases for up-to-date unit prices applying adjustment based on our knowledge of the project location or site
- Determine labor, overhead and profit in each line item
- Reduce contingency percentages as the project moves towards completion
- Provide a variance report summarizing changes from previous estimates so that the effects of any design changes are fully understood

Several past Town of Palm Beach project examples are shown in the table on the next page. Not only does the table demonstrate our accurate cost estimating, it demonstrates the quality of our design documents as well as our ability to assist with delivering construction projects on/under budget!

Project Invoicing

Invoicing will be reviewed and finalized through our Project Manager. As part of our invoice, a billing summary will be provided. Prior to submitting our first invoice, we will sit down with the City’s Project Manager to understand their individual preferences. We will deliver our invoices, typically on a monthly basis, along with our monthly project status report

Project Reporting

As mentioned above, a monthly project status report will be provided to the City’s Project Manager for design projects (constant project status reports will be provided for construction projects). Our team’s PMP will identify content, format, etc. for the report. This report must be clear and concise and must be meaningful so that the City’s Project Manager can quickly measure project status and performance. Our reports will communicate the

project status related to schedule, budget, completed milestones, identify upcoming milestones, and identify any key issues that require City feedback. As with our invoicing, we will sit down with the City's Project Manager to understand their individual preferences prior to our first submission.

Project Closeout

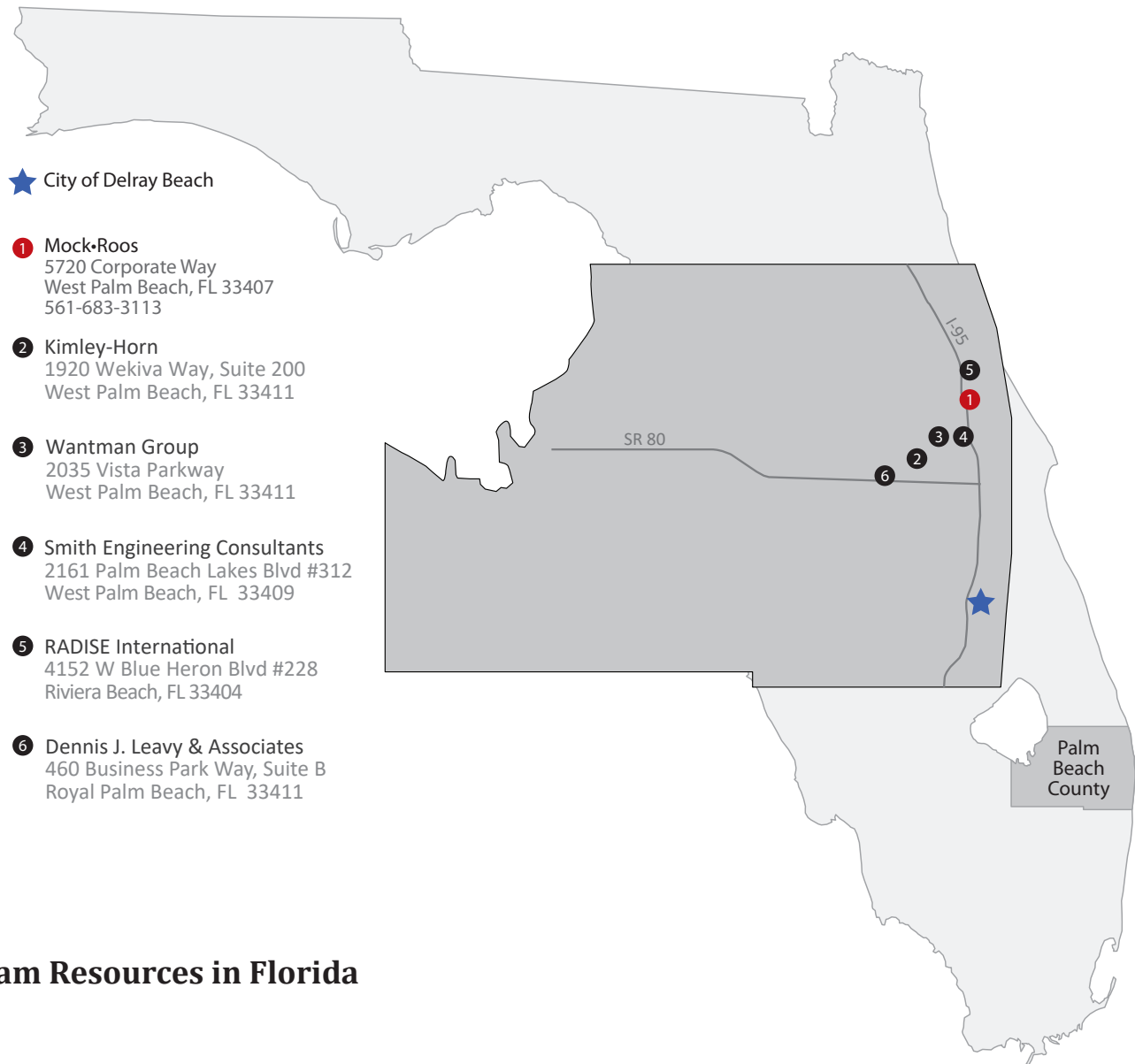
Prior to final project closeout, we will meet with the Town's Project Manager to ensure that the Town is fully satisfied with the project results and confirm that our project was successful. We will meet with the City to discuss the final monthly project status report, final invoices and obtain any constructive feedback from the City regarding execution processes for our next City project.

Town's Project Name	Original Construction Cost	Final Construction Cost	Difference (Dollars)	Difference (Percentage)
D-4 and D-10 Stormwater Pump Station Renovations	\$5,982,800	\$5,823,800	(-) \$159,000	(-) 3%
D-6 and D-7 Stormwater Pump Station Renovations	\$3,467,000 ¹	\$3,177,000	(-) \$290,000	(-) 8.5%
Wastewater Ejector Station Renovations	\$4,168,000	\$4,088,000	(-) \$80,000	(-) 2%
A1A Forcemain Replacement	\$1,956,600	\$1,752,000	(-) \$204,000	(-) 10%
E-3 Forcemain Lining	\$1,205,700	\$1,221,400	\$15,700	1.3%
A-4 and A-7 Forcemain Replacement	\$725,000	\$730,600	\$5,600	<1%

¹ Town Preurchased Equipment (Value not included)

Team's Local Office Location Serving Project

Our local team has the resources and office location proximity within Palm Beach County to immediately meet your needs for completion of this project.



Team Resources in Florida

Consultant	Total Staff in Florida	Professional License				
		PE	PSM	PG	LA	LEED
Mock•Roos	31	14	1			3
Kimley-Horn	830	274	5	1	21	15
Wantman Group	362	69	15		9	13
RADISE International	58	12				
Smith Engineering Consultants	9	4				
Dennis J. Leavy & Associates	13	3				
Totals	1,302	376	21	1	30	31

Typical Scope of Services

Maintaining Accessibility

As requested in the RFQ response, we wanted to state that accessibility of our local experts and inhouse staff continues to be an absolute! Mock•Roos has all of its 31 staff members working together at one office, located at 5720 Corporate Way, in West Palm Beach. We have been at this same location since 1982, as it has served us well. Mr. Mock and Mr. Roos were very intelligent business people as they specifically selected our office location due to its immediate proximity to I-95, knowing that the responsiveness and accessibility of our local staff to our local clients would one of the foundations to our success.

All of Mock•Roos' staff is less than 30 minutes from your office(s). We commit that the appropriate inhouse experts and management staff will physically attend all meetings. We further commit to you that our staff members will be on-time and prepared to make the best use of your valuable time.

We have also selected subconsultants that will have the appropriate local experts to serve your project from their local offices.

