

Request for Qualifications

City of Delray Beach

RFQ # 2017-032; Project # 16-500 (918-42)

Engineering Design Services

SW 4th Street, SW 6th Street, SW 7th Avenue

Before



Delray Beach
SW 12th Avenue /
Auburn Avenue /
SW 14th Avenue

Before



Lake Worth
7th Avenue South
Roadway Improvements



Delray Beach
NE 1st Avenue



After



After



Roadway Improvements

March 7th, 2017

MATHEWS
CONSULTING

a BAXTER & WOODMAN company

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Chapter 1

Letter of Intent



Chapter 1

Letter of Intent

Mathews Consulting, a Baxter & Woodman Company is pleased to submit our Letter of Interest and Statement of Qualifications to the City of Delray Beach for *Engineering Design Services for SW 4th Street, SW 6th Street & SW 7th Avenue (RFQ #2017-032)*. Pursuant to your request, one (1) original unbound, four (4) bound copies and two (2) electronic copies on USB portable flash memory card in PDF format of the required information are included for your consideration.

The engineering services for this Contract include professional engineering services for the following three streets located in the Southwest (SW) Neighborhood:

- SW 4th Street (from South Swinton Avenue to SW 10th Avenue)
- SW 6th Street (from SW 5th Avenue to SW 8th Avenue)
- SW 7th Avenue (from SW 1st Street to SW 8th Court)

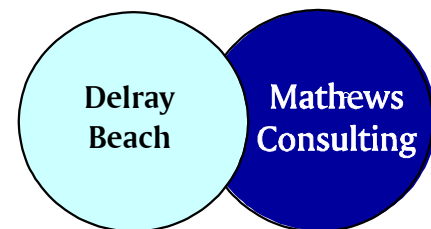
The engineering services include: survey, utility coordination, design, cost estimates, permitting, public outreach, bidding assistance and providing design support services during construction.

The Mathews Consulting Team selected to serve you on this Contract has provided high-quality engineering roadway / streetscape design services to numerous municipalities in South Florida. In fact, we have been under Contract for General Engineering Services with the City of Delray Beach since 1999. **Mathews Consulting has extensive experience with these types of engineering services in residential neighborhoods, business districts and redevelopment districts and will provide the depth of resources needed to take on and successfully complete on time any task this Contract may entail.**

Mathews Consulting also offers a unique approach to serving the City of Delray Beach: we will protect your interests, provide high-quality engineering solutions, and save you money. Our strategy is to work as a valued partner with the City in order to accomplish your goals and objectives. **Our approach is based on achieving success for the City by providing the following:**

Responsiveness. The nature of *Engineering Design Services* is such that responsiveness is the key to maintaining a long-term professional relationship. Many consultants claim to be responsive; however, we take great pride in ensuring that we are ***immediately*** accessible and responsive to our client's needs. This is demonstrated in the twenty-three (23) General Consulting Contracts that we serve throughout South Florida, including the City of Delray Beach (Environmental Services & CRA).

Leadership. A key component of Engineering Design Contracts is having one point of contact with the engineering firm who can respond to all issues and needs pertaining to the Contract. This person will be knowledgeable of every project and provide an efficient means of communication between the City and the engineering firm. Our Project Manager, David Mathews, P.E., will direct all work products for this Contract and will be the City's central point of contact. Mr. Mathews is Vice President of Mathews Consulting and has over 25 years South Florida engineering experience and believes in doing "whatever it takes" to ensure project success. Mr. Mathews, as demonstrated on past numerous City of Delray Beach roadway, streetscape and drainage projects, will take personal ownership of this project assignment to ensure your satisfaction.



Flexible - Responsive - Seamless

Experienced Team. In addition to Mathews Consulting's highly qualified and experienced professionals, we have added a supporting team of talented subconsultants for additional resources and specialty services.

- **Dennis J. Leavy & Associates (DJLA)**, located in Palm Beach County, will provide surveying and mapping services.
- **Terracon Consultants, Inc.**, located in Palm Beach County, will provide geotechnical services.
- **InfraMap, Inc.**, located in Palm Beach County, will provide underground utility locate services.
- **Electrical Design Associates (EDA)**, located in Palm Beach County, will provide electrical lighting design services.
- **Adams Consulting Group**, located in Palm Beach County, will provide public outreach services.

Competitive Rates. Mathews Consulting is a local South Florida, mid-size engineering business enterprise that provides engineering services at a cost-effective rate. The principal owners of our firm will lead and perform specific assigned work task(s). We are also a full service design firm and provide all civil, transportation, structural, electrical and instrumentation, and value engineering services in-house.

Ease of Communication. Our Florida office is located at The Offices at CityPlace North, 477 S. Rosemary Avenue, West Palm Beach. We have been serving Delray Beach from this location since 1999. Additionally, our principals are always available during and after working hours should emergencies arise. This ease of communication promotes team-oriented interaction which produces results!!

Committed Project Partners. The City needs a consultant who will work as a partner with your staff – one who will be a proactive extension of your staff. Mathews Consulting has a solid track record of partnering with local utility clients to deliver the high level of personal service you desire. We are structured to allow for a long-term commitment of specific staff to serve your needs. **By having principal owners directly involved, there is no “revolving door” of staff with our project team.** Mathews Consulting along with our Team Members are committed to our civil engineering practice in South Florida. Our highly experienced team will be accessible and responsive to your needs at all times.

Mathews Consulting's primary goal is to provide the City of Delray Beach with an **experienced, cost effective, responsive and accessible** team that will help you improve and develop the best possible infrastructure to serve the City's residents and business owners, while meeting your technical, budget, and schedule needs. Mathews Consulting firmly understands the work to be completed in this Contract, and based our proven ability on past South Florida roadway, streetscape & drainage projects (including the City of Delray Beach), we give 110% commitment to complete every project task within the required time and budget constraints.

We appreciate the opportunity to present our qualifications and look forward to working with the City on this important and challenging project. Please contact us if additional information is needed during the evaluation and selection process.

Very Truly Yours,

**MATHEWS CONSULTING,
A BAXTER & WOODMAN COMPANY**



John Ambrose, P.E., President
477 S. Rosemary Avenue, Suite 330
West Palm Beach, FL 33401
Office: (561) 655-6175; Fax: (561) 655-6179

**MATHEWS CONSULTING,
A BAXTER & WOODMAN COMPANY**



David Mathews, P.E., V.P. / FL Operations
477 S. Rosemary Avenue, Suite 330
West Palm Beach, FL 33401
Office: (561) 655-6175; Fax: (561) 655-6179

Chapter 2

Statement of Organization



Chapter 2

Statement of Organization

This section provides our statement of organization. Information is organized as follows:

- Firm Organization
- Legal Contracting Name
- State of Incorporation
- Date of Authorization
- Ownership Structure
- Company Owners
- Federal Identification Number
- Corporate Headquarters
- Local Office
- Hours of Operation
- Years in Business
- Primary Representative
- Secondary Representative
- Litigation Summary

2.1 Firm Organization

Baxter & Woodman is a forward-thinking civil engineering firm dedicated to combining sound engineering practices with emerging technologies to provide sustainable, innovative solutions. Our staff of 215 professionals specialize in municipal engineering, transportation services, water and wastewater management, stormwater management construction services, and technology services. We help build community value through safe roads and bridges, clean water supplies, and reliable wastewater treatment.

Baxter & Woodman was founded in 1946 after the firm's founding fathers, Richard Baxter and Lorrin Woodman, became friends in graduate school at Harvard University where they both studied sanitary engineering. During World War II, their paths crossed again when they were stationed together in Guam. Before their return to the States, the two men struck a gentleman's agreement – they would start up an engineering firm upon their safe return home. Making good on this agreement, in 1946, the two friends founded Baxter & Woodman Consulting Engineers in Crystal Lake, Illinois.



After WWII, the country began an era of prosperity and population growth. In response, Baxter and Woodman began providing infrastructure engineering to municipalities, state and county agencies, and sanitary districts. They focused on street, water main, sanitary sewer, and treatment plant design. They took great pride in providing personalized attention to each and every client.

Years later, much has changed – What started as a two-person operation almost 70 years ago, has transformed into a regionally recognized, thriving multi-discipline engineering firm with over 200 team members! Through it all, Baxter & Woodman staff remains committed to the core value of our founders:

“Provide government agencies with outstanding engineering services.”

Today, Baxter & Woodman, Inc. still practices this time-honored philosophy adopted by Richard Baxter & Lorrin Woodman decades ago! Baxter & Woodman has specialized in municipal engineering since 1946, and over 95% of our business is from various forms of government - municipalities, counties, and state agencies. With this municipal sector focus, we have developed the staff, resources and training to provide the full range of engineering and technology services required by today’s municipalities and public agencies.

In 2016, Baxter & Woodman acquired with the Florida-based engineering firm Mathews Consulting, Inc., a civil engineering consulting firm that specializes in municipal work for clients throughout South Florida. The merger expands the midwest based firm’s reach into the Florida region. The



acquisition brings in-house professional planning, water and wastewater treatment, electrical, structural, GIS, information technology, transportation and surveying services into the company’s Florida operations.

Baxter & Woodman’s President and CEO, John V. Ambrose stated, “The two companies share similar corporate values and complement each other to make a stronger team. We have combined the planning, design, and construction expertise of both firms to continue to serve the needs of the growing Florida population.”

Effective August 2016, the 18-year Florida firm operates under the name of Mathews Consulting, a Baxter & Woodman Company. Mr. David Mathews, P.E. serves as Vice President Florida Operations and Ms. Rene Mathews, P.E. leads the business development as Vice President of Business Development for the firm's Florida regional office. In a recent press release, Ms. Rene Mathews confirmed: "The services you receive today and staff members you work with will remain the same. Our team will be joining Baxter & Woodman's 215+ professionals, which allows us to expand our reach in offering GIS, surveying, wastewater and water treatment, instrumentation and controls, trenchless technology, transportation planning, design and construction services".

2.2 Legal Contracting Name

The legal contracting name for our firm is Baxter & Woodman, Inc. In Florida, we operate under the DBA name of Mathews Consulting, a Baxter & Woodman Company. Our State of Florida Department of State Certification No. F16000002059 and DBA Registration No. G16000074503 is included at the end of this section.

2.3 State of Incorporation

Baxter & Woodman's was incorporated February 1, 1969 in the State of Illinois. The firm is authorized to transact business in the State of Florida under the Department of State Certification No. F16000002059, a copy of which is included at the end of this section.

2.4 Date of Authorization

Baxter & Woodman is authorized to do business in Florida as of May 2, 2016. Please see our State of Florida Department of State Certification No. F16000002059 at the end of this section.

2.5 Ownership Structure

Baxter & Woodman was organized as a Corporation in the State of Illinois.

2.6 Company Owners and Officers

Baxter & Woodman is a privately held, employee-owned corporation. The company's success and integrity are determined by our employee shareholders. This corporate structure means the assigned project team has a direct vested interest in the success of each project. The corporation currently has 84 employee shareholders. All shareholders are active full-time employees.

The firms Officers are as follows:

Name	Title	Number of Years with the Firm
John V. Ambrose	President	32
Louis D. Haussmann	Vice President	20
Deborah Finn	Secretary	22
Christopher T. Sosnowski	Treasurer	20
David Mathews	Deputy Secretary	18
Rene Mathews	Deputy Secretary	19

2.7 Federal Employer Identification Number

Baxter & Woodman's Federal Employer Identification Number (FEIN) is 36-2845242.

2.8 Corporate Headquarters

Contact information for Baxter & Woodman' corporate headquarters are as follows:

Address: Baxter & Woodman, Inc.
8678 Ridgefield Road
Crystal Lake, Illinois 60012

Telephone: 815-459-1260
Fax: 815-455-0450
Email Address: John Ambrose, President
JAmbrose@baxterwoodman.com

Website: www.baxterwoodman.com

2.9 Local Office

Contact information for Baxter & Woodman's local Florida Office is as follows:

Address: Mathews Consulting, a Baxter & Woodman Company
477 S. Rosemary Avenue, Suite 330
West Palm Beach, Florida 33401

Telephone: 561-655-6175

Fax: 561-655-6179

Email Address: David Mathews, Vice President Florida Operations
DMathews@baxterwoodman.com

Website: www.baxterwoodman.com

2.10 Hours of Operation

Mathews Consulting, a Baxter & Woodman Company, maintains the following hours of operation for Florida Operations:

Engineering & Administration:

- Monday – Thursday: 7:30 a.m. – 5:30 p.m.
- Friday: 8:00 a.m. – 12:00 p.m.

Construction Services:

- Monday – Friday: 7:30 a.m. – 4:30 p.m.

2.11 Years in Business

Baxter & Woodman, Inc. started its engineering business in the Year 1946 in the State of Illinois. The firm has been in business for over seventy (70) years.

2.12 Primary Representative

The Primary Representative for Mathews Consulting, a Baxter & Woodman Company, is as follows:

Mr. David L. Mathews, P.E., Vice President Florida Operations
561-655-6175
DMathews@baxterwoodman.com
Mathews Consulting, a Baxter & Woodman Company
477 S. Rosemary Avenue, Suite 330
West Palm Beach, Florida 33401

2.13 Secondary Representative

The Secondary Representative for Mathews Consulting, a Baxter & Woodman Company, is as follows:

Ms. Rebecca Travis, P.E., Vice President
561-655-6175
RTravis@baxterwoodman.com
Mathews Consulting, a Baxter & Woodman Company
477 S. Rosemary Avenue, Suite 330
West Palm Beach, Florida 33401

2.14 Litigation Summary

In the past three years, Baxter & Woodman, Inc. has not been the subject of any:

- ☐ Debarment from contracting with any governmental entity
- ☐ Professional license discipline
- ☐ Disciplinary action taken or pending against the Respondent with state regulatory bodies or professional organizations
- ☐ Bankruptcies
- ☐ Adverse civil judgments and administrative findings
- ☐ Criminal felony convictions

Pending litigation includes:

- ***Village of Itasca vs. Baxter & Woodman, Inc. and Baxter & Woodman Control Systems Integration, LLC:*** Issues involve operational status of sludge dewatering, UV disinfection systems and SCADA system. The parties are currently in the mediation stage.
- ***Thorn Creek Basin Sanitary District vs. Baxter & Woodman, Inc.:*** Issues involve preliminary engineering services for a corrosion control study. The parties are currently providing responses and defenses to the legal documents.

Chapter 3

Minimum Qualifications



Chapter 3

Minimum Qualifications

This section provides the Minimum Qualifications as required by the RFQ. Information is organized as follows:

- State of Florida Department of State Certification
- State of Florida Board of Professional Engineers' Business Registration License
- Similar Roadway Design Projects

3.1 State of Florida Department of State Certification

Baxter & Woodman is authorized to do business in Florida as of May 2, 2016. Please see our State of Florida Department of State Certification No. F16000002059 at the end of this section.

3.2 State of Florida Board of Professional Engineer's Business Registration License

Baxter & Woodman's State of Florida Board of Professional Engineer's Business Registration Number is EB #31795. A copy of our engineering business license, as well as a copy of our engineer's licenses, are provided in this section.

3.3 Similar Roadway Design Projects

Detailed project descriptions for roadway design engineering projects within the past three years with the following design elements immediately following this Section:

- Roadways / Streetscape
- Investigating & Upgrading Existing Storm Drain Pipes, Inlets and Manholes
- Swales
- Pedestrian Ramps (ADA)
- Sidewalks & Driveways
- Drainage / Stormwater Design
- Signing & Pavement Markings

State of Florida



Department of State

I certify from the records of this office that BAXTER & WOODMAN, INC., is a corporation organized under the laws of Illinois, authorized to transact business in the State of Florida, qualified on May 2, 2016.

The document number of this corporation is F16000002059.

I further certify that said corporation has paid all fees due this office through December 31, 2016, and its status is active.


I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this the
Twenty-fifth day of August, 2016



CR2EO22 (1-11)

Ken Detzner
Ken Detzner
Secretary of State

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Fictitious Name					
MATHEWS CONSULTING A BAXTER & WOODMAN COMPANY					
Filing Information					
Registration Number	G16000074503				
Status	ACTIVE				
Filed Date	07/26/2016				
Expiration Date	12/31/2021				
Current Owners	1				
County	PALM BEACH				
Total Pages	1				
Events Filed	NONE				
FEI/EIN Number	36-2845242				
Mailing Address					
477 S. ROSEMARY AVENUE, SUITE 330 WEST PALM BEACH, FL 33401					
Owner Information					
BAXTER & WOODMAN, INC. 8678 RIDGEFIELD ROAD CRYSTAL LAKE, IL 60012 FEI/EIN Number: 36-2845242 Document Number: F16000002059					
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Florida Board of Professional Engineers
2639 North Monroe Street, Suite B-112
Tallahassee, FL 32303-5268

Baxter & Woodman Inc.
8678 RIDGEFIELD ROAD
CRYSTAL LAKE, IL 60012

Each licensee is solely responsible for notifying the Florida Board of Professional Engineers in writing the licensee's current address.

Name changes require legal documentation showing name change. An original, a certified copy, or a duplicate of an original or certified copy of a document which shows the legal name change will be accepted unless there is a question about the authenticity of the document raised on its face, or because the genuineness of the document is uncertain, or because of another matter related to the application.

At least 90 days prior to the expiration date shown on this license, a notice of renewal will be sent to your last known address. If you have not yet received your notice 60 days prior to the expiration date, please call (850) 521-0500, or write, Florida Board of Professional Engineers, 2639 North Monroe Street, Suite B-112, Tallahassee, FL 32303-5268 or e-mail: board@fbpe.org. Our website address is <http://www.fbpe.org>.

State of Florida

Board of Professional Engineers

Attests that

Baxter & Woodman Inc.

Is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

Expiration: 2/28/2017

Audit No: 228201706136 I



CA Lic. No:

31795

State of Florida

Board of Professional Engineers

Attests that

Rene Louise Mathews , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201916443 R

P.E. Lic. No:

49298

State of Florida

Board of Professional Engineers

Attests that

David L. Mathews , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201923241 R

P.E. Lic. No:

48242

State of Florida

Board of Professional Engineers

Attests that

M. Rebecca Travis , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201900382 R

P.E. Lic. No:

40988

State of Florida

Board of Professional Engineers

Attests that

Jason A. Pugsley , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201908245 R

P.E. Lic. No:

67426

State of Florida

Board of Professional Engineers

Attests that

Jason M. Debrincat , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201914810 R

P.E. Lic. No:

71392

PROJECT #1 - NE 1st Avenue Improvements

Name of Client: City of Delray Beach

Phone No.: (561) 243-7328

Email: Majtenyi@ci.delray-beach.fl.us

Contact Person Name: Victor Majtenyi

Title: Deputy Director of Public Works

Description of services:

Mathews Consulting provided engineering services for the data collection, final design, permitting, and bidding for the NE 1st Avenue Improvements project as follows:

NE 1st Avenue (NE 1st Street to NE 2nd Street)

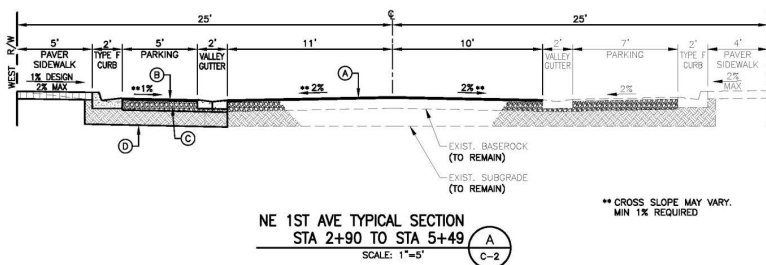
- Mill and resurface roadway.
- On-street parallel parking where space is available.
- Paver sidewalk on both sides of roadway.
- Landscape nodes w/ landscaping.
- Irrigation Plans for landscape nodes.
- Decorative street lights.
- Paver intersection at NE 1st Avenue and NE 1st Street.
- Replace existing 2" WM with new 8" WM.
- Adjust existing drainage and add new drainage components as necessary to accommodate improvements.



The roadway typical section was designed as a mirror image as follows:

- 11-foot travel lane, 2-foot valley gutter, 5-foot parking stall, 2-foot F-curb, 5-foot paver sidewalk.

The project was bid in September 2013 with a construction cost of \$569,206. Construction of the project was completed in 2014.



Project Location: NE 1st Avenue in the City of Delray Beach

Completed on time: Yes X No Start Date: 7/1/2012 End Date: 3/3/2014

Design Elements: Pedestrian Ramps, Sidewalks, Drainage, Signing & Pavement Markings

PROJECT #2 - Rutland Boulevard Improvements

Name of Client: City of West Palm Beach

Phone No.: (561) 494-1040

Email: LLe@wpb.org

Contact Person Name: Laura Le, P.E.

Title: Senior Project Engineer

Description of services:

Mathews Consulting provided engineering services for the preliminary design, data collection, final design, public outreach, permitting, bidding and construction administration/inspections for the Rutland Boulevard Improvements Project. The project is located in a residential neighborhood in the City of West Palm Beach.

The infrastructure improvements included:

- Roadway, curb & gutter, and sidewalk reconstruction
- Stormwater facilities
- Water main upgrades
- Sanitary sewer replacement
- Signage and pavement markings
- Decorative street lights

Scope of work for the project included the following:

- Collect and review record drawings of project area.
- Conduct soil investigation of project area.
- Prepare detailed plan and profile design drawings.
- Prepare and process permit applications for South Florida Water Management District, and Palm Beach County Health Department.
- Prepare technical specifications.
- Prepare cost estimates.

The project was bid in October 2014 in the amount \$1,559,758. Construction of the project was completed in 2016.



Project Location: Rutland Boulevard in the City of West Palm Beach

Completed on time: Yes X No Start Date: 4/13/2009* End Date: 7/19/2016

Design Elements: Pedestrian Ramps, Sidewalks & Driveways, Drainage, Signing & Pavement Markings

*The City put the project on hold for several years due to right-of-way issues.

PROJECT #3 - Monceaux Road Group I Infrastructure Improvements

Name of Client: City of West Palm Beach

Phone No.: (561) 494-1040

Email: LLe@wpb.org

Contact Person Name: Laura Le, P.E.

Title: Senior Project Engineer

Description of services:

Mathews Consulting provided engineering services for the design, permitting, bidding and construction administration/inspections for the Monceaux Road - Group I Stormwater and Utility System Improvements Project. The project is part of the City's Phase II Stormwater Projects that is being funded by a Stormwater Bond.

Elements of the project included Data Collection, Preliminary and Final Design, Permitting, Public Relations, Bidding Assistance, Construction Administration and Inspection Services.

The Infrastructure Improvements included:

- Roadway, curb & gutter, and sidewalk reconstruction
- Stormwater facilities
- Water main upgrades
- Sanitary sewer replacement and rehabilitation
- Signage and pavement markings
- Landscaping
- Decorative Street Lighting

Design components of the project included the following:

- Collect and review record drawings of project area.
- Conduct soil investigation of project area.
- Prepare detailed plan and profile design drawings.
- Prepare and process permit applications for South Florida Water Management District,
- FDOT, FEC Railway, and Palm Beach County Health Department.
- Prepare technical specifications.
- Prepare cost estimates.

The project was bid on December 11, 2013 with a construction cost of \$3,589,993. Construction of the project was completed in 2016.



Project Location: Monceaux Road in the City of West Palm Beach

Completed on time: Yes X No Start Date: 12/1/2004* End Date: 3/14/2016

Design Elements: Pedestrian Ramps, Sidewalks & Driveways, Drainage, Signing & Pavement Markings

*The City put the final design of the project on hold for several years due to funding issues.

PROJECT #4 - 7th Avenue South

Name of Client: City of Lake Worth

Phone No.: (561) 586-1720

Email: flofaso@lakeworth.org

Contact Person Name: Felipe Lofaso

Title: Assistant Public Services Director

Description of services:

The City of Lake Worth recently selected Mathews Consulting (MC) to provide Engineering Services for the 7th Avenue South (South "A" Street to South "F" Street) Roadway Improvements Project. The project is located within the City of Lake Worth's Community Development Block Grant (CDBG) target area. CDBG funding was provided for the project through Palm Beach Department of Economic Sustainability.

Mathews Consulting provided data collection, design services, permitting services, public outreach meetings, presentations to commission, bidding assistance, construction administration services and inspections for the project.

The infrastructure improvements consisted of:

- Conversion of an unimproved 40-foot right-of-way section into a 15-foot one-lane drive lane, meandering pathway, greenways & curbing
- New 8-inch water main for looping purposes
- Roadway striping, signage & traffic calming
- Minor stormwater improvements

The project was bid in June 2015 with a construction cost of \$643,140. Construction of the project was completed in 2016.

Before



After



Project Location: 7th Avenue South in City of Lake Worth.

Completed on time: Yes ☒ No ☐ Start Date: 2/15/2014 End Date: 5/1/2016

Design Elements: Pedestrian Ramsp, Sidewalk & Driveways, Drainage, Signing & Pavement Markings

PROJECT #5 - North / South Roads "Harbor Estates" Stormwater Improvements

Name of Client: City of Boynton Beach

Phone No.: (561) 742-6413

Email: roscheckc@ci.boynton-beach.fl.us

Contact Person Name: Chris Roscheck, P.E.

Title: Engineering Division Manager

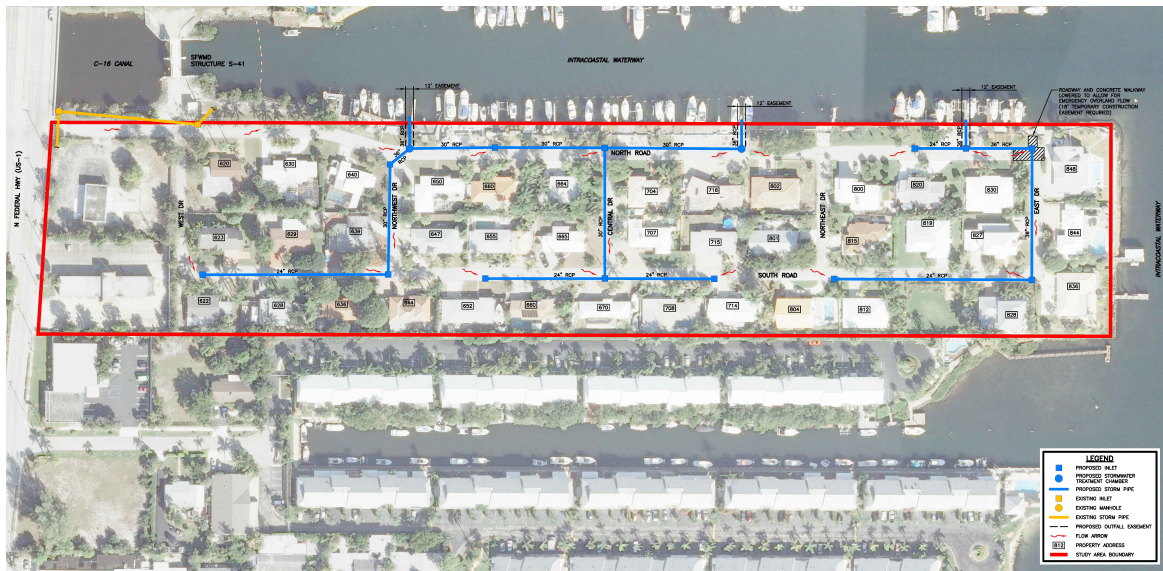
Description of services:

Mathews Consulting provided engineering services for the data collection, hydraulic modeling, final design, public outreach, permitting and bidding of infrastructure improvements along North and South Roads in the City of Boynton Beach. We are currently providing construction management services. The infrastructure improvements recommended by Mathews Consulting included the following:

- 1 mile of roadway reconstruction with curbing
- 1,400 LF of 18"-30" RCP drainage pipe
- 21 drainage structures
- 3 drainage outfalls to the Intracoastal Waterway
- Swale development
- Driveway restoration
- 3,000 LF of 6" water mains
- 51 water services



The project was bid in August 2016 with a construction cost of \$1,843,016. Construction of the project is underway.



Project Location: Harbor Estates Neighborhood in the City of Boynton Beach

Completed on time: Yes ☒ No ☐ Start Date: 9/10/2014 End Date: In Construction

Design Elements: Swales, Driveways, Drainage and Signing & Pavement Markings

PROJECT #6 - Boca Raton Heights Infrastructure Improvements

Name of Client: City of Boca Raton

Address: 1401 W. Glades Road, Boca Raton, FL 33431

Phone No.: (561) 338-7303

Email: chelfrich@ci.boca-raton.fl.us

Contact Person Name: Chris Helfrich, P.E.

Title: Utilities Director

Description of services:

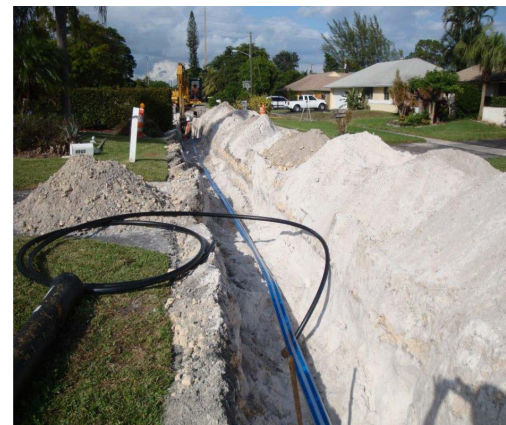
Mathews Consulting provided engineering services for the preliminary design, final design, data collection, public outreach, permitting, bidding services, construction management and inspection services for the Boca Raton Heights Infrastructure Improvement Project. The project is located in the City of Boca Raton.

The Boca Raton Heights neighborhood is bounded by topographic features such as a natural ridge and roadways which result in stormwater runoff being trapped in the low-lying areas of the neighborhood. Stormwater improvements are proposed in order to address the problems associated with water ponding on the roadways, including pavement section deterioration.

A pavement condition review was completed and a decision matrix prepared to assist in analyzing which of the existing roadways should be reconstructed or whether a cost-saving overlay would be recommended.

In addition, new sanitary sewer and a wastewater lift station are proposed to serve the houses and businesses that are currently on septic tank, and watermain improvements are proposed to improve fireflow and water system pressure.

The project was bid in July 2013 with a construction cost of \$2,666,237. Construction of the project was completed in 2014.



Project Location: Boca Raton Heights Neighborhood in the City of Boca Raton

Completed on time: Yes X No Start Date: 7/12/2012 End Date: 7/22/2014

Design Elements: Swales, Pedestrian Ramps, Sidewalks & Driveways, Drainage, Signing & Pavement Markings

PROJECT #7 - Boca Raton Hills Infrastructure Improvements

Name of Client: City of Boca Raton

Phone No.: (561) 338-7303

Email: chelfrich@ci.boca-raton.fl.us

Contact Person Name: Chris Helfrich, P.E.

Title: Utilities Director

Description of services:

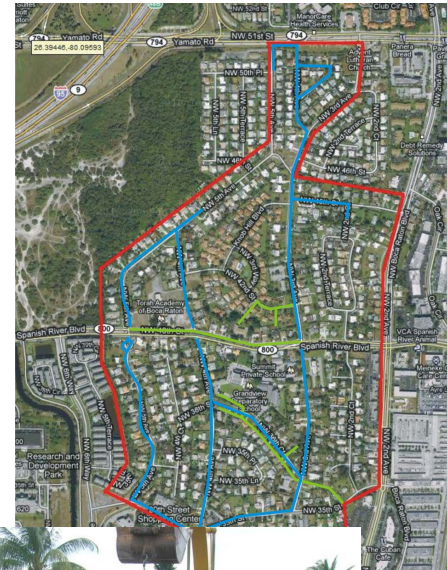
The City of Boca Raton has identified the Boca Raton Hills neighborhood as a candidate to receive conventional gravity sanitary sewer and discontinue the use of septic tanks in the area. Approximately 111 residential units will be sewerred as part of this project.

The City also identified potable water improvements to be completed in conjunction with the sanitary sewer work. The project also included complete roadway reconstruction. The limits of these improvements are as follows:

- Reconstruct roadways within project area
- Install 13,000 LF of gravity sewers (8"-12")
- Install 200 sewer laterals
- Backyard WM's: Abandon (plug and grout) 520 LF of 4" WM
- Install 1,290 LF of 8" WM
- Install 800 LF of 8" WM
- Provide new water services and meter boxes
- Transfer rear yard water connections to front yards
- Provide new fire hydrants

Mathews Consulting provided preliminary and final engineering design, data collection, public participation, permitting, bidding services, construction management & inspection services for the Boca Raton Hills project.

The project was bid in July 2013 with a bid cost of \$3,522,600.00. Construction of the project was completed in 2015.



Project Location: Boca Raton Hills Neighborhood in the City of Boca Raton

Completed on time: Yes ☒ No ☐ Start Date: 7/1/2011 End Date: 11/1/2013

Design Elements: Swales, Pedestrian Ramps, Sidewalks & Driveways, Signing & Pavement Markings

PROJECT #8 - Bel-Air Neighborhood Improvements - Phase I

Name of Client: Town of Lauderdale-by-the-Sea

Phone No.: (954) 776-0576

Email: DonP@Lauderdalebythesea-fl.gov

Contact Person Name: Don Prince

Title: Municipal Services Director

Description of services:

The Town of Lauderdale by the Sea contracted with Mathews Consulting to prepare "Bel-Air Neighborhood Existing Drainage Condition Assessment" dated October 2012. The purpose of the Report was to evaluate the physical condition of the drainage piping, via televised video, and perform hydraulic modeling to determine if the existing drainage system has adequate capacity. The Report recommended three phases of improvements; immediate, median and long-term. The Town has decided to design and construct a modified version of the immediate and median improvements. These improvements are considered Phase I. The Town intends to perform the long-term improvements, as Phase II, at a later date. Phase I includes the replacement of six (6) outfalls within the Bel-Air neighborhood. The improvements are as follows:

- Mill and Resurface Roadway
- Drainage Pipe & Catch Basins
- Lining Existing Drainage Outfalls
- Swale Development

Mathews Consulting provided Data Collection, Drainage Design, Plan Preparation, Permitting, Bidding, construction Administration and Part-Time Inspections for the project.

Construction of the project was completed in 2014 for a construction cost of \$675,650.



Project Location: Bel-Air Neighborhood Subdivision in the Town of Lauderdale-by-the-Sea

Completed on time: Yes X No Start Date: 7/25/2013 End Date: 11/1/2014

Design Elements: Swales, Drainage, Signing & Pavement Markings

PROJECT #9 - 108th Terrace Drainage & Roadway Improvements

Name of Client: City of Tamarac

Phone No.: (954) 597-3706

Email: johnd@tamarac.org

Contact Person Name: John Doherty, P.E.

Title: Asst. Director Public Works / City Engineer

Description of services:

The City contracted with Mathews Consulting (MC) to provide engineering design, bidding and construction administration services for the 108th Terrace Drainage & Roadway Improvements project. The existing four-lane, median divided City roadway is approximately 1.8 miles long and extends from McNab Road to Nob Hill Road in the City of Tamarac. The asphalt on the roadway showed signs of becoming delaminated from the baserock along a majority of the roadway, especially near the center median. Based upon field testing by the City, the problem appeared to be runoff from the grassed median seeping from behind the curb into the baserock and under the asphalt. The City completed a pilot program where perforated drainage pipe was installed at the back of curb and connected to a nearby drainage inlet to collect and re-direct the runoff to an outfall point. The City then contracted with MC to prepare the design drawings, specifications and permit application for the drainage improvements based upon the pilot program design.



Drainage Improvement Work

- Drainage improvements within each center median with a positive outfall connection to the nearest existing drainage system.
- Review the pilot study design and operation and prepare a letter memorandum of findings and recommendation.
- The proposed drainage system shall consist of perforated PE drainage pipe connected to PE drainage basins.
- Prepare a Pollution Prevention Plan.

Pavement Replacement Work

- Review and provide recommendations for the use of a mill and recycled asphalt material option for the asphalt replacement on the adjacent roadway.
- Prepare a pavement marking plan for replacement "in kind" of the existing pavement markings.



Construction of the project was completed in December 2014. Phase I (Drainage Work) was bid in the amount of \$533,134. Phase II (Pavement Replacement) was bid in the amount of \$1,179,370.

Project Location: 108th Terrace in the City of Tamarac

Completed on time: Yes X No Start Date: 7/1/2012 End Date: 2/1/2015

Design Elements: Drainage, Signing & Pavement Markings

Chapter 4

RFQ Forms



Chapter 4

RFQ Forms

This section includes the following RFQ Forms:

- Public Entity Form
- Drug Free Workplace Form
- Conflict of Interest Form

Form A - Proposal Submittal Signature Page

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: Mathews Consulting, a Baxter & Woodman Company

Street Address: 477 S. Rosemary Avenue, Suite 330, West Palm Beach, FL 33401

Mailing Address (if different from Street Address): _____

Telephone Number(s): 561-655-6175

Fax Number(s): 561-655-6179

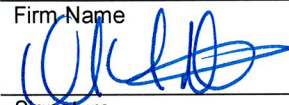
Email Address: dmathews@baxterwoodman.com

Federal Identification Number: 36-2845242

Acknowledged by:

Baxter & Woodman, Inc.

Firm Name



Signature

March 7, 2017

Date

David L. Mathews, P.E. - Vice President

Printed Name and Title

By signing this document, the Proposer agrees to all terms and conditions of this RFQ which includes the Sample Agreement.

THE EXECUTION OF THIS FORM CONSTITUTES THE UNEQUIVOCAL OFFER OF PROPOSER TO BE BOUND BY THE TERMS OF ITS PROPOSAL. 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.

(Remainder of page intentionally left blank)

Form A - Signature Authority

Indicate below Proposer's type of organization and provide the required documentation as applicable to demonstrate that the executor of Proposer's Proposal is duly authorized to execute on behalf of, and as the official act of, Proposer.

Select	Type of Organization	Officer Who Signed Proposal Submittal Signature Page	Required Authorizing Documentation
<input checked="" type="checkbox"/>	Corporation	President, Vice President, or Chief Executive Officer	None
<input type="checkbox"/>	Corporation	Director, Manager, or other title	Corporate resolution
<input type="checkbox"/>	Limited Liability Company (LLC) – Member-Managed	Member	Articles of Organization or Operating Agreement
<input type="checkbox"/>	Limited Liability Company (LLC) – Manager-Managed	Manager	Articles of Organization or Operating Agreement
<input type="checkbox"/>	Limited Partnership	General Partner	Document demonstrating the legal authority to bind the Limited Partnership
<input type="checkbox"/>	Partnership	Partner	None
		CEO, Director, Manager or other title	Authorizing documentation
<input type="checkbox"/>	Individual	Individual	None

☒ **Documentation is not required.**

☐ **The required authorizing documentation is included with Proposal.**

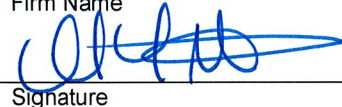
Form B - Public Entity Crimes**NOTIFICATION OF PUBLIC ENTITY CRIMES LAW**

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:

Baxter & Woodman, Inc.

Firm Name



Signature

March 7, 2017

Date

David L. Mathews, P.E. - Vice President

Printed Name and Title

Form C - Drug-Free Workplace

In the event a tie exists at the conclusion of evaluations, preference will be given to the supplier(s) who certifies it has a drug-free workplace program in accordance with Section 287.087, Florida Statutes. The drug-free workplace preference is applied as follows:

TIE: Whenever two or more proposals are equal with respect to scoring for the evaluation criteria (e.g., price, experience, quality, service) are received for the procurement of commodities or contractual services, a proposal received from a supplier that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing a tie will be followed if none of the tied suppliers have submitted this Form C and/or have a drug-free workplace program.

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

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

Acknowledged by:

Baxter & Woodman, Inc.

Firm Name



Signature

March 7, 2017

Date

David L. Mathews, P.E. - Vice President

Printed Name and Title

Form D - Conflict of Interest Disclosure

The award of the agreement 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 or relative of an employee of the City of Delray Beach.

Furthermore, all Proposers must disclose the name of any City employee or relative(s) of a City employee who owns, directly or indirectly, an interest in the Proposers 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 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:

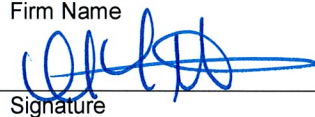
☒ To the best of our knowledge, the undersigned firm has no potential conflict of interest as defined in Chapter 112, Florida Statutes and Section 2-443, Palm Beach County Code of Ordinances.

☐ 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 RFQ.

Acknowledged by:

Baxter & Woodman, Inc.

Firm Name



Signature

March 7, 2017

Date

David L. Mathews, P.E. - Vice President

Printed Name and Title

Chapter 5

Acknowledgment of Addenda Form



Chapter 5

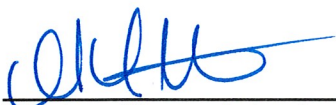
Acknowledgement of Addenda Form

This section includes the Acknowledgement of Addenda Form as required by the RFQ.

Form E - Acknowledgment of Addenda

The Proposer hereby acknowledges the receipt of the following addenda, which were issued by the City and incorporated into and made part of this RFQ. It is the sole responsibility of the Proposer to ensure that all addenda have been received and receipt of each has been acknowledged. Failure to submit acknowledgement of each addendum issued may result in the Proposer being deemed non-responsive.

ADDENDA NUMBER	ADDENDA DATE
1	2/14/17
2	2/16/17
3	2/16/17
4	3/2/17
5	3/2/17



Vice President, Florida Operations

Signature of Proposer's Agent

Title

David L. Mathews, P.E.

March 7, 2017

Printed Name

Date

Chapter 6

Response Requirements



Chapter 6

Response Requirements

This section provides our Proposal Response Requirements. Information is organized as follows:

- Firm Experience & Background
- Primary Engineering Consultant Experience
- Mathews Consulting Key Personnel
- References
- Project Management Approach
- Firm Organization

6.1 Firm Experience & Background



Mathews Consulting, a Baxter & Woodman Company, provides civil engineering design & construction services (transportation, streetscape & drainage) and general utility design & construction services (water, wastewater & reclaimed water) to municipalities in South Florida (Palm Beach County, Broward County & Monroe County). The firm's business is simple:

"Provide personal service and quality engineering consulting to every client."

A blue, cloud-like graphic with a white border. Inside the cloud, the text "We ensure proper attention is given to each and every client" is written in a black, sans-serif font.

We ensure proper attention is given to each and every client

Mathews Consulting's objectives are based on the "grass roots" principles of our profession:


Service Highlights:

- ◆ Roadways
- ◆ Streetscape
- ◆ Stormwater Facilities
- ◆ Public Outreach
- ◆ Neighborhood Improvements
- ◆ Water Treatment
- ◆ Pumping Facilities
- ◆ Collection Systems
- ◆ Transmission Systems
- ◆ Reclaimed Water
- ◆ Regulatory Compliance
- ◆ Construction Management

- Provide technical expertise and quality service.
- Serve clients with integrity and professionalism.
- Demonstrate responsiveness and reliability
- Meet and/or exceed all deadlines.
- Provide cost effective service and solutions.
- Be accountable for all services provided.

Mathews Consulting has a streamlined operation to keep overhead low and utilization high. Our philosophy is to control company growth and the number of project assignments to ensure proper attention is given to each and every client. Mathews Consulting develops its talents by providing staff with the opportunity to participate in the business to develop strength and continuity. Continuity ensures that after completion of the project, there is always a knowledgeable firm member available for consultation.

Our Florida Operation only targets South Florida for prospective business - our local presence and familiarity with these areas is essential for efficient project implementation. Additionally, by focusing our marketing efforts within a limited area, we are always available to serve our clients at short notice. When necessary, we supplement our services with specialists from other local consulting firms with whom we have established successful relationships to provide a multi-disciplined consulting team.



**We are
always
available to
serve our
clients at
short notice**

Mathews Consulting establishes direct relations between clients and firm principles for optimum communication protocol. We take pride in our work and ensure every project reflects our personal best.

Mathews Consulting has extensive engineering consulting experience for projects ranging from \$100,000 to \$30 Million in construction value. We are experienced in all facets of roadway, streetscape, drainage & neighborhood improvement projects for Municipalities, including conceptual design, permitting, detailed design, cost estimates, bidding assistance, construction assistance and final certifications. We have been providing engineering consulting services as a

Prime Consultant similar to the work in this General Contract to the City of Delray Beach (since 1998), City of Boca Raton, Town of Gulf Stream, Town of Highland Beach, City of West Palm Beach, Palm Beach County Water Utilities, Loxahatchee River District, Town of Lantana, City of Riviera Beach, City of Lake Worth and City of Boynton Beach.