Some of the many ways that we ensure accessibility include:

- All our staff members are local, no one is coming from Orlando for the day to attend a meeting
- We have multiple staff members that have overlapping expertise working on each project, allowing flexibility in which team member attends a meeting (if someone is sick, for example)
- We perform a weekly staff meeting, so all staff members (even if they are not assigned to the project) have an understanding of the project and any needs or issues

Finally, it's Mock•Roos culture. Be accessible. Communicate. Coordinate and supervise. All staff members have a company smart phone and are required to promptly respond to our inhouse manager's requests to ensure our clients feel important and that they remain confident that we are providing them with the best possible project experience a consultant can offer.

Comprehensive Planning Phase



A critical first step towards this being a successful project will be a comprehensive and more in depth planning phase. The Carollo Conceptual Design Report offers some insight into the project goals and offers very conceptual level intake wetwell and site layouts. Based on our site investigations, discussions with our team members and coordination with various pump manufacturers regarding this project, these starting point will need to be evaluated further and in more depth.

Our planning phase will identify more specifically the project components necessary to achieve the established project goals. Our executed planning will also identify all of the project constraints to refine the conceptual modeling and design.

The planning phase will evaluate construction feasibility, practicality, and long-term cost effectiveness. It is important to take the results of previous planning concepts and studies and perform preliminary engineering be refined and the final conceptual recommendations be developed to realize the greatest project benefits.

Cost-effective solution “brain-storming” is a very important step within the comprehensive planning phase that implement. We will involve your staff in all decisions made throughout the project. Decisions made early on in the planning phase will impact the schedule and the budget of the improvements being proposed. We will discuss with your staff appropriate “what if’s” so that appropriate decisions are being made. Key decisions will always be made with your input and agreement.

The planning phase services will include:

- Meet with staff to confirm needs and goals
- Develop schedules for design, bidding and construction
- Research solution alternatives
- Confirm permitting requirements
- Perform site evaluations
- Finalize studies and evaluations
- Review previous hydraulic modeling and analysis, including performing preliminary CFD modeling
- Prepare conceptual Engineer's Opinion of Probable Construction Costs (EOPCC)
- Initiate coordination with Equipment Manufacturers
- Initiate coordination efforts with FPL
- Recommend solutions
- Collaborate with staff to determine appropriate course of action
- Develop site plans
- Develop renderings
- Coordinate with other utilities and permitting agencies
- Develop and Initiate Public Outreach Program
- Assist staff in preparation of presentation materials, if necessary
- Project Funding and Administration Services

Neighborhood Communication and Coordination

For this project to be successful, a Neighborhood Communication and Coordination strategy must be focused on "putting people first and quality of life at the forefront." The end goal of our strategy is for the residents to feel they are a partner with the City in making this project, and the ultimate overall/future proposed neighborhood improvements, a successful project that benefits not only them, but the entire community.



We know that this project will be, at times, disruptive, intrusive and bring residents a feeling of uncertainty and

unease. From our experience on similar construction projects, we have gained valuable insight into being a good neighbor to the community. We will communicate regularly and frequently with the City, the residents, other project stakeholder, and ultimately the construction contractor, to provide information, updates, and answers to questions. We will work to gain the community's trust so they clearly see us as advocates for a successful project from everyone's perspective.

Our strategy will include:

Communication Style

Something that we take great pride in is our ability to communicate with project stakeholders in non-technical, easy to understand language. We have many decades of experience translating engineering terms into words that anyone can understand. We will ensure that the project's planning, permitting and engineering language is properly translated so that the average resident may easily understand it.

One-on-One

For the proposed work to be successful, close coordination must occur with each individual adjacent homeowner to coordinate the installation of the improvements. We know that the homeowners must have full and complete access to their homes with only minor interruptions to their driveways, garages and utility service. With City staff, we will meet one-on-one each adjacent homeowners to ensure the all issues are discussed and resolved to the homeowner's satisfaction. It is imperative that the residents have a realistic expectation of the disturbances and understand the benefits of the project and communicate the work and coordination of access during construction, and restoration concerns.

Public Notification Techniques

There are a variety of communication and notification techniques available for this project, including flyers posted in the project area, individual door hangers, announcements on the City's website, project websites, a project hotline, social media and press releases. We will discuss all of these techniques with City staff and implement them as staff sees fit during the design phase. During construction we have seen that it is very effective to provide weekly updates by email communicating project status, the upcoming week's anticipated work, upcoming meeting date(s), service interruptions and we will identify anticipated work activities, work areas and potential MOT impacts.

Public Outreach Meetings

We can conduct an onsite meeting, or attend a regularly scheduled neighborhood meeting, with residents, neighborhood leaders and City's PM to discuss the project, the anticipated project schedule and phasing, and our Neighborhood Communication and Coordination strategy. This meeting will assist with avoiding the spread of misinformation as the neighborhood leaders can keep the residents informed.

Design Phase

During the design phase, Mock•Roos will work with City staff to further evaluate conceptual solutions for sufficiency and suitability for the project. We approach projects with a focus on innovative solutions that will produce favorable benefits to you and your residents while providing substantial cost savings. Being innovative means reducing environmental impacts and optimizing total project life-cycle costs without compromising accuracy or quality.

Our experience and proven ability to think outside the box with "common sense" designs, which this project will require given the overwhelming site constraints.

Design Phase Services may include:

- Collect data
- Verify permit requirements
- Perform site reconnaissance
- Perform field surveys, including topographic, geotechnical and underground utilities
- Refining schedules for design, bidding and construction
- Coordinate and provide the services of specialty sub-consultants as required for a specific project
- Prepare 30% complete construction drawings
- Conduct design review
- Perform Quality Assurance/Contractibility Review
- Prepare Engineer's Preliminary Opinion of Probable Construction Cost
- Finalize H&H and CFD Modeling
- Prepare 60% complete construction drawings
- Conduct design/contractibility review
- Prepare preliminary project specifications
- Prepare permit application and perform permit processing
- Prepare 90% complete construction drawings - 90% means project is constructible
- Prepare final construction drawings

- Prepare Bidding Documents and Final Project Specifications
- Prepare final EOPCC
- Provide final documentation submittal

During the design phase several stormwater pump station design components must be considered, including:

- Stage data and total dynamic head considerations
- Hydraulic considerations
- Level of required flood protection
- Design flow rates
- Ability for pre- and post-storm system drawdown
- Equipment performance curves and efficiencies
- Equipment run-time data
- Equipment configuration(s)
- Intake Pipe Sizing
- Gravity by-pass considerations
- Number of gates and/or pumps
- Mechanical configurations
- Types of pumps and/or gates
- Wetwell intake and discharge configurations
- Pump cavitation, vibration, priming considerations
- Pump minimum submergence
- Ease of equipment removal
- Ease/cost of equipment maintenance
- Capacity needs and capabilities
- Facility redundancy
- By-pass capabilities (temporary and permanent)
- Materials of construction
- Geotechnical data
- Structural conditions
- Discharge Structure
- Structure(s) dewatering considerations
- Tie-in to Existing Private Seawalls
- Hardening Considerations
- Salvageable materials
- Water Quality improvements
- Trash/vegetation removal (from intake and site)
- FPL availability and schedule
- Primary and backup power source(s)
- Operation protocols
- Automation
- Instrumentation and Controls (I&C)
- Site Lighting
- SCADA

- Radio Survey
- Stilling wells
- Access to and over structures
- Security fencing and gates

The following are a few key design elements we wanted to briefly highlight:

Underground Utilities

A critical part of each project is early coordination with other utilities to minimize utility conflicts. This coordination, if not done early enough, can result in a project being postponed or construction budgets being exceeded due to unknown conflicts. Effectively managing other utilities as part of your project proves to be an extremely important task and will be an integral part of our overall project schedule considerations.



We are an Associate's Member of the Sunshine State One Call of Florida, which enables us to obtain more accurate field information during design.

As appropriate, we will coordinate our subconsultant Wantman Group to perform pot holing/soft dig investigations to verify and/or supplement known information. The pot holing/soft dig and as-built information will be represented on our comprehensive survey basemap and used to assist in design to avoid and/or accommodate conflicts that otherwise can cause delays and increase costs during construction. This elevated level of coordination translates into quality contract documents that more accurately reflect existing conditions.

Topographic Survey

Typically, a topographic survey will be performed to acquire existing condition information within the project area. Baseline topography, cross-sections, digital terrain models, existing right-of-way information, as well as drainage and utility features are frequently identified as part of the survey.



Project may also require title searches, preparation of Boundary Surveys and Sketch and Legals (easements).

For this contract, we have added multiple surveying subconsultants (Wantman Group and Dennis J. Leavy); having access to numerous firms guarantees us that we will be able to provide the City with timely services.

Geotechnical Testing

Depending on the ultimately proposed improvements, permeability of the surrounding soils, hardness (density) of the subsurface materials, position and fluctuation of the groundwater level, dewatering impacts, safe excavation sideslopes, stabilization (i.e. compaction) of the excavation bottom, reuse of the excavated materials as backfill, and backfill placement and compaction could all be critical factors in the design.

Based on our subconsultant RADISE International's previous work at Seabreeze Avenue and Thomas Street, we anticipate there will be approximately 5 feet of sandy fill material atop about 10 feet of soft, compressible fibrous organics. We also understand that the western part of the barrier island in this area was formerly low-lying marsh/swamp land which was situated behind the coastal dune feature. The low-lying land was filled to allow development, leaving the organics in place. We anticipate that the new pump station will have some challenges with respect to the low shear strength of the organic soils that we will need to consider.

Geotechnical exploration and testing may consist of the following:

- Auger borings to delineate limits of unsuitable material
- Standard Penetration Test borings for foundation design of proposed structures and other features such as mast arm structures
- Laboratory testing to determine engineering properties
- Installation of piezometers for groundwater monitoring
- In-situ permeability measurements
- Existing pavement conditions survey
- Pavement coring
- Design criteria for sheet piling, revetment or sea-walls
- Geotechnical recommendations regarding the proposed construction

A geotechnical report including design recommendations and discussions of any special considerations (e.g. removal of unsuitable material, high groundwater conditions, consolidation of weak soils, etc.) will be prepared

Hydraulic Modeling and Analysis

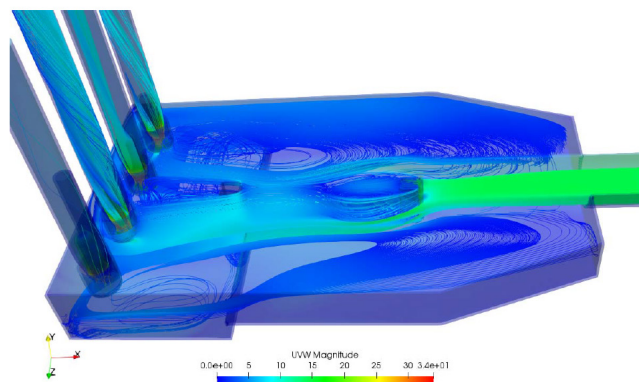
If appropriate, Mock•Roos will provide hydraulic analyses (including updates) of the proposed pumping and collection systems and the proposed improvements to assist the City in making final key infrastructure decisions regarding the level of service and conformance with accepted design standards. Mock•Roos has 4 in-house experts that use ICPR 4 on a regular basis and are experts at evaluating and understanding model results.

For example, further analyses may assist the City in establishing benefit versus cost ratios for use in project funding decisions. Hydraulic analysis is critical for producing pump calculations and pump curve selection. The appropriate curve selection can mean better pumping capabilities and lower energy costs.

The hydraulic analysis during the design of the stormwater pump station intake structure will be one of the most critical components to this stormwater pump station design. The proposed trench style wetwell design will require precise design to meet the Hydraulic Institute Recommendations to evenly distributed flow to the pump suction while providing for adequate pump submergence throughout the operating parameters to avoid damaging expensive pumps. An uneven distribution of flow can result in formation of surface or submerged vortices and may introduce air into the pump(s) causing vibration and/or additional noise. Uneven flow distribution can also increase the pump station's power consumption.

Mock•Roos offers unique expertise in Computational Fluid Dynamics (CFD) modeling and will evaluate the various alternative developed. Mock•Roos recently was tasked to prepare a CFD model using AutoCAD 2020 CFD for the proposed wetwell for the Town of Palm Beach D-14 Stormwater Pump Station. Mock•Roos also developed a CFD model for the existing mixed liquor pump stations at the East Central Regional Water Reclamation Facility (ECR) to identify existing deficiencies and designing potential improvements to maximize the performance of the existing pump stations in their current location and configuration.

For the ECR project, creation of 3D models suitable for CFD simulation were developed base on available record drawings and field measurements. Baseline CFD simulations of the existing sump and pump tube configuration were run for the design conditions of 44 MGD (24,500-30,800 GPM). Pump flow was determined by modeling the performance curve of the pumps chosen for the design.



Formed suction intakes, anti-swirl plates and training wall extensions were added to the CFD model, for each of the pumps, and additional simulations were run to document the changes in relative axial velocity deviation (RAVD) and pre-swirl at the pump suction compared to the existing model.

Mock•Roos will perform similar modeling efforts to better understand the appropriate wetwell configurations and better coordinate with pump manufacturers for proper pump selection.

Coordination with Permitting Agencies

Mock•Roos has over 65 years of extensive experience and a thorough understanding of the regulations, statutes, and guidelines in South Florida. Compliance with the pertinent regulations and successful negotiations with the agencies is an important aspect of any project.

As with utilities, early coordination with permitting agencies to identify permitting “hurdles” that a project will face is extremely important. Many times great conceptual ideas may have permitting issues that could consume the project schedule. Our past experiences, working relationships, and proactive permitting approach will ensure your projects are feasible and are successfully permitted in a timely manner.

In fact, our subconsultant's (Wantman Group) biologists have already conducted an in-water environmental assessment of the Thomas Street Pump Station in September 2019. To be valid for permitting, they conducted the survey before the end of the seagrass growing season and in conformance with the National Marine Fisheries Service protocol for Johnson's seagrass (*Halophila johnsonii*). Wantman Group documented that there were no seagrasses or other protected benthic resources. They also coordinated an inspection with SFWMD to confirm the findings.

For this project, following agency permits are anticipated:

- South Florida Water Management District
- Florida Department of Environmental Protection
- US Army Corps of Engineers
- Municipal permits (Building Department and Right of Way)

When project permits are ready to be issued, we will review the draft permit with the City to be certain that the final permit accurately reflects the City's desires for the project.

Discharge Structure and Seawall Considerations

During the design phase, our subconsultant Kimley-Horn, will evaluate a new discharge structure and configurations. Based on preliminary reviews, the new dissipater outfall structure/seawall will be tied into the adjacent seawalls to the north and south. The existing seawall/headwall is already at a higher elevation than both adjacent residential seawalls. Based on initial observations the existing ~20 foot seawall does not extend to the property lines and is not in good enough condition to accept the two proposed 7'x3.5' openings. It is assumed that a new seawall/headwall will be constructed waterward of the existing seawall. The existing residential seawall on the north side appears to be in good condition. The new seawall/headwall can be built to abut the seawall to the north with a short return wall or closure pour. The residential seawall to the south is exhibiting advanced deterioration and is significantly lower in elevation than the existing seawall/headwall. The connection to the seawall to the south will need to return inland to protect the southern end of the property and support the existing privacy wall, closing the gap between the end of the existing seawall and the property line.