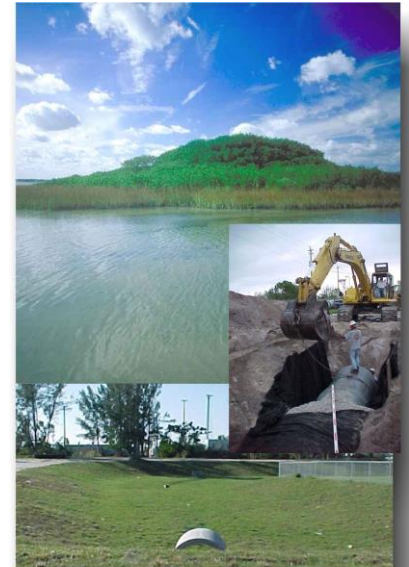
Awards & Certifications

Mathews Consulting has provided reliable and cost-effective solutions to our client's real-world challenges. Many of these solutions have been recognized for their high level of achievements, value and ingenuity by our peer associations. We are honored to be recognized for our past engineering accomplishments.

- Project: Duck Key Utility System Improvements
Client: Florida Keys Aqueduct Authority
Construction Cost: \$15.76 Million
Awards: The project was selected by the Florida Institute of Consulting Engineers (FICE) for a 2014 Engineering Excellence Grand Award.



- Project: Garden Avenue Stormwater & Utility System Improvements
Client: City of West Palm Beach
Construction Cost: \$6.96 Million
Awards: The project was selected by the Florida Institute of Consulting Engineers (FICE) for a 2006 Engineering Excellence Grand Award.



- Project: Lantana Water Plant Process Upgrades

Client: Town of Lantana

Construction Cost: \$4.06 Million

Awards: The project was selected by the Florida Institute of Consulting Engineers (FICE) for a 2005 Engineering Excellence Grand Award.



- Project: South Flagler Sanitary Sewer Rehabilitation Project

Client: City of West Palm Beach

Construction Cost: \$4.0 Million

Awards: The project was selected by the Florida Institute of Consulting Engineers (FICE) for a 2003 Engineering Excellence Grand Award.



Specific Project Experience

As demonstrated in this Section, Mathews Consulting meets the following specific project experience as outlined by the City:

Experience as the prime engineering design consultant on roadway construction projects	✓
Experience with roadway design projects that include investigating and upgrading existing storm drain pipes, inlets and manholes	✓
Experience with roadway design projects that include swales	✓
Experience with roadway design projects that include pedestrian ramps	✓
Experience with roadway design projects that include sidewalks and driveways	✓
Experience with roadway design projects that include drainage / stormwater design elements	✓
Experience with roadway design projects that include signing and pavement markings	✓
Experience with government agency roadway design construction projects	✓

Experience with roadway design projects in Florida, particularly in South Florida and in Palm Beach County	✓
--	---



For specific client references, refer to Section 3, Pages 11-19.

Firm Specialties

Streetscape

Streetscape is a term often used to describe a complex rehabilitation and renewal for aging high profile residential areas, main corridors and business district thoroughfares. The design components typically include replacing aging underground utilities, new roadway configuration, curbing, traffic calming, sidewalks, landscaping, irrigation, and decorative street lighting.

Service Highlights:

- ◆ Roadway Reconstruction
- ◆ Streetscape
- ◆ Traffic Calming
- ◆ Sidewalks
- ◆ Landscaping
- ◆ Irrigation
- ◆ Street Lighting



Mathews Consulting has provided these types of projects to the **City of Delray Beach**, City of Tamarac, City of West Palm Beach, City of Lake Worth, and City of Riviera Beach. We are also experienced in public outreach programs that are required for these types of projects.



Stormwater Facilities



In the last decade, our nation has realized the importance of properly collecting and treating stormwater separate from water and wastewater facilities. In Florida alone, stormwater runoff has greatly impacted our ecosystem as nutrients and contaminants have washed across agricultural areas and farmlands and have accumulated at dangerous levels in primary water bodies such as Lake Okeechobee and the Everglades. These same impacts are occurring within all watershed areas.

Mathews Consulting applies contemporary design concepts to maximize stormwater conveyance for flood protection while properly treating runoff to meet State water quality standards. We help our clients expand their vision and recognize new opportunities to solve recurring problems.

For example, the Town of Gulf Stream faced chronic flooding in a pristine residential neighborhood due to difficult land conditions, extremely low road elevations, mucky soil conditions, and high tide levels from the Intracoastal Waterway that inhibited proper drainage of runoff from the area.

Mathews Consulting designed an integrated, multiple-option stormwater system with new submersible pump station and transmission system to relieve the Town's flooding hazard. To preserve the neighborhood's lush landscaping and architecture, the transmission pipeline was installed using the directional drill method to minimize disturbance to above ground facilities. Mathews Consulting's innovative design concepts provided flood protection, maintained water quality and preserved the Town's quality of life.

Water, Wastewater & Reclaimed Water Facilities

As Civil Engineers, we face a unique challenge of maintaining the delicate balance between using our natural resources to improve our quality of life while preserving the natural state of those resources for future generations to come. Meeting this challenge is the primary objective of all Mathews Consulting water, wastewater and reclaimed projects.

We strive to provide the highest quality drinking water to our customers through careful evaluation and process selection. We provide integrated solutions that will meet treatment and supply needs while providing future flexibility.



Force Main Replacement

We implement efficient collection and treatment systems for our wastes, and find ways to beneficially use and reuse the treatment process byproducts to add nutrients to the soil and to replenish the water supplies through irrigation and aquifer recharge. Through careful planning to utilize our wastes full-circle, our water, wastewater and reclaimed water designs enhance the environment's natural recycling process to keep our air, land and water supplies pristine.

Mathews Consulting has extensive experience in both potable water and reuse water transmission, pump stations & distribution systems; and wastewater collection & transmission system projects, ranging from: conventional gravity sewers, low pressure sewer systems, vacuum sewer systems, submersible lift stations, master booster pump stations and force mains.

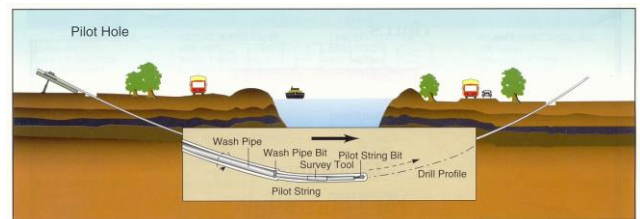


Gravity Sanitary Sewer System

We are also experienced in rehabilitation of existing sanitary sewer systems, including: lining sanitary sewers, coating manholes and converting "can-type" lift stations to "submersible-type" lift stations.

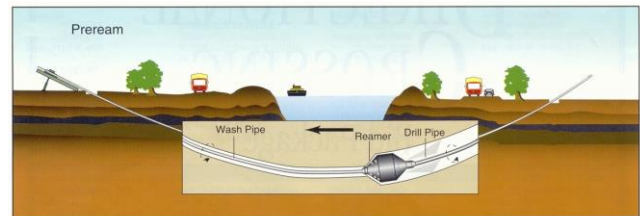
We are also proficient in the design of pipelines using conventional open-cut methods and both jack & bore and directional drill methods. In recent years, horizontal directional drilling (HDD) has been utilized in areas where traditional open-cut methods are not practical. HDD is a trenchless method for installing a pressure pipeline. It is a multistage process consisting of site preparation and restoration, equipment setup and drilling a pilot bore along a predetermined path and then pulling the pipe back through the drilled space. The technique is as follows:

- (1) **Pilot Hole** – A pilot hole is drilled beginning at a prescribed angle from horizontal and continues under and across the obstacle along a design profile made up of straight tangents and long radius arc;



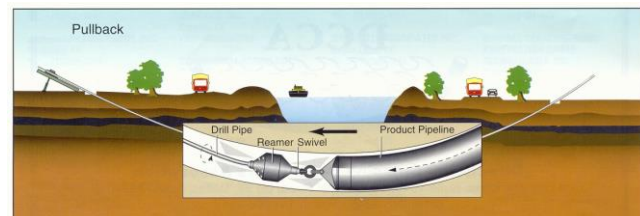
(1)

- (2) **Preream** – Once the pilot hole is complete, the hole must be enlarged to a suitable diameter for the product pipeline;



(2)

- (3) **Pullback** – Once the drilled hole is enlarged, the product pipeline can be pulled through it.



(3)

Mathews Consulting is one of the leading engineering consultants for water and reclaimed water systems in the tri-county area of South Florida. We have developed five (5) Reclaimed Water Master Plans in the last 10 years for clients such as **City of Delray Beach**, City of Pompano Beach, City of Boca Raton, City of Boynton Beach and Loxahatchee River Environmental Control District. We have also helped these clients implement over \$20 million of reclaimed water infrastructure improvements to distribute more than 12 mgd of reclaimed water to new users.



Reclaimed Water Facilities

Regulatory Compliance

Florida is known throughout the nation as being a trend setter in regulatory compliance issues. The regulatory structure of the permitting agencies is constantly changing with delegation of new state regulatory programs and with pending rule revisions that impact water resources, wastewater facilities, reuse programs, drinking water quality, effluent disposal, and deep well injection, just to name a few. Mathews Consulting, Inc., actively monitors Federal, State and local regulatory requirements and rule revisions. We track and forecast critical regulations to ensure project design criteria does not become "outdated". Our regulatory services include preparation of permit applications, safety management programs, facility compliance reporting and project completion documentation. Through our permitting experience, we have maintained strong local ties to each of the communities that we serve.

Service Highlights:

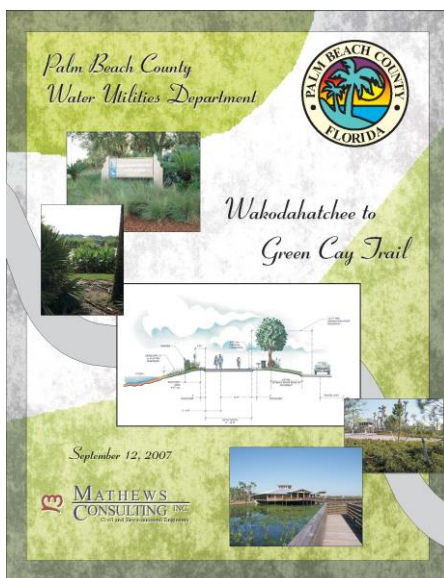
- ◆ Facility Permitting
- ◆ Capacity Analysis Reports
- ◆ Reuse Feasibility Studies
- ◆ Operation & Maintenance Reports
- ◆ Risk Management / Process Safety Management Plans
- ◆ Industrial Pretreatment Programs

Our familiarity with the rule makers and permitting staff at the various agencies simplifies the permitting process. Our goal is to help our clients meet regulatory compliance for all projects without "surprises" which may impact project objectives and schedules.

The complex interrelationship of the regulatory agencies can make permitting one of the most difficult project tasks to complete. Mathews Consulting maintains a clear understanding of the relationships between State and local agencies to ensure an accurate and efficient permitting process for all projects.



Facility Planning

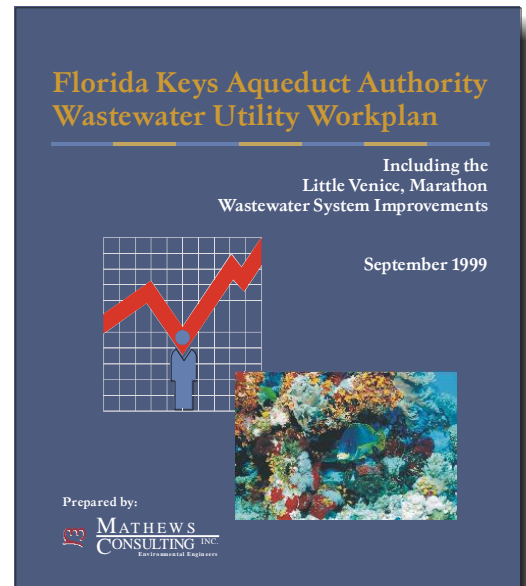


Mathews Consulting helps our clients expand their vision and recognize new opportunities in facility planning. Our facility planning services are tailored to meet the individual needs of the client, and may include: site plan preparation, master planning, environmental evaluations, traffic circulation patterns, and utility corridor analyses. We also prepare due diligence reports for facility acquisitions, which may include assessment of facility conditions, appraisal of land value, estimation of depreciated value of facilities and financial analysis for funding mechanisms. Recently, we completed the "Wakodahatchee to Green Cay Trail Planning Document", which details the master plan for construction of a 2.5 mile bicycling/pedestrian shared use trail between the County's two (2) created wetland sites.

Utility and Asset Management

Utilities are under great pressure to operate efficiently, protect the public health and continuously do more with less. We help our clients achieve these goals with our utility and asset management services. We offer asset inventory services (including evaluation of infrastructure, sidewalks/roadways, treatment facilities, buildings, structures, and other utility equipment) to help our clients manage renewal and replacement programs and to meet new financial reporting requirements.

We also help our clients prepare business plans for new or existing utilities to define the legal, fiscal, technical and administrative requirements for managing a utility. These business plans help our clients identify utility organizational structures and staffing, contractual requirements, implementation tasks, and financial requirements, including plan of finance, budgets, chart of accounts and rate/fee structures. All of these tools can greatly improve the operating efficiency of a utility.



Value Engineering

Traditionally, construction projects have been developed by generating a program of needs, using in-house personnel or outside consultants to develop necessary documents, and subsequently awarding the projects to Contractors for implementation. This approach has fulfilled manager's requirements for presenting and controlling capital expenditures.

However, the traditional approach does not allow for programmed input to implement any kind of quality control/value assurance program. **Value Engineering** (VE) is an organized process with an impressive history of improving value and quality. The VE process identifies opportunities to remove unnecessary costs while assuring that quality, reliability, performance and other critical factors will meet or exceed the customer's expectations. The improvements are the result of recommendations made by a multidisciplinary team representing all parties involved. VE is a rigorous, systematic effort to improve the value and optimize

Our VE results are unsurpassed!!! Our VE/CR services average a life cycle cost savings equal to 26% of construction costs

the life cycle cost of a facility. VE generates these cost improvements without sacrificing needed performance levels.

Mathews Consulting specializes in value engineering and constructability reviews for municipal projects. For the past eleven years, we have served as Palm Beach County's General Value Engineering Consultant and have provided VE and constructability reviews (CR) for a variety of projects, including:

- Lake Worth Sand Transfer Pump Station - VE
- East Central Regional WWTP Expansion to 71 mgd - VE/CR
- Water Treatment Plant No. 8 - VE/Rerate Analysis
- Membrane Water Treatment Plant No. 3 Expansion to 30 mgd - VE/CR
- Southern Region Water Reclamation Facility Upgrade to 35 mgd - VE
- Master Pump Station No. 5229 - VE/CR
- Northern Region Operations Center - CR
- Lyons Road Utility (WM & FM) Improvements - VE
- Winsberg Farm Wetlands Restoration - VE
- Lyons Rd. and Pinehurst Drive Utility (WM & FM) Improvements - VE

We provided Value Engineering services for the Loxahatchee River District's Wastewater Treatment Facility Expansion and Facility Upgrade project in Jupiter, Florida. We also served on the Value Engineering Team for the City of Boca Raton 40 mgd membrane water treatment facility – the largest membrane softening facility in the United States at the time of the review.

The results of our value engineering services are unsurpassed. On average, we have provided life cycle cost savings equal to 26% of construction cost, and the average rate of return for our services is 59:1, which means for every dollar clients have spent for our value engineering services, we have provided \$59 of life cycle cost savings.

Project	Construction Cost	VE Life Cycle Savings	VE Fees
West Palm Beach ECRWRF 71 MGD Expansion VE	\$16,000,000	\$11,850,000	\$108,776
PBC FPL Reclaimed Water Treatment VE	\$16,746,543	\$5,903,150	\$82,552
PBC Master P.S. 5229 VE	\$5,250,000	\$445,000	\$36,904
PBC SRWRF Expansion to 35 mgd VE	\$9,620,000	\$660,000	\$70,668
PBC WTP #8 VE/Rerate Analysis	\$7,300,000	\$5,000,000	\$29,248
PBC NROC 90% Constructibility Review	\$18,500,000	\$920,000	\$43,301
PBC SRWRF Master Plan VE Review	\$6,200,000	\$8,930,000	\$31,762
PBC WTP #3 Phase II Expansion VE	\$34,000,000	\$8,980,000	\$75,917
PBC Green Cay Wetlands VE	\$12,730,000	\$315,000	\$59,827
PBC WTP 2, 8, 9 VE	\$12,830,000	\$1,104,000	\$100,995
PBC WTP #8 Expansion VE	\$17,795,000	\$3,970,599	\$119,395
PBC Century Village Reclaimed System VE	\$3,500,000	\$629,251	\$24,535
LRECD WWTF 2 MGD Upgrade Constr. Rev.	\$24,200,000	\$1,020,000	\$39,000
S. Lake Worth Inlet Sand Transfer Plant	\$2,600,000	\$145,000	\$21,039
Total:	\$187,271,543	\$49,872,000	\$843,919
Avg. Rate of Return:		59:1	
Avg. Life Cycle Savings:		26% of Construction Costs	

Whether the project involves pump stations, force mains, sanitary sewer rehabilitation/replacement, reuse facilities, water treatment, stormwater facilities, streetscape improvements, or water main upgrades, Mathews Consulting can provide the expertise and outstanding performance record to improve the value and optimize the cost of any project.

6.2 Primary Engineering Consultant Experience

Mathews Consulting has served as the prime engineering consultant for the following seventeen (17) projects:

PROJECT #1	
Project Name:	NE 1 st Avenue Improvements
Owner:	City of Delray Beach
Location:	Delray Beach, FL
Start Date:	7/1/2012
End Date:	10/1/2013
Project Status:	Complete
Description:	Mathews Consulting provided engineering services for the final design, permitting, and bidding for the NE 1 st Avenue Improvements project as

follows:

NE 1st Avenue (NE 1st Street to NE 2nd Street):

- Mill and resurface roadway
- On-street parallel parking where space is available
- Paver sidewalk on both sides of roadway
- Landscape nodes w/ landscaping
- Irrigation Plans for landscape nodes
- Decorative street lights
- Paver intersection at NE 1st Avenue and NE 1st Street
- Replace existing 2" WM with new 8" WM
- Adjust existing drainage and add new drainage components as necessary to accommodate improvements

The roadway typical section was designed as a mirror image as follows:

- 11-foot travel lane, 2-foot valley gutter, 5-foot parking stall, 2-foot F-curb, 5-foot paver sidewalk

The project was bid in September 2013 with a construction cost of \$569,206.

Construction of the project has been completed.

PROJECT #2

Project Name: Auburn Avenue Improvements

Owner: City of Delray Beach

Location: Delray Beach, FL

Start Date: 6/1/2010

End Date: 3/21/2011

Project Status: Complete

Description: Mathews Consulting provided engineering services for the final design, permitting, and bidding of the Auburn Avenue Improvements project. The improvements include the following :

Auburn Avenue (SW 8th Street to SW 7th Street)

- Roadway reconstruction to provide a superelevated section
- Provide new drainage structures and piping
- 5-foot sidewalk along the west side of the roadway

SW 13th Avenue (SW 10th Street to SW 8th Street)

SW 12th Avenue (SW 10th Street to SW 8th Street)

SW 8th Street (SW 14th Avenue to SW 12th Avenue)

- Full roadway reconstruction

- New 8-inch potable water main
- New gravity sanitary sewer main and services
- Provide drainage structures and piping
- On-street parallel parking where available
- Landscape nodes on the west side of the roadway

The project was bid in February 2011 with a construction cost of \$1,156,896. Construction of the project has been completed.

PROJECT #3

Project Name: Southgate Boulevard Streetscape Improvements

Owner: City of Tamarac

Location: Tamarac, FL

Start Date: 6/9/2004

End Date: 8/31/2007

Project Status: Complete

Description: The City of Tamarac contracted with Mathews Consulting, Inc. for the design, permitting, bidding and construction administration / inspection of Southgate Boulevard Streetscape Improvements. The work included demolition of the existing, straight aligned, 4-lane divided roadway section and replacing it with a more curvilinear roadway alignment.

The proposed roadway alternates between a 2-lane undivided and 2 lane divided section and includes two roundabouts within the approximately 4,200 linear foot length, along with landscaping for the purposes of traffic calming and beautification.

Permitting included application to Broward County Traffic Division to request approval for reducing the posted speed limit. The project also required coordination with a parallel, linear park and an adjacent residential development, both currently under design.

The project budget was \$1.64 million and the project was constructed under budget for \$1.24 million.

PROJECT #4	
Project Name:	108 th Terrace Drainage Improvements
Owner:	City of Tamarac
Location:	Tamarac, FL
Start Date:	7/1/2012
End Date:	2/1/2015
Project Status:	Complete
Description:	<p>The City contracted with Mathews Consulting (MC) to provide engineering design, bidding and construction administration services for the 108th Terrace Drainage Improvements project. The existing four-lane, median divided City roadway is approximately 1.8 miles long and extends from McNab Road to Nob Hill Road in the City of Tamarac. The asphalt on the roadway showed signs of becoming delaminated from the baserock along a majority of the roadway, especially near the center median. Based upon field testing by the City, the problem appeared to be runoff from the grassed median seeping from behind the curb into the baserock and under the asphalt. The City completed a pilot program where perforated drainage pipe was installed at the back of curb and connected to a nearby drainage inlet to collect and re-direct the runoff to an outfall point. The City then contracted with MC to prepare the design drawings, specifications and permit application for the drainage improvements based upon the pilot program design.</p> <p><u>Drainage Improvement Work</u></p> <ul style="list-style-type: none"> ○ Drainage improvements within each center median with a positive outfall connection to the nearest existing drainage system ○ Review the pilot study design and operation and prepare a letter memorandum of findings and recommendation ○ The proposed drainage system shall consist of perforated PE drainage pipe connected to PE drainage basins ○ Prepare a Pollution Prevention Plan <p><u>Pavement Replacement Work</u></p> <ul style="list-style-type: none"> ○ Review and provide recommendations for the use of a mill and recycled asphalt material option for the asphalt replacement on the adjacent roadway. ○ Prepare a pavement marking plan for replacement “in kind” of the existing pavement markings. <p>Construction of the project was completed in December 2014. Phase I (Drainage Work) was bid in the amount of \$533,134. Phase II (Pavement Replacement) was bid in the amount of \$1,179,370. Mathews Consulting’s fee was \$91,546.</p>

PROJECT #5**Project Name:** SW 12th Avenue Alleys – Phase I**Owner:** City of Delray Beach**Location:** Delray Beach, FL**Start Date:** 6/9/2008**End Date:** 9/7/2010**Project Status:** Complete

Description: Mathews Consulting provided engineering services for the final design, permitting, and bidding for roadway reconstruction, converting existing alleys to paved alleys and storm drainage improvements for SW 12th Avenue in the City of Delray Beach. The infrastructure improvements included:

East Alley

- Convert existing dirt alley to paved alley. Mono-pitch to one side and provide valley gutter to control stormwater discharge. Total of 4 Alleys.
- New stormwater Type 'C' catchbasins and 18"- 24" piping. The new catchbasins shall be located at alley/roadway intersections. The new drainage system will tie into the existing drainage system in the project area.
- Coordinate with FPL to relocate existing power poles. The location of the relocated power poles shall be shown on the design drawings.