Final Design Documents

Detailed design documents will include:

- Civil Design
- Structural Design
- Mechanical Design
- Electrical Design
- Instrumentation and Controls Design
- SCADA Design
- Landscaping Design, if necessary
- Engineer's Opinion of Probable Construction Costs
- Project Schedule through construction and start-up (as applicable)
- Front end documents

Bid Phase Services

Mock•Roos understands that the extent of our involvement during the bid phase may vary from little involvement to highly involved. Services may include:

- Final Review of Contract Documents
- Attending a pre-bid meeting
- Assisting the City in answer questions and prepare addendums
- Evaluate bidder's references and responsiveness
- Provide a recommendation of award
- Prepare conformed (as-bid) documents

Construction Phase Services

An experienced and knowledgeable construction management team is essential for maintaining the project schedule, realizing potential cost reductions, minimizing construction impacts, and gaining public support. Mock•Roos has the highly experienced staff to provide outstanding contract administration services including schedule analysis, estimating, construction submittals review, change order administration, and any related project controls.

During the construction phase of the project, our team will use the same team of professionals who were responsible for the design to assist the City ensure construction of the project is a success.

During construction, Mock•Roos will ensure project control elements are kept up-to-date and that all issues are handled quickly and efficiently. Documentation is a must. We will assist City staff ensure that the contractor is held accountable and are meeting their contractual obligations.

We will conduct periodic field observations to track the progress and quality of the work, identifying, and notifying the contractor and your staff, of any work that does not conform to the contract documents. We will also assist in conflict resolution and field discussion. We have clearly proven ourselves to be responsive and ready to assist - within minutes of being contacted, we are on-site helping resolve construction issues. Finally, routine construction progress meetings will be held as a tool for discussing and enforcing the contractor's schedule and to identify parties responsible for follow-up on any problems, delay items or questions.

Our proposed Neighborhood Communication and Coordination strategy will continue to be implemented during construction, however, it is not repeated here for brevity.

Our involvement during construction can be tailored to be full-time, part-time or less, depending on project budgets and desires.

Construction Phase Services (under a Design-Bid-Build delivery method) may include:

- Conduct/document pre-construction meeting
- Review and process contractor's shop drawing and engineering submittals
- Support and assist with conflict resolutions and field decisions
- Review contractor's requests for payment
- Review and process change orders
- Attend and conduct monthly progress construction meetings
- Review contractor record drawings
- Perform field observations of contractor Work
- Review contractor supplied test reports
- Attend walkthroughs with staff and contractor and develop punch lists of project deficiencies, as needed
- Prepare statements of completion
- Prepare final paperwork for contractor's final payment and project acceptance
- Provide final documentation (O&M manuals, record drawings, etc.) submittal

Pre-Construction Conference

Once the construction contract is awarded, we can assist with scheduling a Pre-Construction Conference to introduce the key participants, define team member roles and responsibilities, identify expectations, communicate the project requirements, and identify/discuss potential critical issues. We will invite all project participants and stakeholders, including the design team, utility companies, permitting agencies, and other applicable agencies. Mock•Roos will can prepare an agenda, conduct the Pre-Construction Conference and produce and distribute meeting minutes.



Submittal Control

Mock•Roos can implement, manage and maintain a Submittal Management System, which will document requests for information, shop drawings, invoices, requests for change, material testing information, etc. Shop drawings will also be submitted to the City for final

approval prior to ordering equipment or materials.

Mock•Roos will:

- Develop, maintain and update submittal logs for the construction contract
- Prepare a listing of all required submittals and expected dates of submittal, coordinated with the construction schedule timeline
- Provide written reminders to the contractor that a submittal is overdue
- Copy, distribute and track all submittals
- Review submittals for completeness and compliance with the project specifications and provide comments and recommendations
- Receive and collate comments on submittals from reviews performed by all team members.

Dealing with Conflicts

No matter how “straight-forward” the project is, no matter how good the project planning is, no matter how much coordination efforts are spent with the other utilities and permitting agencies, some “issues” will be encountered in your project(s). We believe that the key to dealing with issues is to first, perform ALL of the necessary coordination and planning to minimize ANY issues from arising. We will then, be proactive and identify potential issues as they come up and deal with each issue before it becomes a “problem”.



Once an issue has been identified, we will act quickly to understand the issue and develop options to eliminate/overcome the issue. We will contact you immediately to notify you that an issue has arisen. We will then schedule a meeting with you to discuss reason(s) for the issue(s), we will identify options to resolve the issue and we will communicate with you how the issue/resolution could potentially impact the project budget and/or schedule.

Change Order Control

Mock•Roos can review all change proposals submitted by the contractor and other project stakeholders; provide independent analysis and cost estimating; review the cost proposal submitted by the contractor; perform schedule impact analysis; participate in negotiating change proposals with the contractor; and, provide backup documentation as required. We understand

that the City will make all final decisions regarding Change Orders or Field Modifications that may be necessary.



Monthly Progress Reporting

Mock•Roos can submit monthly progress reports to the City and will include the following information:

- Outline of work completed during the period
- Work scheduled for the following period
- Critical issues requiring resolution in order to maintain project schedule
- Review of scheduled progress vs. actual progress
- Review of planned budget vs. actual expenditure including time and cost
- Identification of upcoming/potential conflicts and/or critical issues

Monthly Progress Reporting

Construction Progress Meetings can be conducted with the City, the contractor and active sub-contractors, the design team, and any relevant project stakeholders in order to review the project status, identify and resolve construction issues, material delivery and testing schedule, requests for information and shop drawing status and the contractor's two-week look ahead schedule. These meetings will be used as a tool for discussing and enforcing contractor's schedules and to identify parties responsible for follow-up on any problems, delay items or questions.

Project Close-Out

Mock•Roos will attend a "substantial completion" walk-through with the City and the contractor and prepare a punch list of incomplete or defective work items. We will review record drawings prepared by the contractor's surveyor for conformance with the contract documents prior to securing final record drawings in both reproducible and electronic formats for submission to the City. We will assist the City in ensuring that the contractor provides to the City the required training, operation and maintenance (O&M) manuals and product warranties for all installed equipment.

Mock•Roos will review the O&M manuals and product warranties prior to submission to the City. We will verify and report to the City the completion of all punch list items, assist in final project completion and close out including review of the final payment application and providing a recommendation of final acceptance of the project.

We will also provide all project completion statements necessary to the appropriate permitting agencies.

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Tab 7. Organizational Structure

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 Team Expertise 129

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A, B. Mock•Roos Team Roles and Experience

Mock•Roos is the premier Palm Beach County-based consulting firm specializing in implementing Stormwater Pump Station improvements for local coastal municipalities. Mock•Roos continues to earn its reputation by designing state-of-the-art stormwater control/pump facilities. We are proud to state that by the end of 2019, we have a total of over 150 stormwater pumps in operation throughout South Florida. We have successfully provided professional services for:

- 100+ water control structures, new and rehabilitation, ranging in size up to 3,000 CFS
- 40 stormwater pump station projects, ranging in size from 10,000 gallons per minute (GPM) to over 585,000 GPM (1,300 CFS), since 2000
- Over 85 total stormwater pump station projects throughout Florida
- Hundreds of miles of hydraulic and hydrologic (H&H) modeling and design of canal and conveyance systems
- Performing computational fluid dynamics (CFD) to analyze and solve problems that involve fluid flows
- Large scale, and award winning, water resources and stormwater projects

Our inhouse experts include:

- 31 employees
- 7 Engineering Interns
- Registered Professional Surveyor
- Microsoft Certified Systems Engineer (and Full-time inhouse IT Personnel)
- 14 Registered Professional Engineers
- Full-Time Senior Field Representative
- 3 LEED Certified employees

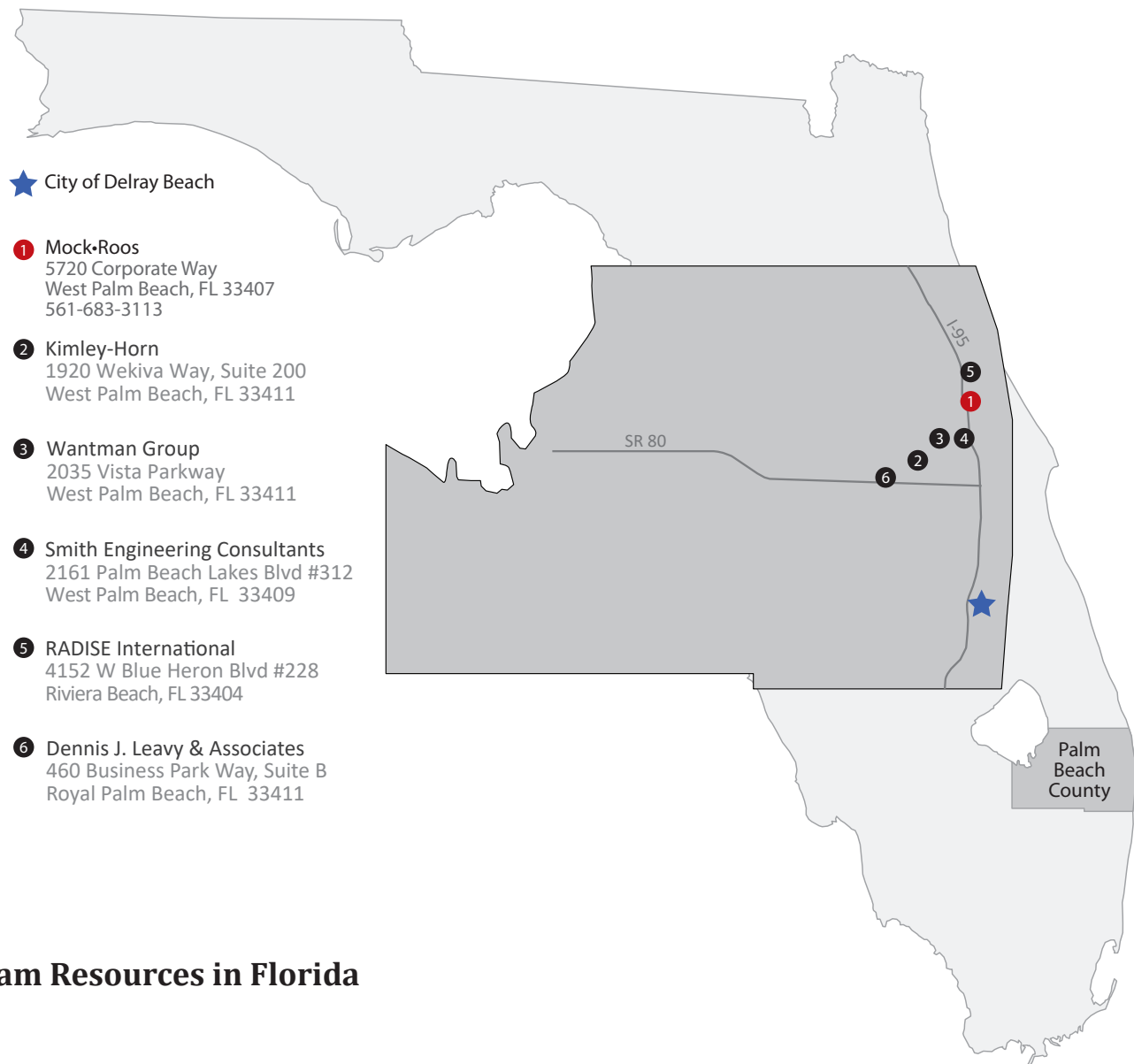
All staff members work at one office, at 5720 Corporate Way, West Palm Beach. We offer significant experience and qualifications on thousands of infrastructure projects throughout South Florida. Our team members possess wide-ranging diversity in their technical abilities, eliminating the organizational structure of “specific” departments.

Our additional team members on this project also possess tremendous experience successfully working with local coastal municipalities as well as working with one another. The following chart shows team roles, office location, Delray Beach project experience and past experiences working with Mock•Roos.

Consultant/Subconsultant	Team Role	Office Within Palm Beach Co.	Previous Delray Beach Projects	Worked with Mock•Roos
Mock•Roos	Prime Contractor Civil and Mechanical Engineering	●	●	N/A
Kimley-Horn	Structural Engineering Landscape Architecture	●	●	●
Wantman Group	Environmental/Permitting Utility Locates Survey	●	●	●
RADISE	Geotechnical Engineering & Testing	●	●	●
Smith Engineering Consultants	Electrical Engineering I & C SCADA	●	●	●
Dennis J. Leavy & Assoc.	Survey	●	●	●

Team's Local Office Location Serving Project

Our local team has the resources and office location proximity within Palm Beach County to immediately meet your needs for completion of this project.



Team Resources in Florida

Consultant	Total Staff in Florida	Professional License				
		PE	PSM	PG	LA	LEED
Mock•Roos	31	14	1			3
Kimley-Horn	830	274	5	1	21	15
Wantman Group	362	69	15		9	13
RADISE International	58	12				
Smith Engineering Consultants	9	4				
Dennis J. Leavy & Associates	13	3				
Totals	1,302	376	21	1	30	31

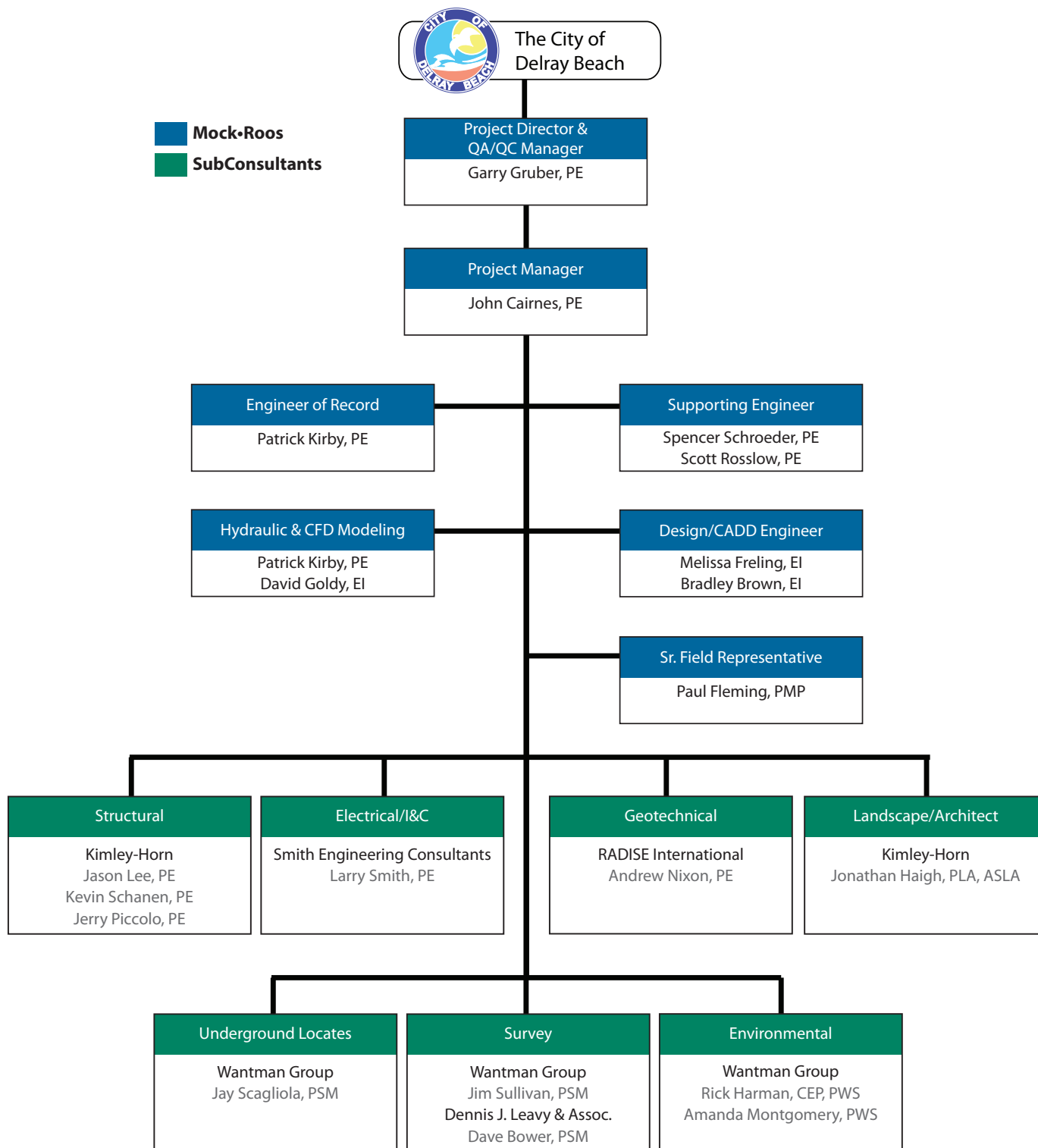
Team Expertise

The following chart shows team members areas of expertise and relevant project experience..