West Alley

- Convert existing dirt alley to paved alley. Mono-pitch to one side and provide valley gutter to control stormwater discharge. Total of 3 Alleys.
- New stormwater Type 'C' catchbasins and 18"- 24" piping. The new catchbasins shall be located at alley/roadway intersections. The new drainage system will tie into the existing drainage system in the project area.
- Coordinate with FPL to relocate existing power poles. The location of the relocated power poles shall be shown on the design drawings.

Dry Detention Area @ NW corner of SW 11th Avenue/SW 2nd Street

- Install a storm water detention area located on the West side of SW 11th Avenue at the intersection of SW. 2nd Street and S.W. 11th Avenue.

The project was bid on July 22, 2010 with a construction cost of \$564,985. Construction of the project has been completed.

PROJECT #6**Project Name:** SW 14th Avenue Roadways, Alleys & Drainage Improvements**Owner:** City of Delray Beach**Location:** Delray Beach, FL**Start Date:** 10/1/2008**End Date:** 7/13/2009**Project Status:** Complete

Description: Mathews Consulting provided engineering services for the final design, permitting, and bidding for roadway reconstruction, converting existing alleys to paved alleys and storm drainage improvements for SW 14th Avenue in the City of Delray Beach. The infrastructure improvements included:

SW 14th Avenue (from SW 1st St. to SW 2nd St.)

- New parallel parking and landscape nodes on east side and portion of the west side of roadway.
- Minor roadway improvements to accommodate the parallel parking, including new Type 'F' curb & gutter on east side and portion of west side of roadway.
- 5 ft. wide sidewalk on east side of roadway.
- New stormwater catch basin, swales and piping.
- New landscape islands adjacent to the parallel parking.

East Alley (from SW 1st St. to SW 2nd St.) / West Alley (SW 1st St. to SW 2nd St.)

- Convert existing dirt alley to paved alley. Mono-pitch to new valley gutter & slope road to new stormwater inlets and piping.
- Widen alley from 16 ft. to 18 ft.
- Coordinate with FPL to relocate existing power poles.

SW 2nd Street (from West Alley to SW 13th Ave)

- New swale section on north side of roadway.
- New stormwater piping and catch basins to connect the East & West alleys and SW 14th Avenue to the drainage system at the Northwest corner of SW 2nd St/SW 13th Ave.

The project was bid on May 28, 2009 with a construction cost of \$508,181.
Construction of the project is complete.

PROJECT #7**Project Name:** Bel-Air Neighborhood Drainage Improvements**Owner:** Town of Lauderdale-by-the-Sea**Location:** Lauderdale-by-the-Sea, FL**Start Date:** 7/25/2013**End Date:** 11/1/2014**Project Status:** Complete

Description: The Town of Lauderdale by the Sea contracted with Mathews Consulting to prepare "Bel-Air Neighborhood Existing Drainage Condition Assessment" dated October 2012. The purpose of the Report was to evaluate the physical condition of the drainage piping, via televised video, and perform hydraulic modeling to determine if the existing drainage system has adequate capacity. The Report recommended three phases of improvements; immediate, median and long-term. The Town has decided to design and construct a modified version of the immediate and median improvements. These improvements are considered Phase I. The Town intends to perform the long-term improvements, as Phase II, at a later date. Phase I includes the replacement of six (6) outfalls within the Bel-Air neighborhood.

The Town contracted with Mathews Consulting to perform the following tasks:

- ☐ Data Collection
- ☐ Drainage Design
- ☐ Plan Preparation
- ☐ Permitting
- ☐ Bidding
- ☐ Construction Administration
- ☐ Part-Time Inspections

Construction of the project was completed in 2014 for a construction cost of \$675,650.

PROJECT #8**Project Name:** SW 12th Avenue / Auburn Avenue / SW 14th Avenue**Owner:** City of Delray Beach**Location:** Delray Beach, FL**Start Date:** 5/1/2010**End Date:** 3/1/2012

Project Status:	Complete
Description:	<p>Mathews Consulting is providing engineering services for the final design, permitting, and bidding of the SW 12th Avenue/ Auburn Avenue/ SW 14th Avenue project.</p> <p>Stormwater improvements, roadway resurfacing, landscaping, decorative street lighting, parallel parking, curbing, and paver cross walks are included in the project. The installation of parallel parking along SW 12th Avenue eliminates the ability for residents to use the front of their property for driveways. Access to the property is moved to the rear of the property, via the Alley, and new parking areas are proposed. This project is a joint venture for the City and the Community Redevelopment Agency (CRA). The CRA's input was critical in capturing the development vision to provide an aesthetically pleasing, pedestrian friendly corridor. Components of the project design included the following:</p> <ul style="list-style-type: none"> ○ 2,625 LF of 15-inch to 30-inch stormwater piping. ○ Resurfacing SW 12th Avenue from Atlantic Avenue to SW 7th Street and along SW 14th Avenue from SW 8th Street to SW 10th Street. ○ Providing parallel parking along SW 12th Avenue from Atlantic Avenue to SW 3rd Street. ○ Providing landscaping nodes and street trees along SW 12th Avenue from Atlantic Avenue to SW 7th Street and along SW 14th Avenue from SW 8th Street to SW 10th Street. ○ Obtaining a Florida Department of Transportation permit for the intersection improvements at SW 12th Avenue and Atlantic Avenue. <p>The project was bid in March 2011 with a construction cost of \$1,586,019. Construction of the project has been completed.</p>

PROJECT #9	
Project Name:	Lake Ida Area Drainage Improvements
Owner:	City of Delray Beach
Location:	Delray Beach, FL
Start Date:	4/21/2014
End Date:	12/1/2015
Project Status:	Complete
Description:	<p>The City of Delray Beach previously selected Mathews Consulting to prepare a Drainage Study for the Lake Ida Area. This Study Report prepared by Mathews Consulting provided the recommended improvements to the Lake Ida Area (approx. 16.40 acres) in order to address reported standing water issues after heavy rainfall events at a residence on NW 3rd Avenue and also to address identified roadway ponding in the western areas of NW 12th Street near Lake Drive. The final recommendations from this Study Report were divided into three (3) phases:</p>

- Phase #1 specifically addresses improvements for site ponding at 1127 NW 3rd Avenue and includes construction of a dry detention area, drainage structures and inlets that collect runoff from in front of 1127 NW 3rd Avenue and direct it to the dry detention area and subsequently to a bubble-up structure outfall along NW 12th Street.
- Phase #2 addresses the reported standing water in the roadway at the intersection of NW 12th Street and Lake Drive. Phase #2 includes an inlet at the southeast corner of the intersection with a bubble-up structure to the west which discharges to Lake Ida. This outfall will also assist in the collection and discharge of the overland runoff from the east within the swales.
- Phase #3 interconnects the improvements included in Phase #1 and Phase #2 with the installation of a drainage inlet and piping along the south side of NW 12th Street, between NW 6th Avenue and Lake Drive. This interconnect will improve the time it takes for the runoff from the eastern areas of the Lake Ida study area to be collected and discharged into Lake Ida.

All of the phases #1, #2, and #3 were combined into one (1) design project for the Lake Ida Area. Additionally, the City requested to upsize the existing 2-1/2" water mains along NW 3rd Avenue to 8" water mains. The project was bid in November 2015 with a construction cost of \$711,890. Construction of the project has been completed.

PROJECT #10

Project Name: Park of Commerce Owner's Representative Services

Owner: City of Lake Worth

Location: Lake Worth, FL

Start Date: 11/1/2013

End Date: 2019 (Est.)

Project Status: Design

Description: The City of Lake Worth recently selected Mathews Consulting to serve as the Owner's Representative for the Park of Commerce (POC) – Phase I Project. The project is located in central Palm Beach County and is bounded by 10th Avenue to the North, Lake Worth Road to the South, I-95 to the East and the E-4 Canal to the West. The infrastructure improvements consist of roadway redevelopment and utility upgrades for drainage, potable water, sanitary sewer, fire protection, electric supply, telecommunications, landscaping and street lighting. Phase I of the Park of Commerce infrastructure Improvements will center on upgrading Boutwell Road from 10th Avenue North to Lake Worth Road, including intersection improvements at 10th, 7th, 4th, and 10th Avenues North and Joyce Avenue. The ultimate build-out of the POC is anticipated to be carried out in three (3) phases for the redevelopment of the 393-acre industrial park, which will house an estimated 750,000 square feet of commercial space and

	<p>2,250,000 square feet of light industrial and office space by the year 2015.</p> <p>Mathews Consulting is providing Overall Project Management, Right of Way Needs Analysis, Land Acquisition, Public Outreach, Engineering Design Review, Bidding Services and Construction Management and Resident Project Representative Services for the Park of Commerce – Phase 1 Project.</p> <p>Mathews Consulting also assisted the City with obtaining an Economic Development Administration (EDA) Grant Fund for \$1.4 million.</p> <p>The estimated construction cost for Phase 1 is \$5,000,000. The project is currently in the design stage.</p>
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PROJECT #11

Project Name: 7th Avenue South Improvements

Owner: City of Lake Worth

Location: Lake Worth, FL

Start Date: 11/1/2013

End Date: 12/1/2014

Project Status: Complete

Description: The City of Lake Worth recently selected Mathews Consulting (MC) to provide Engineering Services for the 7th Avenue South (South “A” Street to South “F” Street) Roadway Improvements Project. The project is located within the City of Lake Worth's Community Development Block Grant (CDBG) target area. CDBG funding will be provided for the project through Palm Beach Department of Economic Sustainability.

Mathews Consulting will provide data collection, design services, permitting services, public outreach meetings, bidding assistance, construction administration services and inspections for the project. The infrastructure improvements consist of:

- Conversion of an unimproved 40-foot right-of-way section into a full roadway section
- New meandering pathway
- Swale area
- New 8-inch water main for looping purposes
- Roadway striping, signage & traffic calming
- Minor stormwater improvements

The project was bid in June 2015 with a construction cost of \$643,140. The construction of the project has been completed.

PROJECT #12**Project Name:** SW 2nd Avenue Streetscape**Owner:** City of Delray Beach**Location:** Delray Beach, FL**Start Date:** 11/1/2013**End Date:** 12/1/2014**Project Status:** Complete**Description:** Mathews Consulting provided engineering services for the final design, permitting, and bidding of proposed streetscape improvements along SW 2nd Avenue from Atlantic Avenue to SW 1st Street.

The improvements consisted of the reconstruction of the existing roadway, curbing, brick paver crosswalks, parallel parking spaces, pavement markings, decorative street lights, landscaping and irrigation, and minor stormwater improvements.

Design components of the project included the following:

- ☐ Prepare detailed plan and profile design drawings.
- ☐ Conduct soil investigation of the project area.
- ☐ Conduct underground utility soft-digs in project area.
- ☐ Prepare and process permit applications for FDOT.
- ☐ Collect and review record drawings of project area.
- ☐ Prepare technical specifications.
- ☐ Prepare cost estimates.

The project was bid in February 2008 with a construction cost of \$270,000. Construction of the project has been completed.

PROJECT #13**Project Name:** Duck Key Utility System Improvements**Owner:** Florida Keys Aqueduct Authority**Location:** Duck Key, Florida Keys**Start Date:** 5/23/2006**End Date:** 1/1/2014**Project Status:** Complete

Description: Mathews Consulting provided engineering services for the data collection, design, public participation, permitting and bidding for the Duck Key Utility System Improvements. Duck Key is a small island community located at Overseas Highway Mile Marker 60 in unincorporated Monroe County. Duck Key consists of five islands connected by Venetian Style bridges. The infrastructure improvements included: Low pressure sewer system (30

	<p>pump stations); Sanitary sewer system; Water main replacement (28,960 LF); Reclaimed water main system; Nine lift stations and force main system; Four bridge crossings; and Roadway reconstruction.</p> <p>Design components of the project included: Aerial survey of project area; Conduct soil investigation of project area; Wastewater system hydraulic model; Reclaimed water system hydraulic model; Review environmental constraints (wetlands); Collect and review record drawings of project area; Prepare detailed plan & profile design drawings; Prepare lift station mechanical & electrical design; Prepare and process permit applications to FDEP; Prepare technical specifications; and Prepare cost estimates. The project was broken into 7 phases (4 bid contracts). The project will be constructed as follows:</p> <ul style="list-style-type: none"> ○ Contract 1 - Phase 1 & 2 (Contract 1) ○ Contract 2 - Phase 3 (Contract 2) ○ Contract 3 - Phase 4, 5 & 6 (Contract 3) ○ Contract 4 - Phase 7 (Contract 4) <p>Construction of the project was completed in 2013.</p>
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PROJECT #14

Project Name: Reclaimed Water Expansion Area 12A (Phase I & II)

Owner: City of Delray Beach

Location: Delray Beach, FL

Start Date: 2/1/2011

End Date: 12/1/2013

Project Status: Complete

Description: The City of Delray Beach has adopted a Reclaimed Water Master Plan (RWMP), (prepared by Mathews Consulting, Inc., October, 2003) which identifies areas of service for the City's new reclaimed water system. The purpose of the RWMP is to serve as a planning document from which a reclaimed water system can be developed in phases as capital improvements are budgeted and scheduled through a designated time frame. The fifth project identified for implementation is "Area 12". The Area 12 RWS will be broken into Area 12A, Area 12B and Area 12C.

Mathews Consulting provided engineering design, permitting, surveying, geotechnical investigations, utility locates and bidding services for the Area 12A reclaimed water transmission/distribution system. The project was broken into Phase I & Phase II. Specific project elements include the following:

- Reclaimed water mains (ranging from 6-inch to 10-inch diameters), valves, fittings & reclaimed water meter boxes/services.

- Provide 6-inch reclaimed water stub-outs as required for future connections.
- 8-inch water main along Miramar Street (from Gleason St. to State Road A1A).
- 6-inch water main along Coconut Row (from Gleason St. to east dead-end).
- 8-inch water main along Ingraham Avenue (from Venetian Dr. to Gleason St).
- 8-inch water main along Nassau St. (from Gleason St. to State Road A1A).
- 8-inch water main along Bay St. (From Gleason St. to State Road A1A).
- Drainage Improvements in project area shall be per the Bay Street Drainage Area Evaluation performed by Others
- Roadways – trench repair w/ all roads (with the exception of Atlantic Avenue) to be micro-surfaced.

The Phase I portion of the project was bid in January 2013 with a construction cost of \$1,470,000. The Phase II portion of the project was bid in January 2014 with a construction cost of \$1,456,545. Construction of Phase I & Phase II has been completed.

PROJECT #15

Project Name: Monroe Drive Infrastructure Improvements

Owner: City of West Palm Beach

Location: West Palm Beach, FL

Start Date: 12/1/2004

End Date: 8/1/2011

Project Status: Complete

Description: Mathews Consulting provided engineering services for the design, permitting, bidding and construction administration/inspections for the Monroe Drive Stormwater and Utility System Improvements Project. The project is part of the City's Phase II Stormwater Projects that is being funded by a Stormwater Bond. Elements of the project include Data Collection, Preliminary and Final Design, Permitting, Public Relations, Bidding Assistance, Construction Administration and Inspection Services.

The infrastructure improvements included:

- Stormwater facilities
- Water main upgrades
- Sanitary sewer replacement and rehabilitation
- Roadway, curb & gutter, and sidewalk reconstruction

- Signage and pavement markings
- Landscaping
- Decorative Street Lighting

Scope of work for the project included the following:

- Collect and review record drawings of project area.
- Conduct soil investigation of project area.
- Prepare detailed plan and profile design drawings.
- Prepare and process permit applications for South Florida Water Management District, FDOT, FEC Railway, and Palm Beach County Health Department.
- Prepare technical specifications.
- Prepare cost estimates.

The project was bid in July 2009 with a construction cost of \$5,984,486. Construction of the project has been completed.

PROJECT #16

Project Name: Esquire Lake Stormwater Improvements

Owner: City of Pompano Beach

Location: Pompano Beach, FL

Start Date: 4/13/2015

End Date: 2017 (Est.)

Project Status: Design

Description: The City of Pompano Beach previously selected Mathews Consulting (MC) to prepare a Drainage Preliminary Design Report for the Esquire Lake Neighborhood under Work Authorization No. WA-05. The Drainage Preliminary Design Report provided the recommended improvements to the Esquire Lake Neighborhood in order to address roadway flooding and standing water issues after rainfall events in the neighborhood. The Esquire Lake Neighborhood project limits is bounded on the east by Powerline Road, on the west by NW 27th Avenue, on the south by NW 6th Street and the north by Martin Luther King Boulevard.

As discussed in the Drainage Preliminary Design Report, Alternative 3B was our recommended drainage alternative since it provides the most overall benefit in terms of roadway flooding. The City also requested that the existing 36-inch exfiltration trench, manholes and inlets along NW 6th Court be replaced with a new 42-inch exfiltration trench, manholes and inlets. MC is currently providing engineering design, permitting, bidding, public relations and construction administration services for this project. This project is currently in the 100% Design Stage.

PROJECT #17	
Project Name:	Boca Raton Heights Infrastructure Improvements
Owner:	City of Boca Raton
Location:	Boca Raton, FL
Start Date:	9/29/2008
End Date:	9/1/2014
Project Status:	Complete
Description:	<p>Mathews Consulting is currently providing engineering services for the preliminary design, final design, public participation, permitting and bidding services for the Boca Raton Heights Infrastructure Improvement Project. The project is located in the City of Boca Raton.</p> <p>The Boca Raton Heights neighborhood is bounded by topographic features such as a natural ridge and roadways which result in stormwater runoff being trapped in the low-lying areas of the neighborhood. Stormwater improvements are proposed in order to address the problems associated with water ponding on the roadways, including pavement section deterioration. A pavement condition review was completed and a decision matrix prepared to assist in analyzing which of the existing roadways should be reconstructed or whether a cost-saving overlay would be recommended.</p> <p>In addition, new sanitary sewer and a wastewater lift station are proposed to serve the houses and businesses that are currently on septic tank, and watermain improvements are proposed to improve fireflow and water system pressure.</p> <p>The project was bid on July 19, 2013 with a construction cost of \$2,666,237. Construction of the project has been completed.</p>

6.3 Mathews Consulting Key Personnel

1. David Mathews, P.E., Vice President Florida Operations

Office Location: West Palm Beach, FL

Education: BSCE University of South Florida, 1990

Project Role: Project Manager, Design & Bidding

Specific Experience: Mr. Mathews has over 26 years of experience in the planning, design, permitting, construction, and management of general civil; roadway; drainage; water and wastewater facilities; neighborhood infrastructure improvements; wastewater pumping stations; construction management; and regulatory compliance. Relevant project experience includes the following:

Project	Role	Municipality
1. SW 2 nd Avenue Streetscape	Project Manager / Design	Delray Beach CRA
2. Auburn Avenue Improvements	Project Manager / Design	City of Delray Beach
3. Monroe Drive Infrastructure Improvements	Project Manager / Design	City of West Palm Beach
4. Rutland Boulevard Infrastructure Improvements	Project Manager / Design	City of West Palm Beach
5. Duck Key Utility System Improvements	Project Manager / Design	Florida Keys Aqueduct Authority

Two Client References for David Mathews are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
City of West Palm Beach	Laura Le	401 Clematis St., 4th Floor WPB, FL 33401	561-494-1040	LLe@wpb.org

2. Rene Mathews, P.E., Vice President

Office Location: West Palm Beach, FL

Education: BSCE North Carolina State University, 1995

Project Role: Quality Assurance & Public Outreach

Specific Experience: Ms. Mathews has over 25 years of experience in the planning, design, construction, and management of general civil, wastewater, water, and reuse projects. Her broad experience covers water and wastewater treatment, distribution, and collection systems; process operation and pilot facilities; effluent/reuse management and disposal; sludge treatment and disposal; odor control and air quality assurance; industrial pretreatment; construction management; and regulatory compliance. Ms. Mathews has also managed and participated in over twenty-five (25) value engineering and constructability reviews in the last 10 years. Relevant project experience includes the following:

Project	Role	Municipality
1. Lift Station 100A Upgrade	Design / Quality Assurance	City of Delray Beach
2. Reclaimed Water Master Plan	Prepared Report	City of Delray Beach
3. Hydraulic Water Model Update	Hydraulic Modeling	City of Delray Beach
4. 2006 Alternative Water Supply Grant	Prepared Grant Applications	City of Delray Beach
5. Stormwater Pump Station	Design / Quality Assurance	Town of Gulf Stream

Two Client References for Rene Mathews are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
Town of Gulf Stream	Bill Thrasher	100 Sea Rd. Gulf Stream, FL 33483	561-276-5116	bthrasher@gulf-stream.org

3. **Rebecca Travis, P.E., Vice President**

Office Location: West Palm Beach, FL

Education: BSCE Iowa State University, 1994

Project Role: Design & Public Outreach

Specific Experience: Ms. Travis has over 32 years of progressively responsible civil engineering design and project management experience in both private sector residential and commercial land development, as well as streetscape beautification, municipal stormwater, roadway and utility projects. Her range of experience includes performance of complex professional engineering work involving investigation, planning, design development, permitting, management and construction of public and private developer improvement projects. Ms. Travis also has extensive experience in streetscape / roadway design and stormwater facilities, including NPDES permitting. Relevant project experience includes the following:

Project	Role	Municipality
1. Auburn Avenue Infrastructure Improvements	Design / Permitting	Delray Beach CRA
2. Lake Ida Area Drainage Improvements	Design / Permitting	City of Delray Beach
3. SW 12th Avenue Alleys – Phase I	Design / Permitting	Delray Beach CRA
4. Monroe Drive Infrastructure Improvements	Design / Permitting	City of West Palm Beach
5. Southgate Boulevard Streetscape Improvements	Design / Permitting	City of Tamarac

Two Client References for Rebecca Travis are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
City of Tamarac	John Doherty	6011 Nob Hill Rd. Tamarac, FL 33321	954-597-3706	johnd@tamarac.org

3. Jason Pugsley, P.E., Water/Wastewater Department Manager

Office Location: West Palm Beach, FL

Education: BSCE Florida State University, 2004

Project Role: Design

Specific Experience: Mr. Pugsley has over 15 years of experience in the project management, permitting, design and construction of numerous projects within the Water/Wastewater, Facilities, Infrastructure, and General Civil engineering. His experience within multiple business practices makes him uniquely qualified to design, construct and manage projects which are multi-pronged and which typically require the use of multiple staff which are each independently qualified within the respective disciplines. Relevant project experience includes the following:

Project	Role	Municipality
1. Intracoastal Waterway FM Subaqueous Crossing	Project Manager / Design	Town of Lantana
2. LS 309 Evaluation	Project Manager	City of Boynton Beach
3. River Oaks/Little Oaks Sanitary Sewer	Project Engineer	Loxahatchee River District
4. Reuse Master Plan	Project Engineer	City of Pompano Beach
5. ECRWRF Monitoring Well Head Replacement	Project Manager / Design	City of West Palm Beach

Two Client References for Jason Pugsley are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
Loxahatchee River District	Clint Yerkes	2500 Jupiter Park Dr. Jupiter, FL 33458	561-747-5700	clint.yerkes@loxahatcheeriver.org
City of Boynton Beach	Chris Roschek	124 E. Woolbright Rd. Boynton Beach, FL 33435	561-742-6400	roschekc@ci.boynton-beach.fl.us

4. Courtney Marshall, E.I., Project Engineer

Office Location: West Palm Beach, FL

Education: BSCE University of Florida, 2013

Project Role: Design, Permitting & Cost Estimating

Specific Experience: Courtney Marshall is a Project Engineer with Mathews Consulting and will provide Design, Permitting and Cost Estimating services for this Contract. Ms. Marshall has recently provided engineering services to South Florida Municipalities on the following projects:

Project	Role	Municipality
1. Tropic Palms Water Main Replacement	Project Engineer	City of Delray Beach
2. Lake Ida Drainage Improvements	Project Engineer	City of Delray Beach
3. River Oaks/Little Oaks Sanitary Sewer System	Project Engineer	Loxahatchee River District
4. Delray Shores Water Main Phase II	Project Engineer	City of Delray Beach
5. A.1.A. Water Main Improvements	Project Engineer	City of Pompano Beach

Two Client References for Courtney Marshall are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
Loxahatchee River District	Clint Yerkes	2500 Jupiter Park Dr. Jupiter, FL 33458	561-747-5700	clint.yerkes@loxahatcheeriver.org

5. Kyle Scott, E.I., Project Engineer

Office Location: West Palm Beach, FL

Education: BSCE University of Central Florida, 2013

Project Role: Hydraulic Modeling & Design

Specific Experience: Kyle Scott is a Project Engineer with Mathews Consulting and will provide Master Planning, Hydraulic Modeling and Design services for this Contract. Mr. Scott has recently provided engineering services to South Florida Municipalities on the following projects:

Project	Role	Owner Contact
1. Delray Shores Water Main Phase II	Project Engineer	City of Delray Beach
2. NW Service Area WW Hydraulic Study Update	Project Engineer	Loxahatchee River District
3. Delray Shores Water Main Phase III	Project Engineer	City of Delray Beach
4. Hydrogen Sulfide Study	Project Engineer	City of West Palm Beach
5. Reclaimed Master Plan Update	Project Engineer	City of Delray Beach

Two Client References for Kyle Scott are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
Loxahatchee River District	Clint Yerkes	2500 Jupiter Park Dr. Jupiter, FL 33458	561-747-5700	clint.yerkes@loxahatcheeriver.org

6. Aaron Cutler, G.C., Vice President, Construction Manager

Office Location: West Palm Beach, FL

Education: AAS Civil Engineering Technology, Pensacola Junior College

Project Role: Quality Assurance

Specific Experience: Aaron Cutler is a Construction Manager with Mathews Consulting and will provide Quality Assurance services for this Contract. Mr. Cutler has 15 years of experience in all facets of construction management, ranging from roadway, and pipeline & pump station inspections to management of multiple contractors for water, wastewater and reuse facility projects. Mr. Cutler also has his General Contractor's License. Mr. Cutler recently provided Construction Management services to South Florida Municipalities on the following projects:

Project	Role	Municipality
1. A.1.A. Water Main Replacement	Construction Manager / Public Relations	Town of Highland Beach
2. S.E. Federal Hwy. Infrastructure Improvements	Construction Manager / Public Relations	City of Boynton Beach
3. Boca Raton Hills WW Infrastructure Improvements	Construction Manager / Public Relations	City of Boca Raton
4. Reclaimed Water Expansion – Area 12B	Construction Manager / Public Relations	City of Delray Beach
5. Eagles Nest Sanitary Sewer System	Construction Manager / Public Relations	Loxahatchee River District

Two Client References for Aaron Cutler are shown in the table below:

Client	Point of Contact	Address	Telephone	Email
City of Delray Beach	Victor Majtenyi	434 South Swinton Ave. Delray Beach, FL 33444	561-243-7000	Majtenyi@ci.delray-beach.fl.us
Town of Highland Beach	Ed Soper	3616 S. Ocean Blvd. Highland Beach, FL 33487	561-243-2084	esoper@highlandbeach.us

6.4 References

This sub-section provides a brief overview of our governmental entities experience and a list of our Client References.

Governmental Entities Experience

The City of Delray Beach needs a consultant who will work as a partner with the City's staff – one who will be a proactive extension of your staff. Mathews Consulting has a solid track record of partnering with local municipality clients to deliver the high level of personal service you desire. We are structured to allow for a long-term commitment of specific staff to serve your needs. **By having principal owners directly involved, there is no "revolving door" of staff with our project team.**

Mathews Consulting is committed to its Municipal practice in South Florida. We have developed and refined our approach to continuing service contracts and offer you the advantages of our partnering philosophy. Mathews Consulting is currently providing General Civil; Streetscape; Neighborhood Improvements; Roadway/Stormwater; and Utility Engineering and Construction Services under continuing General Contracts to the following municipalities:

- City of Delray Beach
- Pompano Beach
- Town of Gulf Stream
- Palm Beach County Water Utilities
- City of Boca Raton
- City of Riviera Beach
- City of Lake Worth
- Town of Highland Beach
- Lauderdale-by-the-Sea
- City of Tamarac
- Florida Keys Aqueduct Authority
- Loxahatchee River District
- Town of Lantana
- City of West Palm Beach

We pride ourselves on the fact that **95% of our business is repeat business** from existing clients. This high percentage demonstrates our ability to provide exceptional service to clients on a continual basis.

Mathews Consulting also specializes in providing exceptional consulting services to mid-size municipalities, similar to the City of Delray Beach (population 65,055). For the last 14 years, we have served as General Engineer to the City of Delray Beach, and we have also served as General Engineer to the City of Boca Raton (population 91,332) and the City of West Palm Beach (population 104,031) for the last 14 years. Mid-size communities need an engineering consultant who is readily accessible and available at short notice to address the various engineering questions, concerns or needs that may arise. Mid-size communities also need a consultant who provides cost effective services so that project costs meet budget constraints.

Large, national consulting firms have difficulty providing the hands-on, close/personal service that is expected from mid-size communities, as their staff is often traveling from office to office, and

from State to State. And their high overhead costs and billable rates create challenges in meeting the expected tight project budgets in today's market conditions.

Mathews Consulting enjoys working with mid-size communities like the City of Delray Beach and find that we can easily meet and exceed the expectations of the client and offer the greatest value to their day-to-day operations.

References

One of the best measures of a Consultant's success is the response received from the firm's clients. We encourage the City of Delray Beach to contact any of our references listed below to provide information about our project performance. Mathews Consulting is proud of our commitment of meeting the goals and objectives of our clients. **Over 98% of our work is performed for repeat Clients!**

Mathews Consulting has been providing Civil Engineering and Roadway Design Services for Infrastructure Improvements to the City of Delray Beach since 1998. The working relationships we have established with the City Staff and the excellent performance we have demonstrated on past projects are invaluable to this new Contract. Our Project Manager, David Mathews, P.E., has a proven track record of delivering successful projects to the City of Delray Beach since 1999. The following table lists some of our current and past projects for the City of Delray Beach Environmental Services Department and our past projects for Delray Beach CRA.

Projects for Delray CRA	Status
NE 1 st Avenue Infrastructure Improvements	Completed (2013)
SW 12 th Avenue / Auburn Avenue / SW 14 th Avenue Infrastructure Improvements	Completed (2012)
Auburn Avenue Infrastructure Improvements	Completed (2011)
SW 12 th Avenue Alleys – Phase I	Completed (2010)
SW 2 nd Avenue Streetscape	Completed (2008)
SW 14 th Avenue Conceptual Design	Completed (2008)
SW Area Neighborhood – Surface Water Management Study	Completed (2008)

Projects for Delray Environmental Services Department	Status
Reclaimed Water Expansion Area 12B	In Progress

Projects for Delray Environmental Services Department	Status
Tropic Palms Water Main Replacement (Phase II)	In Progress
Delray Shores Water Main (Phase III)	In Progress
Reclaimed Water Master Plan Update	In Progress
Lift Station #1 Upgrade Study	In Progress
Reclaimed Water Expansion Area 12C	In Progress
SFWMD Alternative Water Supply Grant for FY 2017	Completed (2016)
Delray Shores Water Main (Phase II)	Completed (2015)
Tropic Palms Water Main Replacement (Phase I)	Completed (2015)
Lake Ida Drainage Improvements	Completed (2015)
Delray Shores Water Main (Phase I)	Completed (2014)
Lake Ida Drainage Study	Completed (2013)
Lift Station 100A Upgrade	Completed (2013)
Congress Avenue Force Main Replacement	Completed (2013)
Lowson Blvd. Force Main Replacement	Completed (2012)
Area 11A Reclaimed Water System	Completed (2009)
Congress Avenue Corridor Utilities Master Plan	Completed (2008)
Area 4 Reclaimed Water System	Completed (2008)
Area 2 & 3 Reclaimed Water System	Completed (2008)
L-33 Canal Culvert Extension	Completed (2006)
Area 1 Reclaimed Water System	Completed (2005)
Reclaimed Water Master Plan	Completed (2003)

Mathews Consulting also has been instrumental in assisting the City in obtaining grant money for the City's reclaimed water program. Over the past ten (10) years, since implementation of the reclaimed water program started in 2005, Mathews Consulting has assisted the City in obtaining eight (8) grants totaling over \$3.2M. This funding assistance has greatly benefited and ensured the success of the reclaimed water program throughout the City's service area.

Client	Project	Funding Amount
City of Delray Beach	Area 1 Reclaimed Water System	\$150,000
City of Delray Beach	Area 2 & 3 Reclaimed Water System	\$500,000
City of Delray Beach	Area 4 Reclaimed Water System	\$619,700
City of Delray Beach	Area 11A Reclaimed Water System	\$1,118,000
City of Delray Beach	Area 11B Reclaimed Water System	\$210,910
City of Delray Beach	Area 12A Phase I Reclaimed Water System	\$170,000
City of Delray Beach	Area 12A Phase II Reclaimed Water System	\$100,000
City of Delray Beach	Area 12C Reclaimed Water System	\$400,000
	Total:	\$3,268,610

6.5 Project Management Approach

This sub-section provides Mathews Consulting, Inc.'s, understanding of the project and the engineering services to be performed under this Contract. Also included is a specific project approach that will be implemented to ensure the successful design and construction of this project included under this Contract. We also describe the company project controls that are implemented for all projects. We feel our project approach, outstanding team members, South Florida experience, design, public outreach and permitting experience on numerous South Florida neighborhood improvements, streetscape / roadway beautifications, drainage, water, sewer, and our working relationship with the regulatory agencies will be the most cost effective and provide the most experienced team for the City of Delray Beach based on the following:

- We offer streamlined operations to implement projects efficiently.
- **We provide cost effective engineering rates.**
- We are highly experienced in the design & construction of neighborhood infrastructure projects in residential neighborhoods, business districts and redevelopment districts.
- We offer a "Good Neighbor" public relations program to keep your residents and elected officials informed of the project.
- We are experienced in meeting schedules for fast-track projects.
- Our understanding of the local regulatory environment and our working relationship with permit reviewers ensures timely releases and certifications for construction.
- Our ability to work with local utility agencies (e.g. electric, telephone, gas, cable TV, etc.) ensures that these utilities will be accounted for during construction activities.
- **We maintain continuity of project staff throughout duration of project.**
- We are readily accessible to serve you at a moment's notice.

- Our project approach will provide the City with quality engineering services at a cost effective rate, while exceeding all project deadlines and budget requirements.

Scope of Work

- SW 4th Street from South Swinton Avenue to SW 10th Avenue
- SW 6th Street from SW 5th Avenue to SW 8th Avenue
- SW 7th Avenue from SW 1st Street to SW 8th Court



Engineering Services

Engineering services to be provided by Consultant include, but are not limited to the following:

- Topographic surveying
- Pavement design
- Investigating and upgrading existing storm drain pipes, inlets and manholes Sidewalks and swales
- Upgraded pedestrian ramps, sidewalks, and driveways
- Drainage/storm water design
- Signing and pavement markings
- Lighting - Light Emitting Diode (LED)
- Engineer's estimate and specifications
- Bid package assistance QA/QC
- Utility coordination
- Public outreach
- Permits (prepare and assist the City in obtaining permits)
- Provide design support during construction
- Clean, video and inspect all sewer and drainage pipes.

Project Scope

Consultant shall prepare design documents for construction of this Project as part of the 2017 Capital Improvement Plan (CIP). Consultant services are for the development of design drawings for roadway mill and overlay projects. Consultant work shall also include the design of swales, drainage and sanitary sewer, striping and signing, and lighting plans.

The Consultant shall prepare a complete set of design drawings for each street included in this Project. Design drawings shall include:

- Roadway survey from right of way to right of way;
- Location maps to identify the project(s) and surrounding streets, including necessary notes, standards and details for milling and resurfacing or overlay;
- Drainage, including swales and underground drainage rehabilitation plan sheets with necessary notes, and details;
- Sanitary sewer, underground sewer rehabilitation plan sheets, notes, and details.
- Pavement marking and roadway signs in accordance with all current applicable manuals, guidelines, standards, handbooks, and procedures;

- Light-Emitting Diode (LED) lighting in accordance with all current applicable manuals, guidelines, standards, handbooks, and procedures;
- Design drawings with three QA/QC (quality control submittal) phases with the City: preliminary (30% design), intermediate (60% design) and a final (100% design);
- Utility coordination up to construction to ensure that no utilities (including underground utilities) are in conflict with the project or will impact the construction schedule.

The Consultant services shall include, but not be limited to the following:

- Make all field visits to the Project site as required to obtain necessary data for all components of the Project.
- Assist with preparation of the pre-bid agenda package for the construction phase, assistance with design questions at the pre-bid meeting and throughout the question and answer period.
- Preparation of specifications, drawings, cost estimate(s).
- Assist Purchasing with preparation of the commission agenda item(s) for the awarding of the Project.
- Coordinate all the public outreach activities with the City Project Manager.
- Prepare materials and be present for public outreach activities as requested by the City.
- Community Outreach - Through the duration of the project, Consultant shall be responsible for notifying all property owners, tenants, and residents about potential impacts associated with the project.
- Notifications - Consultant shall assist the City with the preparation of flyers, and/or letters to the residents, tenants, and property owners. Information to be provided shall include the proposed project scope, limits, schedule, and the anticipated impacts of the construction to residents (e.g. detours, street closures, utility interruptions). Contact information shall also be included with the notification. Notifications shall be in accordance with City policy.
- Mailing List Preparation - Consultant shall identify all impacted property owners and tenants. Consultant shall prepare a mailing list of all such entities and shall update the mailing list as needed throughout the duration of the project.
- Coordination - Consultant shall coordinate with outside agencies and municipalities for all permits necessary during design. Consultant shall coordinate the project, as necessary, (during design) with outside municipalities and agencies, including the South Florida Water Management District (SFWMD).

Project Approach

Mathews Consulting has a proven track-record in providing the design, permitting, community outreach, bidding and construction support services for projects in residential neighborhoods, business districts, and redevelopment districts. Our project approach for this project involves the following primary tasks:

- Project Kick-Off
- Data Collection / Survey Mapping / Geotechnical Investigation
- Clean, Video & Inspect All Sewer / Drainage Pipes
- Hydraulic Modeling
- Final Design Services
- Value Engineering Services
- Cost Estimate
- Permitting Services
- Bidding Services
- Community Outreach
- Design Support during Construction

Total Quality Assurance/Quality Control is maintained during all aspects of Mathews Consulting's projects. Our project approach for the project(s) under this Contract is summarized in the Flow Chart as shown on **Figure 6-1** and discussed below.

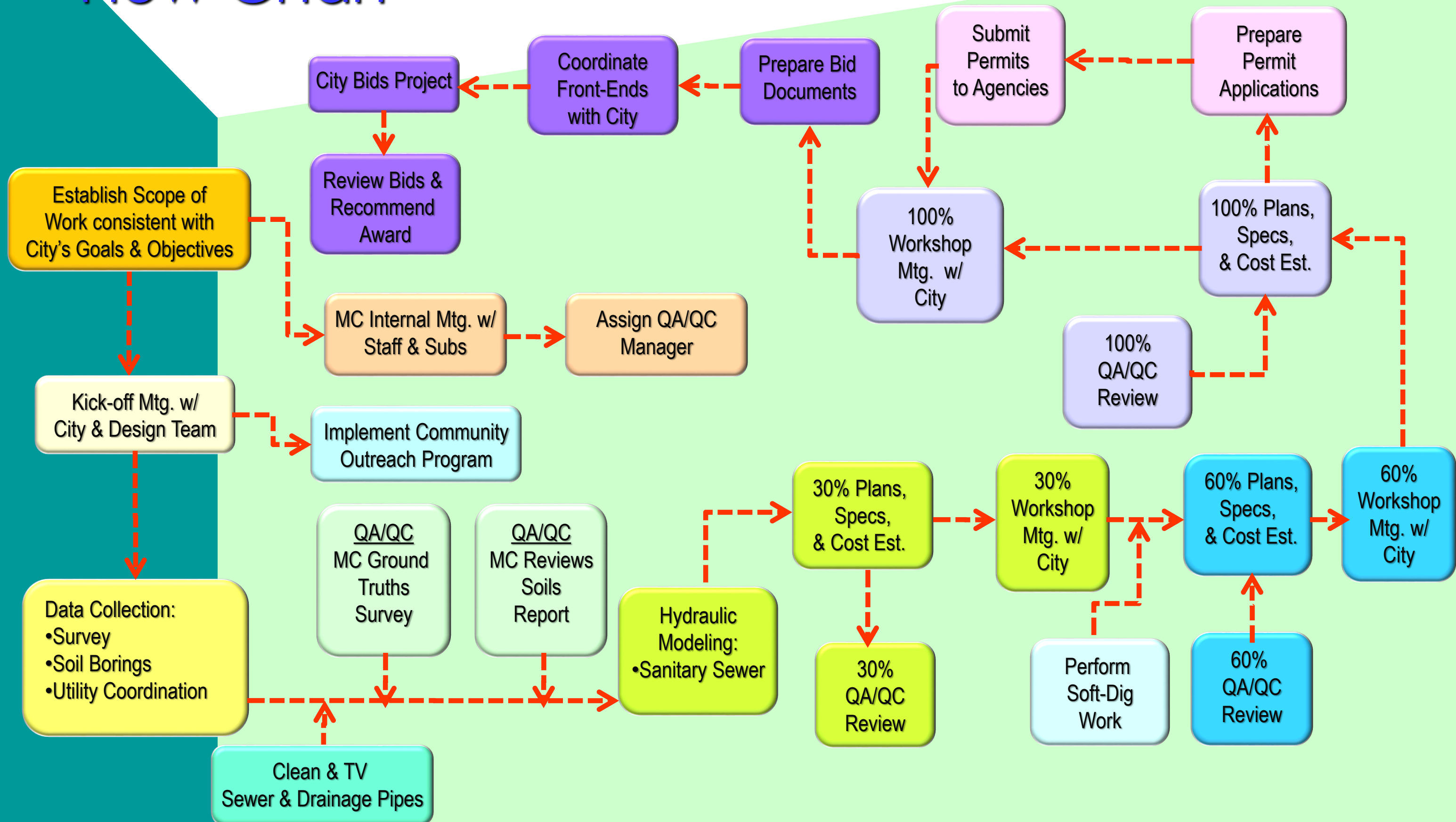
Project Kick-Off

Mathews Consulting Team members will attend a notice-to-proceed kick-off meeting with the primary objectives of developing a clear understanding of the scope of work and the key concerns of all project participants, obtaining relevant information that may be available from the City, and establishing proper communication between the consultant team and the City's staff.