Consultant						Expertise / Category of Work
Dennis J. Leavy & Assoc	RADISE International	Wantman Group	Smith Electrical Consultants	Kimley-Horn	Mock•Roos	
		•		•	•	Stormwater Pumping Stations
		•			•	Water Control Structures
		•		•	•	Wastewater Pumping Stations
		•		•	•	Civil Engineering
		•		•	•	Stormwater Engineering
				•	•	Water Resources
				•	•	Mechanical Engineering
				•	•	Hydraulic & Hydrologic Modeling
					•	CFD Modeling
		•		•		Structural Engineering
	•		•			Electrical Engineering
	•		•			Instrumentation and Controls
	•		•		•	SCADA Systems
		•		•		Seawall / Bulkhead Design
				•		Architectural
						Landscape Architecture
		•		•	•	Permitting/Environmental
				•		Geotechnical Engineering
		•				Underground Utility Locates
•		•				Land Surveying
		•		•	•	Construction Management
	•	•	•	•	•	Construction Inspection
		•		•	•	Project Management
	•	•	•	•	•	QA/QC/Value Engineering
		•		•	•	Stakeholder Coordination

C. Team Organizational Chart

The following individuals names below will ABSOLUTELY participate in your project.



D, E. Availability of Key Personnel

Mock•Roos maintains a high level of personal commitment to effectively assist clients with the completion of numerous projects. We are committed to providing the City with this same level of service throughout the duration of this contract.

Our team members will be the foundation of the successful completion of project tasks undertaken through this contract. Our team's current workload is such that we can fully commit to providing the City with quality and timely services under this contract.

While our team's workload will vary considerably over the next several years, we offer the City considerable depth of talented local staff and the assurance that we will provide the right amount of resources to satisfy the needs of any project. This depth will help ensure that the individuals named in this submittal will be available to participate in this contract as presented.

The following chart (to the right) shows the availability of the key individuals that will be working on this project.

Mock•Roos Key Individuals	Availability
Garry Gruber, PE	50%
John Cairnes, PE	50%
Patrick Kirby, PE	60%
Spencer Schroeder, PE	40%
Scott Rosslow, PE	40%
David Goldy, EI	55%
Melissa Fresley, EI	55%
Bradley Brown, EI	60%
Paul Fleming, P.M.P.	60%
Sub-Consultant Key Individuals	Availability
Jason Lee, PE	60%
Kevin Schanen, PE	50%
Jerry Piccolo, PE	60%
Larry Smith, PE	50%
Andrew Nixon, PE	55%
Jonathan Haigh, PLA, ASLA	40%
Jay Scagliola, PSM	45%
Jim Sullivan, PSM	45%
Dave Bower, PSM	25%
Rick Harmon, CEP, PWS	50%
Amanda Montgomery, PWS	55%

Letter of Commitment

As stated, Mock•Roos' current and projected workloads provides us with the time and resources needed to ensure the Thomas Street Stormwater Pump Station project will receive the attention it needs. The Mock•Roos staff selected for this project, as well as our subconsultants, as stated above, are aware of the time and resource commitment this project requires. Their resource availability allows them to commit to make this project a success and we commit that the individuals named will ABSOLUTELY participate in your project.

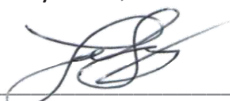
The businesses below commit the resources needed to complete this job.



Mock•Roos, Garry Gruber, PE, Senior Vice-President



Kimley-Horn, Kevin Schanen PE, Vice-President



Smith Engineering Consultants, Larry Smith, PE, President



Wantman Group, David Wantman, PE, CEO



RADISE, Andrew Nixon, Operations Manager



Dennis J. Leavy & Associates., David Bower, PSM, Vice-President

Sub-Consultants

Kimley»Horn

Kimley-Horn

Kimley-Horn will serve as Mock•Roos' Structural Engineer and Landscape Architecture. Kimley-Horn and Mock•Roos have teamed together on numerous high profile stormwater pump station projects, including the Town of Palm Beach's D-4, D-10, D-12 and D-14 Stormwater Pump Stations. Our team is also implementing the Town of Palm Beach's \$100 Million Utility Undergrounding Program.

Kimley-Horn is a consulting firm providing engineering, planning, and environmental services. Throughout its 53-year history, Kimley-Horn has demonstrated its ability to effectively provide innovative, high-quality consulting services to a wide variety of clients.

Kimley-Horn offers multiple disciplines of services, including:

- Civil and Structural engineering
- Mechanical engineering
- Recreational facilities planning and design
- Infrastructure master planning and design
- Landscape architecture
- Traffic engineering

Kimley-Horn has designed 100s of pumping stations across the state, for water, wastewater, stormwater, reuse, and seawater. Their experience includes pump station sizes from 0.1 million gallons per day (MGD), up to over 100 MGD for Stormwater Pumping Stations.

Kimley-Horn's recently completed Delray Beach projects include:

- Harbor Drive Drainage Project
- Lawson Pedestrian Bridge
- Martin Luther King Jr. Drive Beautification
- NE 3rd Streetscape
- Roadway Bond Program Projects
- Stormwater Master Plan
- Swinton Avenue and Atlantic Avenue Intersection
- US 1 Corridor Design and Implementation
- Water Supply Plan

Main Office Location:

1920 Wekiva Way, Suite 200
West Palm Beach, FL 33411



Wantman Group

Wantman Group (WGI) will serve as Mock•Roos' Environmental / Permitting assistance consultant, as well as provide underground utility locates and surveying services.

WGI is a full-service consulting firm founded in 1972 to provide a comprehensive range of infrastructure services. WGI has since diversified by offering related professional services including civil engineering, surveying and mapping, transportation engineering, structural

engineering, subsurface utility engineering, landscape architecture, land planning, environmental sciences, architecture, water resources, parking planning and design, and creative services.

WGI's corporate office is in West Palm Beach, Florida with branch offices nationwide. We currently employ over 400 highly skilled and experienced professionals committed to excellence and unsurpassed service to our clients.

WGI Structural, Environmental and Geospatial provide unparalleled expertise in these disciplines. WGI Structural Division has extensive experience with federal, state, county, municipal, and special district projects including structural and civil design/rehabilitation of commercial/institutional buildings up to ten stories, bridges, large span culvert crossings, water and wastewater structures, military structures, marine structures, ground storage tanks, drainage control structures, roadways, recreational facilities (including monument signs, boardwalks, overlook towers, boat ramps, fishing piers, canoe launches, sport lighting poles, and picnic shelters), facility assessments and vulnerability reports, hur-

ricane hardening of existing facilities, and OSHA safety upgrades within industrial plants facilities. SFWMD has used WGI's Structural Division as the "GO TO" professionals for those difficult problems which require "OUT OF THE BOX" solutions encountered during the course of operating the largest surface water management system in Florida.