Design Project Approach – Flow Chart

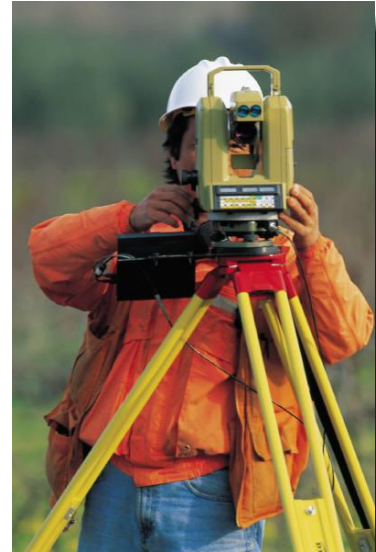
Figure 6.1



Data Collection

This task involves the collection of project specific data to be used in the design of infrastructure improvement projects. We propose to use **Dennis J. Leavy & Associates** to provide topographical survey of the project area. The survey information will be used in conjunction with the City's available record drawing (e.g. "As-Builts") information, existing GIS maps, and aerial maps.

We also propose to use **Terracon Consultants** to collect geotechnical (e.g. soil information) and provide testing as needed for design purposes. A Geotechnical Report shall be prepared for each project that will provide a description of the underground soil characteristics and water table information and provide recommendations for trench design, removal of unsuitable material and any special pipe trench design.



The project team will obtain information on existing utilities in the project area in order to avoid utility conflicts. This will include reconciling apparent discrepancies between record information and existing photographic and field-verification information. Typical utility information includes: FP&L, AT&T telephone, cable TV, gas, water, reclaimed water, sanitary and storm drainage.

As necessary, utilities will be potholed and surveyed. We propose to use **InfraMap**, which is a local underground utility locating firm, to locate any existing critical underground utility locates using "ground penetrating radar". This information would be added to the design drawings.

During the data collection process, the Project Team will work closely with the City to determine what site data may already exist in an effort to avoid redundant collection of data. This will allow the project to move forward quickly and cost effectively.

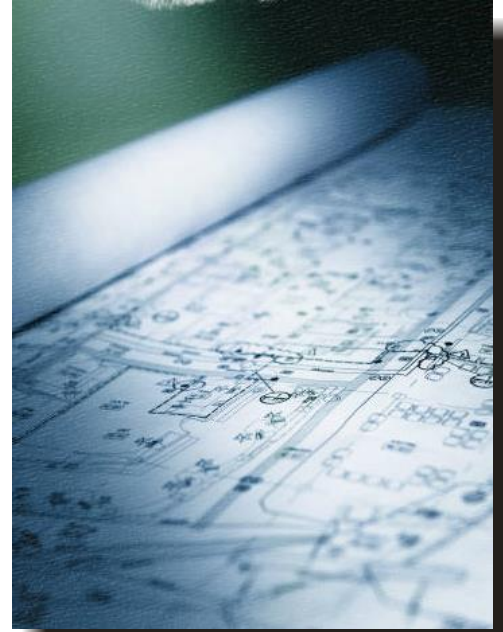
Cleaning & Televising Sewer / Drainage Pipes

This task involves the cleaning & televising of sewer and drainage pipes in the project area. We propose to use Tele-Vac to provide all cleaning and televising. Mathews Consulting shall review the results of the video recordings and shall summarize a condition assessment of the gravity sewers and drainage pipes and make recommendations regarding the appropriate method of rehabilitation and/or replacement.

Hydraulic Modeling

The Project Team will perform all necessary flood routing, system capacity and water quality calculations and hydraulic modeling for the stormwater/drainage improvements to confirm stormwater pipe routing and sizing. We will confirm input data, percolation rates, existing system conditions, elevations and delineation of the drainage areas.

Mathews Consulting will utilize various hydraulic modeling programs available for sanitary sewers and water mains. We predominantly use WaterCAD® and SewerCAD® modeling programs, as well as InfoWater®.



Design

Our approach is to break each design project into two subtasks: preliminary design layout (preparation of 30% design documents and construction cost opinion), and final design (preparation of biddable contract documents – subject to 60 and 100 percent reviews).

- **Preliminary Design Layout** – Based on the survey and geotechnical data collected, utility locates and TV reports, the project team will layout the proposed roadway and infrastructure improvements for the project area. The system will be designed to maximize system performance, provide for ease of maintenance, minimize utility conflicts, and minimize construction costs. The project will also be designed in accordance with City design standards and regulatory agencies requirements (e.g. PBCHD, FDEP, FDOT, SFWMD, etc.). Also, any requirements that need to be followed in order to receive grant or stimulus money for the project will be closely adhered to. Upon completion of the layout, we will hold a review meeting with the Delray Beach to review the layout for approval before proceeding. This will also include preparation of a preliminary phasing plan, if required, to implement construction consistent with available multi-year funding.

- **Contract Document Preparation** – The construction documents shall include drawings and technical specifications. The construction drawings shall include: cover sheet, phasing plan (if required), plan and profile drawings, roadway sections, landscape drawings, decorative street light drawings (if required), and miscellaneous civil detail sheets. The drawings will be designed using AutoCAD Version 2016.

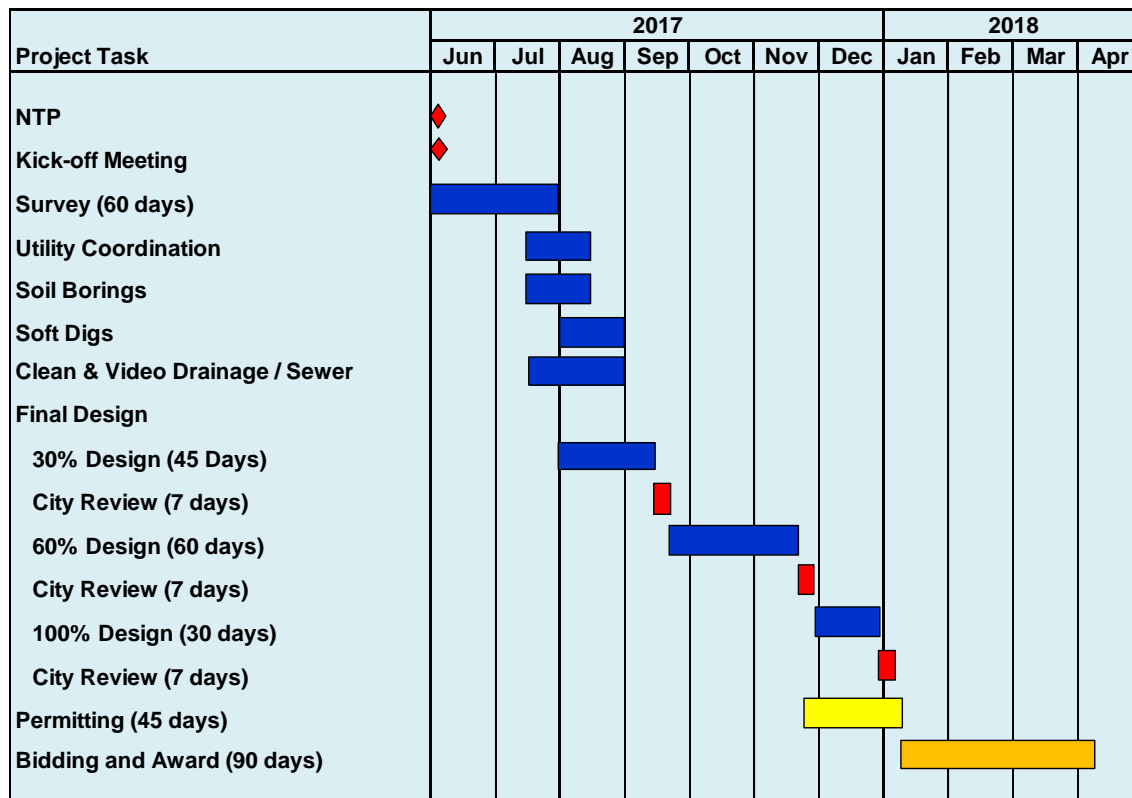
Regular consultation will be made with City staff to inform them of the project's progress and to receive their input. At 60 percent design completion, plans, specifications, and construction cost opinion will be submitted to the City for review.

When the design drawings and specifications are at one-hundred percent completion, a submittal will again be made to the City. The submittal will include a construction cost opinion. This one-hundred percent design submittal will serve as the basis for obtaining City staff's final project input prior to finalization of the contract documents for bid. **Throughout the design, our project team will provide necessary internal quality assurance/quality control reviews.**

Project Schedule

Our proven project approach will allow us to develop a project schedule that will fast-track the design, permitting and bidding of this project so that it can be completed in one (1) year. The schedule for this project from data collection through construction is presented below.

Project Schedule

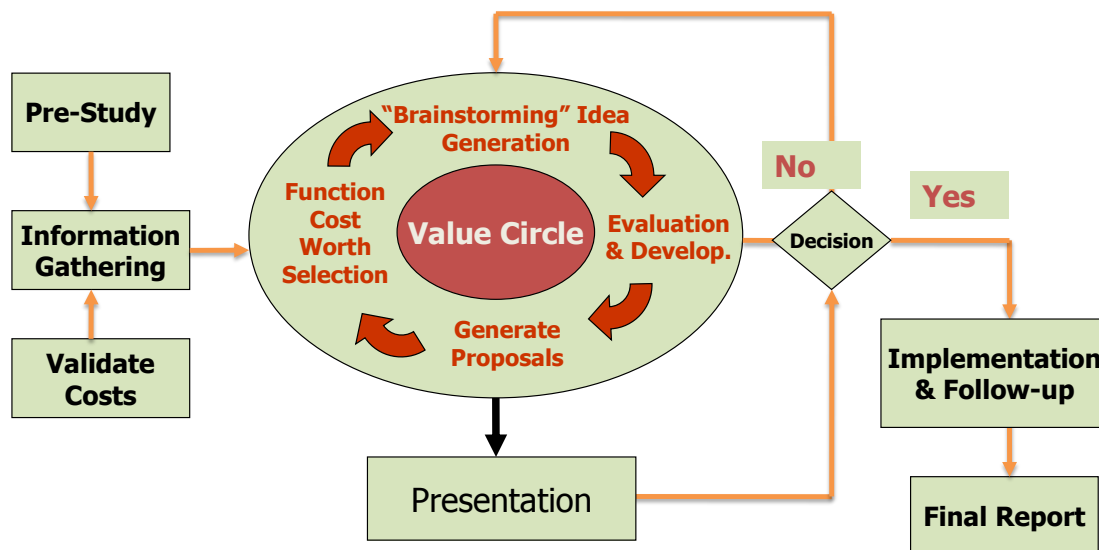


Note: Community Outreach and Internal QA/QC will be conducted by MC throughout the project time-frame.

Value Engineering and Constructability Reviews

Value Engineering (VE) is the method by which a project is studied and reviewed with the intent of generating cost improvements without sacrificing the project's needed performance levels. VE is a rigorous, systematic effort to improve the value and optimize the life cycle cost of a facility. Mathews Consulting has developed a unique and efficient approach to conducting value engineering studies:

- A team of in-house experts is assembled to participate in the workshop review session. Disciplines covered include civil, mechanical, process, structural, architectural, electrical, instrumentation and control, and/or operations as needed for the specific project requirements.
- The team utilizes brainstorming sessions coupled with independent reviews to identify VE proposals.



- VE proposals are thoroughly researched to present accurate capital and life cycle cost savings. A Function Analysis and Cost Model are developed for each project to validate project value and to establish target VE savings.
- The VE report is prepared in conjunction with the workshop session so that the client has immediate results at the end of the review period.

Value Engineering Recommendation		VE Rec. No.
Project:	East Central Regional WWTF Expansion	
Item:	Consider covering the proposed EQ tank and provide odor control system.	P - 5
Original Design		
Proposed tank is 180' diameter open top prestressed concrete tank with no odor control facilities.		
Proposed Design		
Propose similar size tank but provide geodesic dome cover and odor control system.		
Discussion - Advantages and Disadvantages		
This will reduce odors only when extreme flows are being equalized, but will cost significantly more both in capital and operating cost.		
Advantages: <ul style="list-style-type: none"> • Marginally reduce odors 		
Disadvantages: <ul style="list-style-type: none"> • Higher capital and operating costs • Additional maintenance cost 		
Life Cycle Cost Summary		
	Initial	Annual
Original		
Proposed	1,044,000	45,000
Savings	(1,044,000)	(45,000)
	PW Annual Savings at (Factor)	10.59
	Total Savings (Initial + PW Annual)	\$(US) (1,520,550)

Summary of Potential Cost Savings			
Project: East Central Regional WWTF Expansion		Date: 3/16/01	
Location: Palm Beach County		Initial Savings	Life Cycle Savings
Proposals			
YARD-SITE			
Y - 4	North CCB, eliminate 48" line and plug @ effluent PS.	29,557	29,557
Y - 5	Eliminate effluent PS/ North CCB 48" parallel line.	111,675	111,675
YARD-SITE TOTAL		141,232	141,232
PROCESS-EQUIPMENT			
P - 1	Sheet M-5 EQ tank transfer pumps consist of 6 pumps and 6 lines. Suggest 4 pumps and fewer lines.	120,452	120,452
P - 4	Revise gravity flow line from EQ tank to AB 7. Consider hard-pipe to bottom of basin in lieu of complex concrete trough.	70,475	70,475
P - 5	Consider covering the proposed EQ tank and provide odor control system.	-1,044,000	-1,520,550
P - 6	Check mixer design for EQ tank. Appears too small. Use feed pumps to recirculate	60,063	66,787
P - 8	Consider single stage, modulating vane blowers in lieu of multi-stage blowers.	-182,700	587,532
P - 14	Utilize new 5 MG tank as primary EQ Basin	-1,510,799	-4,105,349
P - 17	Proposed roll up door in chlorine bldg will not work with monorail. Provide monorail extension & change doors to bifold	7,569	7,569
P - 20	Recalculate max Day O2 demand and use 1 mg/l D.O. May result in 1 less blower.	571,851	649,158
P - 23	Eliminate effluent P.S. expansion	1,985,478	1,985,478
Process-Equip. Total		78,389	(2,138,448)
STRUCTURAL			

To facilitate workshop progress and to enhance the presentation of results, Mathews Consulting has developed custom forms for value engineering projects. The forms list VE and constructability comments according to discipline so that the results are easy to reference and implement by the Design Team. Detailed cost proposal forms ensure cost estimates compare "apples to apples", represent "true" life cycle costs of the item and include proper construction markups.

Constructability reviews are conducted in the mid to later project design stages to ensure constructability and clarity of the design documents and to avoid conflicts, delays, and added costs. These reviews minimize the need for redesign, reduce construction costs, expedite project completion, and reduce environmental impacts and long-term maintenance costs.

Constructability reviews measure the ease with which a project design can be built while complying with the drawings, specifications, construction schedule, quality control requirements, and budget constraints. The reviewer identifies areas where the ability to build a facility can be improved by

listing construction constraints and sequencing the design components to meet the construction schedule.

Cost Estimates

Cost estimates will be prepared at the 30, 60, and 100 percent completion stages. The cost estimates will reflect changes in general scope, and additional design requirements that may be incorporated during the design review stages. This affords the City the opportunity to make changes in project direction based on construction budget constraints.

Permitting

Typical civil/utility type projects that involve water and wastewater are permitted through the Palm Beach County Health Department (PBCHD) and drainage facilities are permitted through South Florida Water Management District (SFWMD). It is very important that the regulatory agencies be involved in the project from the outset. This participation is vital to obtain information and direction, which may be critical to the success of the project. For this reason, we typically hold a pre-application conference with the regulatory agencies to discuss the project and troubleshoot any potential problems.

After approval by City staff of the 60 percent submittal, the contract documents will be submitted to the appropriate regulatory agencies for construction permits. **Mathews Consulting has a strong professional relationship with all regulatory agencies in South Florida.** This has been developed over many years of working with the various regulatory agencies in South Florida.

Bidding

The bid review process is very important in order to ensure that the Contractor selected for the work is qualified to provide the construction services in the bid documents. In all of our conventional design-bid-construct projects, Mathews Consulting evaluates the bids submitted by the General Contractor's. The bids are typically evaluated for the following items:

- Bidder maintains a permanent place of business and is fully licensed.
- Bidder has adequate manpower and equipment to do the work properly and expeditiously.
- Bidder has suitable financial resources to meet the obligations of the work.
- Bidder will perform a specified percentage of the work using his own forces.

- Bidder's Project Manager is experienced in executing the required work.
- Subcontractor's proposed for use are qualified to perform the work.
- Bidder meets insurance requirements.
- All bid forms are filled out correctly.
- The bid prices are mathematically correct if a unit price bid is used.
- Any addendum's are acknowledged.
- Bid Bond (5% bid price) is submitted with bid.
- Mathews Consulting checks the bidders references.

After Mathews Consulting has evaluated the bids we typically recommend the lowest responsible and responsive bidder whose bid meets the requirements of the Contract Documents and provides the City the best value. In situations, where the lowest bidder is not qualified, we then evaluate the second low bidder, and so forth, until a bidder is selected.

The Bid Phase Services for this Contract may include the following tasks:

- Provide pre-bid services, such as assistance with advertisement, answering questions from potential bidders, and prepare responses for issuance of addenda to the plan holders by the City.
- Respond to questions from prospective bidders and suppliers and prepare responses for issuance of addenda by the City.
- Participate in Pre-Bid meetings with interested contractors and City staff. Prepare responses as a result of the meeting, for issuance of addenda by the City.
- Review bid packages received, document the due diligence process, and recommend award for each project.
- Prepare the required sets of conformed Contract Documents for execution by the selected contractor. The conformed sets will include addenda issued during the bid phase and the awarded contractor's schedule of bid items.

Community Outreach

As with any infrastructure improvements project, including roadway and underground utility infrastructure improvements in residential neighborhood(s) and/or business districts, positive public relations are a vital aspect of the program. Our approach to Community Outreach is to keep the public and City Officials informed and involved. By using a proactive “Good Neighbor” approach with the public, the City can generate a partnering relationship with the affected residents. This can be done by keeping the public aware of project scope, road closures, schedules, and benefits of project through handouts, flyers, etc. We will tailor the public relations campaign to meet the specific needs of the City of Delray Beach for these particular project(s). The following outlines our approach to Public Relations:



The Residents and Business Owners Matter

Our Team understands that the public matters when it comes to a successful project. At the heart of the project are a series of tactics that will serve as the implementation component of the public education and outreach program. These tactics are summarized below and incorporate a variety of public education on outreach techniques.

- Conduct community outreach meetings
- Develop presentations and provide speakers to attend public meetings
- Post project updates on City's Web site
- Establish and maintain a project telephone information line
- Prepare traffic advisory flyers
- Provide email alerts
- Prepare project press releases and project fact sheets
- Develop and distribute a project newsletter

The objective of the community outreach program is to convey information to the public and interested groups. By using a multi-faceted approach to convey information, the success of the effort is optimized. For example, individuals wanting specific information about a certain area of the project may feel more comfortable leaving a message on the telephone information line, instead of asking a speaker a question in front of a group, or sending an email or written letter. The

Community Outreach Plan describes the general approach and specific benefits of each element of the program.

Newsletter / News Release

Newsletters will be written to include information, calendars of service days, telephone numbers, information about the Web site, and maps. The newsletters will be printed and distributed at fundamental intervals. Newsletters differ from press releases, in that a newsletter will have a smaller audience, greater depth of reporting, and more issues presented than a press release. Each newsletter will explain how to provide input. Newsletter distribution points are identified by the following locations:

- City Hall
- Delray Beach Environmental Services Department
- Delray Beach CRA

Newsletter distribution points will be identified on the project Web site and via press releases distributed to the local media. Although the primary method of distribution will be at established distribution points, newsletters will be mailed out upon specific request. Based on need, newsletters can be printed in English on large-type formats.

Email Alerts

If the City has the capability to use email alerts to residences regarding issues and other announcements, this tool can be used to share information about the project.

Telephone Information Line

A dedicated telephone line can be developed to provide access for interested parties to leave questions, comments, and/or concerns on a voicemail system. Callers may leave messages and questions for senior staff to address. The number of the telephone line will be listed in newsletters and on the Web site. This service is internet based and transfers calls to a designated cell phone or any number programmed into the system. This system also allows for emergency call response.

Website

In today's fast moving technological environment, citizens want timely and accurate information. The City has a functional and easy-to-use Web site. Because the citizens are familiar with City's Web site, it can be used to provide information and description of the project and project schedule. The Web site can be updated on a weekly or monthly basis, or as frequently as City updates the information.

Community Outreach Meeting

Working with City staff and elected officials, our team will schedule community outreach meetings to inform the residents. These meetings will give an overview of the project budget, design and construction schedule. The community outreach meeting will also help to facilitate accurate information to the residents and businesses.

- Focus on residences
- Focus on commercial interest

Press Releases

As important developments warrant, the Mathews Consulting Team will prepare press releases, project fact sheets, and traffic advisory flyers for local distribution. While newsletters address several issues with depth, press releases are limited on the number of items discussed and are typically constrained on the depth to which it addresses an issue. Press releases also have a wider audience than do newsletters. As with newsletters, press releases will be prepared at intervals when public awareness is encouraged or during significant events. These press releases can be disseminated via the local radio stations, local newspapers, etc.

Summary

A Community Outreach Plan is effective when several facets are implemented as part of a coordinated program. In certain situations, single elements of the plan may be more effective than other elements. Combining several techniques in conveying project information to the public creates an optimal approach.

Design Support During Construction

Mathews Consulting shall provide design support during construction of the project including:

- Providing any construction clarifications
- Assisting the City & Construction Manager as necessary
- Attending construction meetings as requested

City Staff Involvement

Our Team's project philosophy is to match experienced individuals with the Owner's staff when developing the project goals and defining the desired outcome. Key to the success of the project is frequent communication between Owner's staff, and the design team at scheduled meetings. There is no substitute for interpersonal interaction throughout the implementation phase to ensure a clearly defined set of deliverables that meet the Owner's and staff's expectations.

The Project Team Organization Chart shown in Section 6.6 of this proposal defines the lines of communication between team members and shows the flow of information to and from the City Staff. Our Team's philosophy is not to employ unnecessary layers of management (i.e., project administrator, client coordinator, principal in charge, etc.), but to require **direct, open interface between the City Staff and our project manager and staff members.**

Project Management Philosophy

Development of a sound approach and methodology is of primary importance for completion of projects in a timely and cost effective manner. This is especially evident for projects with fast track schedules. This section briefly outlines the basic project management philosophy followed by Mathews Consulting. The principals of Mathews Consulting's Project Team are involved in all facets of projects, which ensures that full attention is paid to every work assignment. We place a high emphasis on "getting the job done right". The success of this philosophy is evidenced by the repeat business that we have received from our current clients.