Main Office Location:

2035 Vista Parkway
West Palm Beach, FL 33411



RADISE International

RADISE International (RADISE) will serve as Mock•Roos' Geotechnical and Materials Engineer and Testing Firm. RADISE specializes in geotechnical engineering, construction materials testing, and inspection services for over 21 years. RADISE has extensive experience providing professional engineering services throughout South Florida, including Broward, Palm Beach and Miami Dade Counties, SFWMD, FDOT, The School Boards of Palm Beach, Broward and Miami Dade Counties, and the Cities of West Palm Beach, Lake Worth, Greenacres, Fort Lauderdale and Miami Beach and Delray Beach.

RADISE's Corporate Office houses our state-of-the-art laboratory that is fully equipped for the testing of soils and other construction materials. Their laboratory is accredited by the Construction Materials Engineering Council (CMEC), approved by the FDOT and validated by the USACOE. RADISE have offices and Certified Laboratories in Miami, Ft. Lauderdale, Tampa, Jacksonville and Orlando.

The following list of services represents those most frequently requested, but not all that RADISE provides.

- Geotechnical Engineering (subsurface studies)
- Geotechnical Drilling (Standard Penetration Test borings)
- Foundation Analysis (recommendations and design)
- Bridge Piling Design including WEAP Analysis
- Construction Materials Testing and Inspections, including soils & concrete tests
- Construction Monitoring and Inspections, including PDA, driven pile inspections, vibro-compaction/replacement oversight, auger cast pile load test and production pile monitoring, post-tension inspections and vibration monitoring
- Masonry Tests, Asphalt Monitoring and Tests
- Non-destructive tests
- Special and Threshold Inspection Services
- Geosynthetic Materials (geomembranes, geotextiles, geonets and geosynthetic clay liners) Inspections

Main Office Location:

4152 W Blue Heron Blvd #228
Riviera Beach, FL 33404



Smith Engineering Consultants

Smith Engineering Consultants, Inc. (SEC) will serve as Mock•Roos' electrical, Instrumentation and Controls (I&C) and Supervisory Control and Data Acquisition (SCADA) Engineer. SEC was founded in 1999 and is a certified local Small Business Enterprise (SBE). SEC is a multi-discipline engineering firm with an in-depth knowledge of energy, water, telecommunications, and architectural projects.

SEC's areas of expertise includes:

- Transmission and distribution systems
- Electrical systems
- SCADA
- HVAC/Plumbing/Piping
- Energy conservation and power quality studies
- Power generation/cogeneration
- Controls and instrumentation
- Indoor/Outdoor lighting
- Telecommunications

For the past 25 years, SEC has provided electrical and instrumentation and controls services for Mock•Roos on countless stormwater and wastewater projects throughout Palm Beach County, including for SFWMD, LWDD, Palm Beach, West Palm Beach, Wellington, Lake Worth and PBC Water Utilities.

SEC has extensive experience with Delray Beach, some of which include:

- Atlantic Avenue Lighting
- Lift Station #58A Upgrades
- 12th Avenue Lighting
- NW 5th Avenue Lighting
- Christmas Tree Lighting Electrical Service

Main Office Location:

5114 Okeechobee Blvd, #104
West Palm Beach, FL 33417



Dennis J. Leavy & Associates

Dennis J. Leavy & Associates, Inc. (DJL) will serve as one of Mock•Roos' on-call surveyors. Founded in 1994, DJL was established with the goals of providing outstanding client service, dependability and integrity. They are a certified local Small Business Enterprise (SBE) and have been Mock•Roos with surveying support from the same location in Royal Palm Beach since their founding.

The firm employs 4 PSM with over 100 years combined experience. This enables them to offer great depth of knowledge in all aspects of the land surveying profession. They also employ CADD technicians, project field representatives and support staff, as well as uses an array of state-of-the-art equipment, including Global Positioning Systems (GPS), Geodetic Total Stations, Robotic Total Stations and Electronic Data Collection.

DJL have worked extensively with several public entities including the Town of Palm Beach, Palm Beach County, the City of West Palm Beach, South Florida Water Management District, and Seacoast Utility Authority.

Recent Town projects include:

- D-9 Stormwater Pump Station
- A-7 Forcemain Replacement
- Pinewalk (A-4) Forcemain Replacement
- E-3 and E-6 Forcemain Rehabilitation
- North Lake Way / Laurian Lane Road
- A1A Forcemain Replacement
- D-6 and D-7 FPL Easement
- Seawall Research and Topographic Survey

Main Office Location:

460 Business Park Way, Suite B
Royal Palm Beach, FL 33411

Tab 8. Attachments

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Notification of Public Records Law 143

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N:\RFPs\Delray Beach\C0005.00 Thomas St SWPS 2020-011\Tab 8. Attachments.indd

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City of Delray Beach

Bid RFQ No. 2020-011

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

ACKNOWLEDGEMENT OF ADDENDA

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

Please complete Part I or Part II, as applicable

PART I:

List below the dates of issue for each addendum received in connection with this Solicitation:

Addendum #1, Dated Q&A, Feb 4, 2020

Addendum #2, Dated _____

Addendum #3, Dated _____

Addendum #4, Dated _____

Addendum #5, Dated _____

Addendum #6, Dated _____

Addendum #7, Dated _____

Addendum #8, Dated _____

Addendum #9, Dated _____

Addendum #10, Dated _____

PART II:

☐ NO ADDENDUM WAS RECEIVED IN CONNECTION WITH THIS SOLICITATION

Mock•Roos

Firm Name

Signature

Garry Gruber, PE, Senior Vice President

Name and Title (Print or Type)

February 13, 2020

Date

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

PROPOSAL SUBMITTAL SIGNATURE PAGE

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

By signing this Proposal, the Proposer certifies that it satisfies all legal requirements as an entity to do business with the City, including all Conflict of Interest and Code of Ethics provisions.

Firm Name:
Mock•Roos

Street Address:
5720 Corporate Way, West Palm Beach, FL 33407

Mailing Address (if different from Street Address):


Telephone Number(s): 561-683-3113

Fax Number(s): 561-478-7248

Email Address: garry.gruber@mockroos.com

Federal Employer Identification Number: 59-0878800

Prompt Payment Terms: N/A % N/A days' net N/A days

Signature:  (Signature of authorized agent)

Print Name: Garry Gruber, PE

Title: Senior Vice President

Date: February 13, 2020

By signing this document, the Proposer agrees to all terms and conditions of this Solicitation and the resulting contract/agreement.

THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL, FOR NOT LESS THAN 90 DAYS, AND THE PROPOSER'S UNEQUIVOCAL OFFER TO BE BOUND BY THE TERMS AND CONDITIONS SET FORTH IN THIS SOLICITATION. FAILURE TO SIGN THIS SOLICITATION WHERE INDICATED ABOVE, BY AN AUTHORIZED REPRESENTATIVE, SHALL RENDER THE PROPOSAL NON-RESPONSIVE. THE CITY MAY, HOWEVER, IN ITS SOLE DISCRETION, ACCEPT ANY PROPOSAL THAT INCLUDES AN EXECUTED DOCUMENT WHICH UNEQUIVOCALLY BINDS THE PROPOSER TO THE TERMS OF ITS PROPOSAL.

City of Delray Beach

Bid RFQ No. 2020-011

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

CONFLICT OF INTEREST DISCLOSURE FORM

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

The award of this contract is subject to the provisions of Chapter 112, *Florida Statutes*. All Proposers must disclose within their Proposal: the name of any officer, director, or agent who is also an employee of the City of Delray Beach.

Furthermore, all Proposers must disclose the name of any City employee who owns, directly or indirectly, an interest of more than five percent (5%) in the Proposer's firm or any of its branches.