Project Management

The overall contract will be administered by our Project Manager, David L. Mathews, P.E., who has the direct authority to commit the resources as required for the successful completion of the project(s). The Project Manager is responsible for maintaining full knowledge of all aspects of the

project. This approach is designed to provide one person answerable to the City at all times. Our project management framework results in direct lines of communication and responsibility and allows for simple project coordination.

For infrastructure construction projects in residential neighborhoods and/or business districts (e.g. roadway reconstruction and underground utility improvements, etc.), it is extremely beneficial to have the Project Manager integrally involved with the project – from conceptual design through construction services. This will ensure continuity during the entire duration of the project(s). Our Project Manager will be "hands-on" during the design and construction of projects under this contract with the City.

Schedule Control

It is important that each and every work authorization meet the established time schedule. The Project Manager will be responsible for schedule compliance. Mathews Consulting's principals review schedule compliance on a bi-monthly basis at project schedule control meetings and take appropriate action to prevent slippage with it first becomes apparent.


Cost Control

Just as it is with schedule control, it is essential that all work authorizations stay within approved budgets. Each task and associated subtasks will be tightly managed to achieve this goal. Work authorization budgets will be established by task and by subtask.

These budgets will be used as the basis against which actual costs will be measured. The Project Manager will be responsible for maintaining the task or subtask within the budget.

Quality Assurance / Quality Control

Our Team recognizes the importance of a clear focus on ensuring quality. Our Quality Control Manager will monitor the implementation of the QC program on each task order and will ensure that all work is performed in conformance with the "QA/QC Plan". The committee will work with the project manager to select an appropriate senior reviewer for each delivery order based on applicable experience and technical expertise.



**Quality is not a
"one time"
commitment,
but rather a
continuous
process of
improvement**

Our Team's quality management program incorporates oversight of specific quality control functions to ensure that:

- Project staff including subcontractors are qualified to perform their duties and meet all regulatory and project specific training requirements.
- Items and services procured for the project meet necessary quality requirements.
- Quality related work is documented and documents are managed and controlled.
- Computer hardware and software is controlled.
- Work is properly planned.
- Work procedures are established where necessary.
- Work is reviewed and quality processes are audited for effectiveness.
- Deficiencies are documented and effective corrective action is promptly completed.

Our Team's QA/QC program emphasizes to all project members that quality is not a "one time" kind of commitment, but rather is a continuous process of improvement.

Professional Ethics

Mathews Consulting's policy is to uphold the highest ethics for all actions and work products implemented by the company in conducting our daily business activities. Rene Mathews, P.E., the company's Vice President, is responsible for overseeing the ethics practice of the firm and our employees. The firm has developed an "Employee Manual" which details company policies and procedures, including the requirements for each employee to maintain proper ethics in performing their duties. The Manual specifically prohibits the disclosure of confidential information from our clients, and prohibits the acceptance of gifts and gratuities from any source which could, in any way, be construed as interfering with impartial and objective execution of one's duties. Each employee is required to sign an acknowledgement that they have read and agree to follow all policies of the company Employee Manual.

Our Firm's ethics policy will ensure there are no conflicts of interest or improper performance in completing engineering services under this contract.

Cost Control Performance

Mathews Consulting is committed to producing high quality, cost efficient products within required time frames. The Principal Owners of the firm continually monitor the design and construction costs of each project. Also, we are extremely familiar with the construction contractors in South Florida and are aware of bidding conditions that can affect the construction cost of a project.

Table 6.1 is a record of recent cost estimates which shows our competence and dedication to providing clients with accurate project estimating. This is the best physical evidence an engineering firm can present as demonstration of project cost control performance.

Table 6.1
Mathews Consulting's Recent Cost Estimates

Project	Engineer's Estimate	Bid Was
City of Boca Raton Reclaimed Water Storage & Pumping Facility	\$5,200,000	\$3,914,909
City of Boca Raton On-Site Reclaimed Water Pumping Facility	\$811,000	\$730,000
City of Boca Raton West Reclaimed Water Main Extension	\$1,768,437	\$1,557,425
City of Delray Beach - 24" Reclaimed Water Main	\$321,522	\$271,364
City of Delray Beach - Country Club Acres Infrastructure Imp.	\$1,515,811	\$1,377,027
City of Delray Beach - Sea Sage Dr/Melaleuca Rd/Oleander Lane	\$984,063	\$1,126,755
City of Delray Beach - SW 12th/SW 11th Avenue Water Main	\$736,740	\$721,420
City of Delray Beach - Venetian Drive Infrastructure Imp.	\$1,495,164	\$1,458,795
City of Delray Beach - Area 1 Reclaimed Water System	\$1,484,995	\$1,312,100
City of Delray Beach - Area 2 & 3 Reclaimed Water System	\$1,500,000	\$1,731,265
City of Delray Beach - Area 11 Reclaimed Booster Pump Station	\$989,590	\$691,084
City of Tamarac - Tamarac Lakes Water Main Improvements	\$837,441	\$766,175
City of Tamarac - Southgate Blvd. Streetscape Improvements	\$1,449,717	\$1,239,469
City of Tamarac - McNab Road Water Main Improvements	\$477,250	\$486,832
City of West Palm Beach Monroe Drive Infrastructure Improvements	\$7,077,975	\$5,984,486
Loxahatchee River District - S. Seabrook Road Sewer System	\$1,689,931	\$1,494,589
Loxahatchee River District - Tidewater Drive Sewer System	\$290,081	\$274,156
Loxahatchee River District - Jupiter Highlands Low Pressure System	\$315,728	\$245,018
Palm Beach County - 30" Reclaimed Water Main	\$368,520	\$299,705
Palm Beach County - FPL On-site Reclaimed Water Facilities	\$3,600,000	\$2,772,000
Town of Gulf Stream - 24" Stormwater Outfall	\$44,746	\$39,655
Town of Lantana - Raw Water Supply Wells No. 11	\$755,000	\$631,500
Town of Lantana - Raw Water Supply Well No. 12	\$400,000	\$341,400
Town of Highland Beach A.1.A. Water Main Replacement	\$3,700,000	\$2,714,707
Average		-11.43%
(under engineer's estimate)		

Regulatory Agency Experience

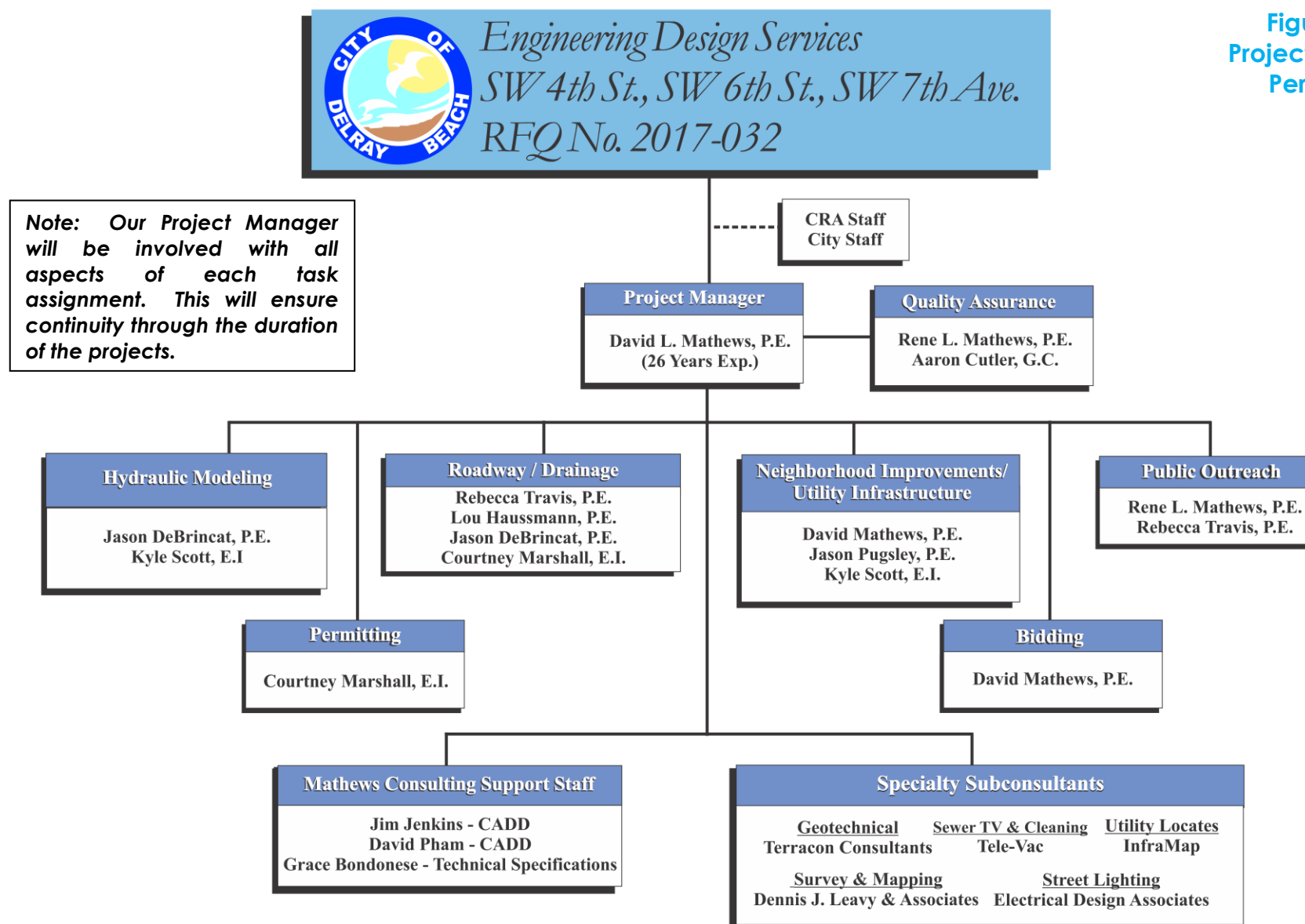
Mathews Consulting's staff for this Contract has extensive experience with all of the regulatory agencies that may be involved during the design and construction of the projects associated with this Contract. The following matrix provides a summary of each of our Staff Members experience with the identified regulatory agencies for this Contract.

Regulatory Agency	David Mathews	Rebecca Travis	Rene Mathews	Jason Pugsley	Jason Debrincat	Courtney Marshall	Kyle Scott
Florida Department of Environmental Protection (FDEP)	✓	✓	✓	✓	✓	✓	✓
Palm Beach County Health Department (PBCHD)	✓	✓	✓	✓	✓	✓	✓
South Florida Water Management District (SFWMD)	✓	✓	✓	✓	✓	✓	✓
Florida Department of Transportation (FDOT)	✓	✓	✓	✓	✓	✓	✓
Palm Beach County	✓	✓	✓	✓	✓	✓	✓
CSX/FEC Railway	✓	✓	✓	✓	✓	✓	

6.6 Firm Organization

Figure 6-3 illustrates the functional role of each key project member assigned to our Project Team for this Contract. The team organization stresses short and direct lines of communication between the Project Manager, Delray Beach Staff, and key project members. The Project Manager will select the respective technical support staff for each specific assignment in order to provide the City with the most efficient team of professionals. The Specialty Subconsultants (Surveying, Geotechnical, Utility Locates, Sewer Cleaning & Televising, and LED Lighting) will contract directly with Mathews Consulting on an as-needed basis. We are confident that our Team's organizational structure and qualifications will provide the City with the technical resources needed to successfully complete all assignments on schedule and within budget constraints. **Our Team is "quick, nimble and responsive."** It is important to note that our Project Manager, David Mathews, P.E., has successfully managed, designed and constructed numerous neighborhood improvement projects for municipalities in South Florida, including the Delray Beach Environmental Services Department and the Delray Beach CRA.

Figure 6-3
Project Team
Personnel



Project Manager's Experience

Mr. Mathews has over 25 years of experience in the planning, design, permitting, community outreach, bidding, construction and management of street beautification, neighborhood improvements, drainage, water and wastewater projects in redevelopment districts, commercial districts and along FDOT and County roadways.

Great services require a responsive leader:

- Mr. Mathews has managed and designed over \$225 million roadway / streetscape and utility infrastructure in the last 18 years while at Mathews Consulting.
- Mr. Mathews will be available to the City of Delray Beach on a Daily Basis.
- Mr. Mathews puts 110% attention & energy into every project task.
- Mr. Mathews implements "Good Neighbor" approach in residential and commercial areas.
- Mr. Mathews is successful in meeting fast-track schedules.
- Mr. Mathews ensures projects are cost effective.
- **Mr. Mathews will be dedicated to the City of Delray Beach for the duration of the contract period.**

Sub-Consultants

Mathews Consulting is submitting as the Prime Consultant for the Contract and we will be supported on an as needed basis by the following specialty subconsultants:

Subconsultant Firm	Expertise	Office Location
Dennis J. Leavy & Associates	Surveying & Mapping	460 Business Park Way, Suite B Royal Palm Beach, Florida 33411
Terracon Consultants	Geotechnical (Soil Borings)	1225 Omar Road West Palm Beach, FL 33405
InfraMap, Inc.	Utility Locates (Soft Digs)	1860 Old Okeechobee Road, Suite 201 West Palm Beach, Florida, 33409
Electrical Design Associates	Electrical Engineering	8401 Lake Worth Rd., Suite 221 Lake Worth, FL 33467
Tele-Vac	Sewer & Drainage Cleaning and TV	221 NE 13 th Street Pompano Beach, FL 33060

The Mathews Consulting Team is committed to providing the City with the highest quality engineering and construction solutions that will save you time and money. We do this by providing you with a team of experienced and technically superior professionals who know how to implement innovative, cost-saving ideas.

All of our specialty Subconsultants have worked with Mathews Consulting on past City projects and municipal infrastructure improvement projects. Our continued working relationship as a Team will ensure there is no learning curve in the services that will be included under this Contract for the City of Delray Beach.

Our Project Team offers compatible backgrounds, capabilities, and philosophies consistent with the City's needs and requirements. We have established team member roles and responsibilities utilizing the following guidelines.

- Assignment and dedication of the principal owners of each firm to specific work task(s).
The principals of each firm will be responsible for leading and performing the work.
- Best available technical expertise to ensure project quality.
- Extensive team experience on similar projects.

We are confident that our Project Team will provide the City with outstanding services in an efficient and cost-effective manner.



DENNIS J. LEAVY & ASSOC.



Mathews Consulting will utilize **Dennis J. Leavy & Assoc.** to assist with surveying, mapping and GIS services for the contract. Dennis J. Leavy & Associates is a Land Surveying and Mapping Firm established in 1994 and is located in Palm Beach County, Florida. They offer a wide spectrum of services to all aspects of the Municipal Engineering, Land Development and Construction trades. Their land related services include, but are not limited to: land surveying, land planning, land development consulting, and platting. Dennis J. Leavy takes pride in their ability to offer a quality professional service in a timely manner at very competitive rates.

The firm employs four Registered Land Surveyors with over 80 years combined experience which enables this firm to offer a vast variety of knowledge in all aspects of the land surveying profession.

For fast and accurate performance on the forefront of technology, Leavy's field crews are equipped with an array of equipment, including Global Positioning Systems (GPS), Geodetic Total Stations (Topcon) and Data Collection (TDS). In order to meet the need of any job request, their firm also owns and maintains an airboat, two wave runners, three all terrain cycles, one all terrain vehicle, an aluminum boat, and four four-wheel drive pick-up trucks. To compliment the efforts of field crews, the office staff is equipped with Civil 3D Release 2013. Mr. David Bower qualifies the firm under certificate No. LB-0006599 issued by the Florida State Board of Professional Surveyors and Mappers.

Leavy's Elements of Service:

- | | |
|--|---|
| <input type="radio"/> Boundary Surveys | <input type="radio"/> Project Management |
| <input type="radio"/> Topographic Surveys | <input type="radio"/> Legal Description Preparation |
| <input type="radio"/> Right-of-way Surveys | <input type="radio"/> Control Surveys |
| <input type="radio"/> Hydrographic Surveys | <input type="radio"/> As-Built Surveys |
| <input type="radio"/> Platting | <input type="radio"/> Record Drawings |
| <input type="radio"/> Title Searches | <input type="radio"/> ALTA/ACSM Surveys |

For this Contract, Dennis J. Leavy & Associates will provide surveying, mapping and GIS services. Dennis J. Leavy's primary liaison for this Contract will be David Bower, Dennis J. Leavy & Associates, 460 Business Park Way, Suite B, Royal Palm Beach, Florida 33411, (561)-753-0650.



Terracon is a dynamic and growing engineering and scientific consulting firm providing multiple related service lines to clients at local, regional and national levels. They offer specialized engineering services throughout Florida, working with thousands of private and public sector clients. With the strength of firm and our existing operations, Terracon has a tremendous presence and broad scope of knowledge in South Florida. Terracon is a 100 percent employee-owned consulting engineering firm providing quality



services to clients. Since 1965, the firm has evolved into a successful multi-discipline firm specializing in:

- Environmental
- Facilities
- Geotechnical
- Materials

Over its history, Terracon has achieved significant expansion through both internal growth and acquisitions. Nodarse & Associates, Inc. and Dunkelberger Engineering & Testing, Inc. joined Terracon in 2011 and 2013, respectively. The firm currently has more than 3,400 employees in 150 offices and 42 states nationwide. Additionally, we partner with our U.S. clients to serve their international needs. The firm's success is further evidenced by a current ranking of 35 in *Engineering News-Record's* 2014 listing of the Top 500 Design Firms, as compared to a ranking of 54 a decade ago. Terracon's growth is due to dedicated employees who are responsive to clients, provide quality services, and take advantage of opportunities in the marketplace.

Terracon provides services on thousands of projects each year. Their culture, systems, and structure enable them to excel at both small and large projects. By combining their national resources with specific local area expertise, they consistently overcome obstacles and deliver the results our clients expect.

Terracon has been providing services for state and local governments in Florida through continuing services contracts since the early 1990's. Currently they hold over 100 continuing services (geotechnical, construction testing and inspection, building inspection, and environmental assessments) with more than 85 different governmental agencies in the state.

Terracon serves a diverse portfolio of private and public clients. By being responsive, resourceful, and reliable, they strive to exceed their clients' expectations for service, solutions, quality, and speed of delivery. Based on a deep understanding of our clients' needs, Terracon's commitment is centered around these key objectives.

For this contract, Terracon will provide geotechnical services (i.e. soil borings). Terracon's liaison for this contract will be Kevin Aubrey, Terracon, 1225 Omar Road, West Palm Beach, FL 33405, 561-689-4299.



Mathews Consulting will utilize **InfraMap Corp.** to provide underground utility locates (soft-digs) for the Contract. InfraMap Corp. was founded in 1987 and is a leading provider of Utility

Infrastructure Mapping and Subsurface Utility Engineering (S.U.E.) services. Their clients include State and Local Transportation Departments, Airports, Port Authorities, Utility Municipalities and Engineering Consultants. They have performed some of the largest utility mapping projects ever undertaken by any firm.

InfraMap has the resources to perform and deliver multiple large scale projects on time throughout the United States as evidenced by our past and recent performance. InfraMap collects utility infrastructure data in the field using sophisticated geophysical techniques and instrumentation (including Ground Penetrating Radar/GPR), with automated data collection and state of the art survey equipment (including Spectra/ Global Positioning System/ GPS). They then merge this information onto the client's base mapping in their desired format. InfraMap collects and presents this data to aid their clients in reducing the design and construction cost of major infrastructure projects.



InfraMap's primary liaison for this Contract will be Jay Scagliola, InfraMap Corp., 1860 Old Okeechobee Road, Suite 201, West Palm Beach, Florida, 33409, 561-420-8367.



Electrical Design Associates

Electrical Design Associates, Inc. is a small sized consulting engineering firm specializing in electrical and instrumentation design.

They provide consulting engineering services primarily to the public sector. In September of 1998, Electrical Design Associates, Inc. was formed as a minority owned business (WBE) with offices in Palm Beach County, Orange County and Hillsborough County. Their present staff includes registered engineers, an instrumentation designer, and designer/Cadd technicians.

EDA's electrical experience includes electrical and instrumentation system designs for industrial plants, specifically Water and Wastewater Treatment Facilities located throughout the state of Florida. EDA's electrical distribution system experience covers the full range up to 4,160 volt distribution systems as well as standby generator systems. Our instrumentation systems design experience includes SCADA and PC based systems, as well as numerous traditional plant monitoring and control panel designs. Our design experience encompasses computer/PLC controlled systems utilizing SCADA based systems for interfacing to remote locations, as well as hard wired relay controlled custom solutions.

Electrical Design Associates, Inc. is staffed to provide engineering services from inception through design, bid and construction completion. They take pride in the fact that while they are a small sized firm, they utilize state of the art computerization to accomplish design projects and project management which allows them to provide enhanced production quality, lower operating costs and closer engineer participation.

EDA's Elements of Services:

- | | |
|---|--|
| <input type="radio"/> WWTP / WTP / Reclaimed Facilities | <input type="radio"/> Value Engineering |
| <input type="radio"/> Instrumentation Systems | <input type="radio"/> Sports Field Lighting |
| <input type="radio"/> SCADA Systems | <input type="radio"/> Roadway Lighting |
| <input type="radio"/> Telemetry Systems | <input type="radio"/> Parking Lot Lighting |
| <input type="radio"/> Studies | <input type="radio"/> Industrial Controls |
| <input type="radio"/> Power Distribution | <input type="radio"/> Construction Inspections |

Electrical Design Associates design staff brings to this Contract vast electrical and instrumentation design and project management experience.



Mathews Consulting will utilize **Tele-Vac** to provide sewer televising, cleaning and rehabilitation for the Contract. Tele-Vac is a professional sewer company qualified to provide complete service and analysis, utilizing the most advanced equipment available along with a full staff of trained professionals with over 250 combined years of experience. Established in 1991, Tele-Vac is a dynamic, growing company specializing in television inspection and hydro-jet cleaning and vacuuming. Tele-Vac provides complete services and evaluation on sewers efficiently and effectively.

Firm's Resources

Our Project Team uses state-of-the-art engineering equipment, hardware and software for execution of all projects. This ensures efficient execution of all projects and services to our clients. The following sections describe our equipment base, software packages, and in-house expertise.