The purpose of this disclosure form is to give the City the information needed to identify potential conflicts of interest for evaluation team members and other key personnel involved in the award of this contract.

The term "conflict of interest" refers to situations in which financial or other personal considerations may adversely affect, or have the appearance of adversely affecting, an employee's professional judgment in exercising any City duty or responsibility in administration, management, instruction, research, or other professional activities.

Please check one of the following statements and attach additional documentation if necessary:

- X To the best of our knowledge, the undersigned firm has no potential conflict of interest due to any other Cities, Counties, contracts, or property interest for this Proposal.
- The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other Cities, Counties, contracts, or property interest for this Proposal.

Acknowledged by:

Mock•Roos

Firm Name

Signature

Garry Gruber, PE, Senior Vice President

Name and Title (Print or Type)

February 13, 2020

Date

23

1/22/2020 5:30 PM

p. 25

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

NOTIFICATION OF PUBLIC ENTITY CRIMES LAW

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

Pursuant to Section 287.133, *Florida Statutes*, you are hereby notified that a person or affiliate who has been placed on the convicted contractors list following a conviction for a public entity crime may not submit a Proposal on a contract to provide any goods or services to a public entity; may not submit a Proposal on a contract with a public entity for the construction or repair of a public building or public work; may not submit Proposals on leases or real property to a public entity; may not be awarded or perform work as a contractor, supplier, sub-Proposer, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 [F.S.] for Category Two [\$35,000.00] for a period of thirty-six (36) months from the date of being placed on the convicted contractors list.

Acknowledged by:

Mock•Roos

Firm Name

Signature

Garry Gruber, PE, Senior Vice President

Name and Title (Print or Type)

February 13, 2020

Date

City of Delray Beach

Bid RFQ No. 2020-011

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

**Notification of Public Records Law Pertaining to Public Contracts and Requests
for Contractor Records Pursuant to Chapter 119, *Florida Statutes***

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

Pursuant to Chapter 119, *Florida Statutes*, Contractor shall comply with the public records law by keeping and maintaining public records required by the City of Delray Beach in order to perform the service. Upon request from the City of Delray Beach' custodian of public records, contract shall provide the City of Delray Beach with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, *Florida Statutes* or as otherwise provided by law. Contractor shall ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract. If the Contractor does not transfer the records to the City of Delray Beach. Contractor upon completion of the contract, shall transfer, at no cost, to the City of Delray Beach all public records in possession of the Contractor or keep and maintain public records required by the City of Delray Beach in order to perform the service. If the Contractor transfers all public records to the City of Delray Beach upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City of Delray Beach, upon request from the City of Delray Beach' custodian of public records, in a format that is compatible with the information technology systems of the City of Delray Beach.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, *FLORIDA STATUTES*, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT OFFICE OF THE CITY CLERK LOCATED AT 100 NW 1ST STREET, DELRAY BEACH, FLORIDA 33444, PHONE NUMBER (561) 243-7000, EMAIL ADDRESS: JOHNSONK@MYDELRAYBEACH.COM.

Acknowledged:

Mock•Roos

Firm Name

Signature

Garry Gruber, PE, Senior Vice President

Name and Title (Print or Type)

February 13, 2020

Date

25

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION


DRUG-FREE WORKPLACE

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

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Mock•Roos is a drug-free workplace and has
(Company Name)
a substance abuse policy in accordance with and pursuant to Section 440.102, *Florida Statutes*.

Acknowledged by:

Mock•Roos
Firm Name

Signature
Garry Gruber, PE, Senior Vice President
Name and Title (Print or Type)
February 13, 2020
Date

City of Delray Beach

Bid RFQ No. 2020-011

City of Delray Beach

RFQ No. 2020-011

Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION

NON-COLLUSION AFFIDAVIT

There is no web form available on www.bidsync.com for this form. Please print and complete this form

STATE OF Florida
COUNTY OF Palm Beach

Before me, the undersigned authority, personally appeared Garry Gruber, who, after being by me first duly sworn, deposes and says of his/her personal knowledge that:

- a. He/She is Senior Vice-President of Mock Roos, the Proposer that has submitted a Proposal to perform work for the following:

RFQ No.: 2020-011 Title: Thomas Street Stormwater Pump Station

- b. He/She is fully informed respecting the preparation and contents of the attached Request for Qualifications, and of all pertinent circumstances respecting such Solicitation.

Such Proposal is genuine and is not a collusive or sham Proposal.

- c. Neither the said Proposer nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Proposer, firm, or person to submit a collusive or sham Proposal in connection with the Solicitation and contract for which the attached Proposal has been submitted or to refrain from proposing in connection with such Solicitation and contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm, or person to fix the price or prices in the attached Proposal or any other Proposer, or to fix any overhead, profit, or cost element of the Proposal price or the Proposal price of any other Proposer, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City or any person interested in the proposed contract.
- d. The price or prices quoted in the attached Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signature [Signature]

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 11 day of February, 20 20, by Garry Gruber who is ☒ personally known to me or ☐ has produced _____ as identification.



Jane E. Hayes

(Signature of Notary Public - State of Florida)

Jane E. Hayes

(Print, Type, or Stamp Commissioned Name of Notary Public)

City of Delray Beach
RFQ No. 2020-011
Project No. 18-017

THOMAS STREET STORMWATER PUMP STATION


TRUTH – IN – NEGOTIATION CERTIFICATE

IF SUBMITTING HARD COPY: PRINT AND COMPLETE THIS FORM

IF SUBMITTING ELECTRONICALLY: COMPLETE APPLICABLE WEB FORM ON WWW.BIDSYNC.COM

The undersigned warrants (i) that it has not employed or retained any company or person, other than bona fide employees working solely for the undersigned, to solicit or secure the Agreement and (ii) that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than its bona fide employees working solely for the undersigned or agreed to pay any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of the Agreement.

The undersigned certifies that the wage rates and other factual unit costs used to determine the compensation provided for in the Agreement are accurate, complete, and current as of the date of the Agreement.

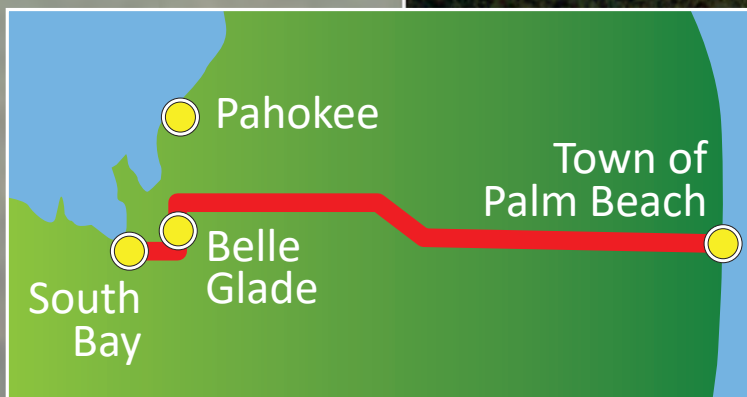
Name: Mock•Roos
Title: Garry Gruber, PE, Senior Vice President
Date: February 13, 2020
Signature: 

Kenneth C. Mock Memorial Highway

In 1985, an expanse of State Road 80 was dedicated as the Kenneth C. Mock Memorial Highway. Stretching from South Bay, Florida, to the Town of Palm Beach, it is a lasting testimony to the Mock•Roos co-founder whose sense of responsibility led to safer travel.

The Kenneth C. Mock Memorial Highway commemorates the personal commitment and skill of Mr. Mock. Today, the highway links the eastern Lake Okeechobee area with Palm Beach County urban centers, providing travelers with both scenic and safe roadways.

Concern for the health and safety of the public is a Mock•Roos tradition, and a continuous tribute to the firm's original president, who always insisted upon a high standard of excellence.



The Kenneth C. Mock Memorial Highway stretches from South Bay, Florida, to the Town of Palm Beach.