Office Equipment

Mathews Consulting has standardized on DELL® Computers, Hewlett Packard® color plotters / laser printers and MicroSoft® software. DELL® computers and HP printers provide the highest quality and reliability for hardware systems. **Each** employee of Mathews Consulting has been provided with a desktop or laptop computer with full internet and e-mail access. This ensures the most reliable network of communication within our firm and to our clients. Mathews Consulting has the ability to provide complete in-house printing and preparation of construction drawings and technical specifications.

CADD Systems

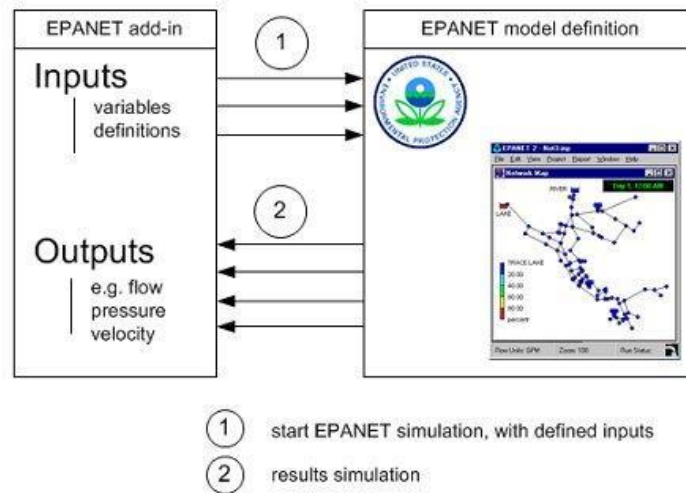


All of our Project Team designs are computer generated using AutoCAD Civil 3D version 2016. This allows seamless interface with all members of the design team, from surveying through the record drawing phase. All design work will be prepared in our local West Palm Beach office.

Computer Modeling

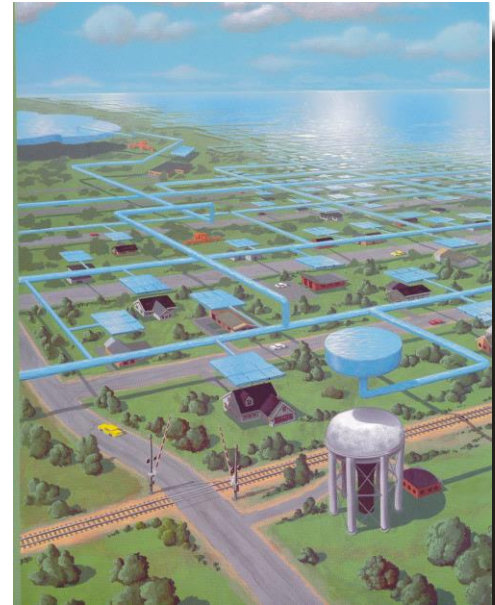
Mathews Consulting is proficient with several hydraulic modeling programs. These include *EPANet*, *Waterworks*®, *Cybernet*®, *WaterCAD*®, *SewerCAD*®, and *ICPR*®.

Developed by EPA's Water Supply and Water Resources Division, *EPANet* is software that models water distribution piping systems. It is a Windows 95/98/NT/XP program that performs extended-period simulation of the hydraulic and water quality behavior within pressurized pipe networks.



WaterCAD® is a program from Bentley/Haestad Methods which models the design and analysis of complex pressurized systems. The program performs the following functions:

- Performs steady state analysis of water distribution systems with pumps, tanks and control valves.
- Performs extended period simulations to analyze the piping systems' response to varying supply and demand schedules.
- Performs water quality simulations and determines the water source and age, or track the growth or decay of a chemical constituent throughout the network.
- Performs Fire Flow Analyses on systems to determine how it will behave under extreme conditions.



The program also provides for profiling and enhanced pressure contours.

SewerCAD®, also a program from Bentley/Haestad Methods, models the design and analysis of gravity flow and pressure flow through pipe networks and pumping stations. The program can be

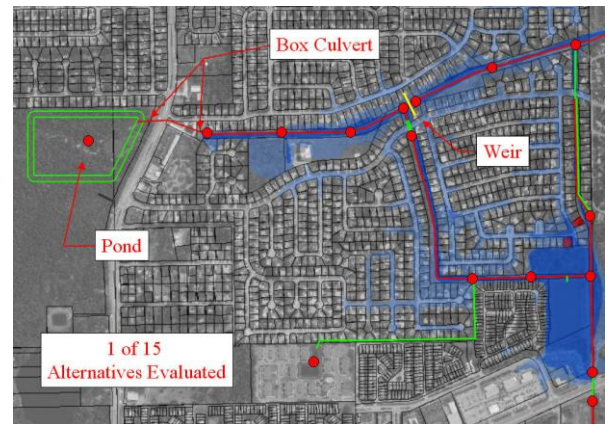
run in AutoCAD mode or in Stand-Alone mode utilizing a separate graphic interface. The program performs the following functions:

- Designs multiple sanitary sewer systems.
- Analyzes various design scenarios for sanitary sewer systems.
- Imports and exports AutoCAD and MicroStation .DXF files.
- Generates plan and profile plots of a network.
- Performs detailed cost estimating using an integrated cost analysis modeling subsystem.

Mathews Consulting is also proficient in stormwater modeling and pipe sizing, utilizing programs such as *ASAD*® (Automated Storm sewer Analysis & Design), *Cascade*®, *ICPR*® (Interconnected Channel and Pond Routing Model), and *StormCAD*®.

ICPR®, a Streamline Technologies product, is a flood routing software that provides solutions for interconnected and hydraulically interdependent stormwater ponds. This software also allows for the modeling of channels and pipe systems. Typical applications for this program include:

- Stormwater Management Master Plans
- Detention Pond Design
- Roadway Drainage Systems
- Stormwater Retrofits



StormCAD® is a Bentley Solutions software that provides a comprehensive design and analysis of a stormwater system. This program has the ability to run within AutoCAD to improve efficiency by allowing the Design Engineer to model the stormwater network while at the same time “drafting” the pipe network for the design plans. It can also be used in a stand-alone application. The following are select features within *StormCAD*®:

- Steady-state simulations
- Diversion simulation
- Curb, grate, ditch, slot, generic, combination, and user-defined capture curve inlet types

- Open channel and closed conduit hydraulics

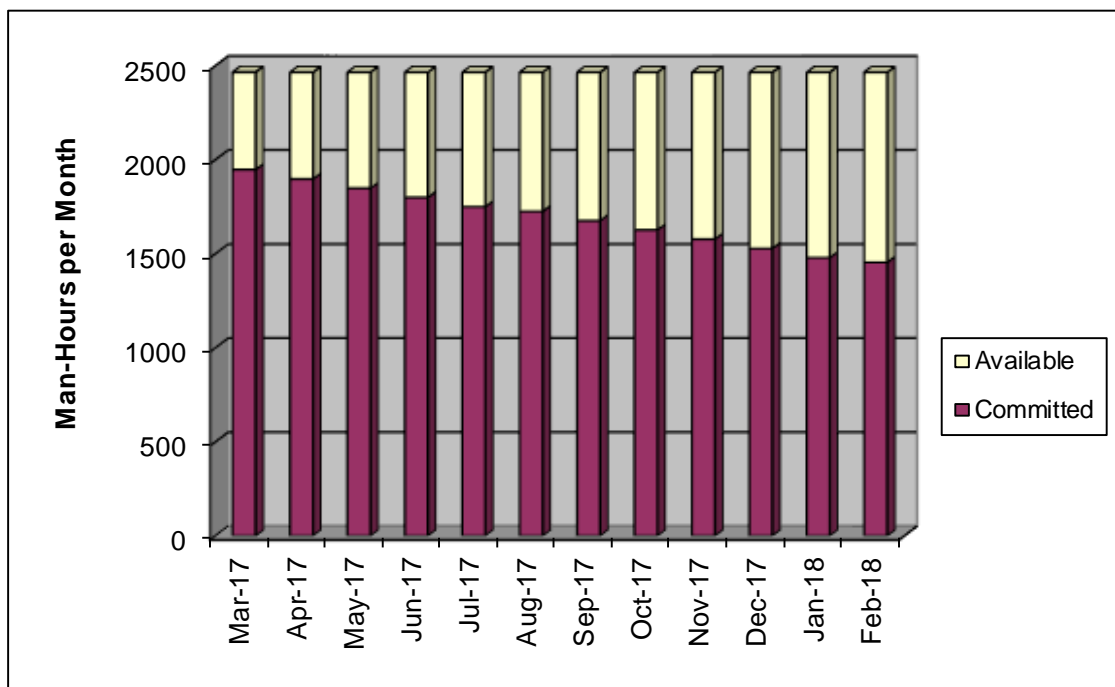
Current Workload & Availability

Mathews Consulting is available to begin the work tasks associated with this Contract immediately. Our experienced staff and team members permit us to commit all of our necessary resources to the City of Delray Beach Engineering Design Services for SW 4th Street, SW 6th Street, and SW 7th Avenue. Our team is committed to assign the most qualified, technical expertise to this project assignment, meet the required schedules and budgets, and produce exceptional project results.

Our Project Manager, David Mathews, P.E., will be fully dedicated to this Contract and to the City to ensure that all project tasks are performed on time and within budget. **Our Project Manager will be available for the duration of this Contract.**

Mathews Consulting's projected workload is presented in **Figure 6-4**. The chart shows that we have more than enough man-hours available to provide Design, Permitting, Bidding, Construction Assistance Services for this Contract. We are immediately available to provide exceptional engineering design services to the City of Delray Beach.

Figure 6-4
Workload



As the chart demonstrates, our workload availability far exceeds the required staffing allocation for this project. **This Project will be our TOP PRIORITY, and we will devote all required resources and personnel to the Project that is required to complete the project tasks efficiently, with the highest quality of standards.**

Commitment to Perform

The City of Delray Beach needs a consultant who will work as a partner with your staff – one who will be a proactive extension of your staff. Mathews Consulting has a solid track record of partnering with local utility clients to deliver the high level of personal service you desire. We are structured to allow for a long-term commitment of specific staff to serve your needs. **By having principal owners directly involved, there is no “revolving door” of staff with our project team.** Mathews Consulting along with our Team Members are committed to our utility practice in South Florida. Our highly experienced team will be accessible and responsive to your needs at all times.

Mathews Consulting's primary goal is to provide the City of Delray Beach with an **experienced, cost effective, responsive and accessible** Engineering Design team that will help you improve and develop the best possible infrastructure to serve Delray Beach residents and businesses, while meeting your technical, budget, and schedule needs. Mathews Consulting firmly understands the work to be completed in this Contract, and based on our proven ability on past South Florida Municipal engineering projects (including the City of Delray Beach), we give 110% commitment to complete every project task within the required time and budget constraints. Mathews Consulting is the best qualified firm to perform this engagement based upon our proven engineering design ability and experienced team that is available for the duration of this Contract.

Office Location

Mathews Consulting, a Baxter & Woodman Company, operates its Florida Regional office located at **The Offices at CityPlace North, 477 S. Rosemary Avenue, West Palm Beach, Florida**. All of our Florida design work and construction administration is done at this office location. We are located approximately 18 miles from the City of Delray Beach. We are also located within minutes of the following regulatory agencies: FDEP, PBCHD, SFWMD and FDOT. **Our close proximity**

to the City of Delray Beach will ensure immediate response and direct availability of our staff.

Our office location is very close to the City of Delray Beach, and this ensures that we are immediately accessible and available to the City to attend meetings, and to provide general communications, coordination and supervision of all of our projects.

All of our staff can easily attend pre-scheduled meetings personally due to our close proximity to the City and short driving times.

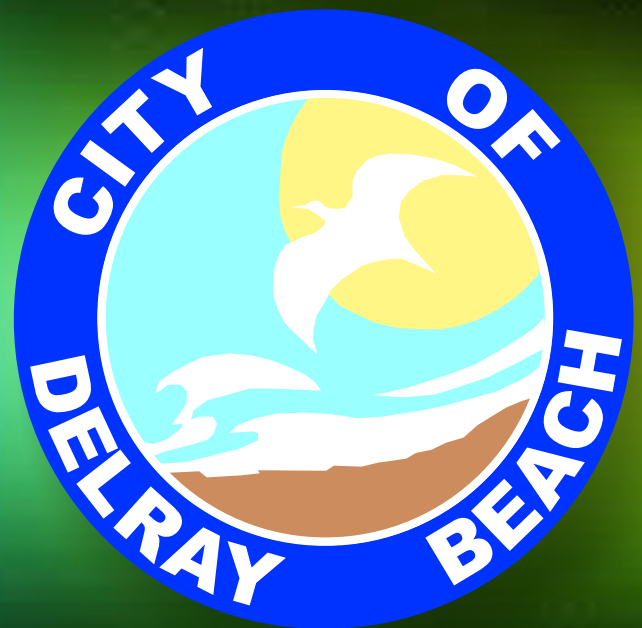
As we have demonstrated to the City on past projects, we ensure accessibility and availability of our staff during the term of our Contract.

Our Company website can be found at: www.baxterwoodman.com. The office locations for our Subconsultants are listed below.

Subconsultant Firm	Expertise	Office Location
Dennis J. Leavy & Associates	Surveying & Mapping	460 Business Park Way, Suite B Royal Palm Beach, Florida 33411
Terracon Consultants	Geotechnical (Soil Borings)	1225 Omar Road West Palm Beach, FL 33405
InfraMap, Inc.	Utility Locates (Soft Digs)	1860 Old Okeechobee Road, Suite 201 West Palm Beach, Florida, 33409
Electrical Design Associates	Electrical Engineering	8401 Lake Worth Rd., Suite 221 Lake Worth, FL 33467
Tele-Vac	Sewer TV / Cleaning / Rehab	221 NE 13 th Street Pompano Beach, FL 33060

Chapter 7

Insurance, Licenses
& Certificates



Chapter 7

Insurance, Licenses & Certificates

This Section provides our insurance, licenses and certifications to perform the required services. Information is organized as follows:

- Proof of Insurance
- State of Florida Department of State Certification
- State of Florida Board of Professional Engineer's Business Registration License
- Florida Department of Transportation (FDOT) Certification

7.1 Proof of Insurance

In this section, please find certificates of insurance which indicate Mathews Consulting, a Baxter & Woodman Company's current level of insurance in the areas of General Liability, Worker's Compensation, and Professional Liability.

It is important to note that Mathews Consulting currently maintains a \$5 million Professional Liability insurance policy.

7.2 State of Florida Department of State Certification

Baxter & Woodman is authorized to do business in Florida as of May 2, 2016. Please see our State of Florida Department of State Certification No. F16000002059 at the end of this section.

7.3 State of Florida Board of Professional Engineer's Business Registration License

Baxter & Woodman's State of Florida Board of Professional Engineer's Business Registration Number is EB #31795. A copy of our engineering business license, as well as a copy of our engineer's licenses, are provided at the end of this section.

7.4 Florida Department of Transportation Certification

Mathews Consulting is certified by the Florida Department of Transportation for the following work categories:

- 3.1 Minor Highway Design
- 3.2 Major Highway Design
- 4.1.1 Miscellaneous Structures
- 4.1.2 Minor Bridge Design
- 7.1 Signing, Pavement Marking & Channelization
- 7.2 Lighting
- 7.3 Signalization
- 10.1 Roadway Construction Engineering Inspection

A copy of our certification is provided at the end of this section.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/3/2016

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

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

PRODUCER Risk Strategies Company 650 Dundee Road Suite 170 Northbrook IL 60062		CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:	
INSURED Mathews Consulting, a Baxter & Woodman Inc. Company 477 S. Rosemary Av., #330 West Palm Beach FL 33401		INSURER(S) AFFORDING COVERAGE INSURER A: Valley Forge Ins Co INSURER B: Continental Casualty Co INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 20508 20443	

COVERAGES**CERTIFICATE NUMBER:** CL168318171**REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			6018314414	5/1/2016	5/1/2017	EACH OCCURRENCE \$ 1,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000
	<input checked="" type="checkbox"/> primary/non contributory						MED EXP (Any one person) \$ 15,000
	<input checked="" type="checkbox"/> subj to written contract						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						PRODUCTS - COMP/OP AGG \$ 2,000,000
	OTHER:						\$
A	AUTOMOBILE LIABILITY			6018314364	5/1/2016	5/1/2017	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS		<input type="checkbox"/> SCHEDULED AUTOS				BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS		<input checked="" type="checkbox"/> NON-OWNED AUTOS				PROPERTY DAMAGE (Per accident) \$
							\$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB		<input checked="" type="checkbox"/> OCCUR	6018314381	5/1/2016	5/1/2017	EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> EXCESS LIAB		<input type="checkbox"/> CLAIMS-MADE				AGGREGATE \$ 5,000,000
	DED \$		RETENTION \$				\$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			6018314400	5/1/2016	5/1/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N	N/A				E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liability			AEH591900841	5/15/2016	5/01/2017	Per Claim \$5,000,000 Aggregate \$5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Re: 2012 General Engineering Consulting Services Agreement. City of Delray Beach is included as additional insured as respect GL/Auto/Umbrella, subject to written contract requiring same per blanket endt.

CERTIFICATE HOLDER**CANCELLATION**

City of Delray Beach
434 S. Swinton Avenue
Delray Beach, FL 33444

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Michael Christian/JAW

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State of Florida



Department of State

I certify from the records of this office that BAXTER & WOODMAN, INC., is a corporation organized under the laws of Illinois, authorized to transact business in the State of Florida, qualified on May 2, 2016.

The document number of this corporation is F16000002059.

I further certify that said corporation has paid all fees due this office through December 31, 2016, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.


Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this the
Twenty-fifth day of August, 2016



CR2EO22 (1-11)

Ken Detzner

Ken Detzner
Secretary of State

FLORIDA DEPARTMENT OF STATE DIVISION OF CORPORATIONS		www.sunbiz.org			
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No Filing History					
Fictitious Name Detail					
Fictitious Name					
MATHEWS CONSULTING A BAXTER & WOODMAN COMPANY					
Filing Information					
Registration Number	G16000074503				
Status	ACTIVE				
Filed Date	07/26/2016				
Expiration Date	12/31/2021				
Current Owners	1				
County	PALM BEACH				
Total Pages	1				
Events Filed	NONE				
FEI/EIN Number	36-2845242				
Mailing Address					
477 S. ROSEMARY AVENUE, SUITE 330 WEST PALM BEACH, FL 33401					
Owner Information					
BAXTER & WOODMAN, INC. 8678 RIDGEFIELD ROAD CRYSTAL LAKE, IL 60012 FEI/EIN Number: 36-2845242 Document Number: F16000002059					
Document Images					
07/26/2016 -- Fictitious Name Filing			<div>View image in PDF format</div>		
Previous on List . Next on List . Return to List			<div>Fictitious Name Search</div> <div>Submit</div>		
No Filing History					
<div> Home Contact us Document Searches E-Filing Services Forms Help </div> <div>Copyright © and Privacy Policies</div> <div>State of Florida, Department of State</div>					



Florida Board of Professional Engineers
2639 North Monroe Street, Suite B-112
Tallahassee, FL 32303-5268

Baxter & Woodman Inc.
8678 RIDGEFIELD ROAD
CRYSTAL LAKE, IL 60012

Each licensee is solely responsible for notifying the Florida Board of Professional Engineers in writing the licensee's current address.

Name changes require legal documentation showing name change. An original, a certified copy, or a duplicate of an original or certified copy of a document which shows the legal name change will be accepted unless there is a question about the authenticity of the document raised on its face, or because the genuineness of the document is uncertain, or because of another matter related to the application.

At least 90 days prior to the expiration date shown on this license, a notice of renewal will be sent to your last known address. If you have not yet received your notice 60 days prior to the expiration date, please call (850) 521-0500, or write, Florida Board of Professional Engineers, 2639 North Monroe Street, Suite B-112, Tallahassee, FL 32303-5268 or e-mail: board@fbpe.org. Our website address is <http://www.fbpe.org>.

State of Florida

Board of Professional Engineers

Attests that

Baxter & Woodman Inc.

Is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

Expiration: 2/28/2017

Audit No: 228201706136 I



CA Lic. No:

31795

State of Florida

Board of Professional Engineers

Attests that

Rene Louise Mathews , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201916443 R

P.E. Lic. No:

49298

State of Florida

Board of Professional Engineers

Attests that

David L. Mathews , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201923241 R

P.E. Lic. No:

48242

State of Florida

Board of Professional Engineers

Attests that

M. Rebecca Travis , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201900382 R

P.E. Lic. No:

40988

State of Florida

Board of Professional Engineers

Attests that

Jason A. Pugsley , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201908245 R

P.E. Lic. No:

67426

State of Florida

Board of Professional Engineers

Attests that

Jason M. Debrincat , P.E.



Is licensed as a Professional Engineer under Chapter 471, Florida Statutes

Expiration: 2/28/2019

Audit No: 228201914810 R

P.E. Lic. No:

71392



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

RACHEL D. CONE
INTERIM SECRETARY

March 1, 2017

Louis Haussmann, Executive Vice President/COO
BAXTER & WOODMAN, INC.
d/b/a Mathews Consulting a Baxter & Woodman Company
477 South Rosemary Avenue, Suite 330
West Palm Beach, Florida 33401

Dear Mr. Haussmann:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify your firm for the following types of work:

- Group 3 - Highway Design - Roadway
 - 3.1 - Minor Highway Design
 - 3.2 - Major Highway Design
- Group 4 - Highway Design - Bridges
 - 4.1.1 - Miscellaneous Structures
 - 4.1.2 - Minor Bridge Design
- Group 7 - Traffic Operations Design
 - 7.1 - Signing, Pavement Marking and Channelization
 - 7.3 - Signalization
- Group 10 - Construction Engineering Inspection
 - 10.1 - Roadway Construction Engineering Inspection

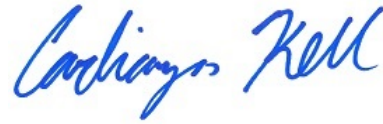
Your firm is now technically qualified to pursue work for the Department for minor projects only, enabling your firm to compete for Professional Services projects with fees estimated at below \$500,000.00. This status shall be valid until November 7, 2017 for contracting purposes.

On the basis of self-certification materials submitted, the rates listed below represent the costs the Department has accepted.

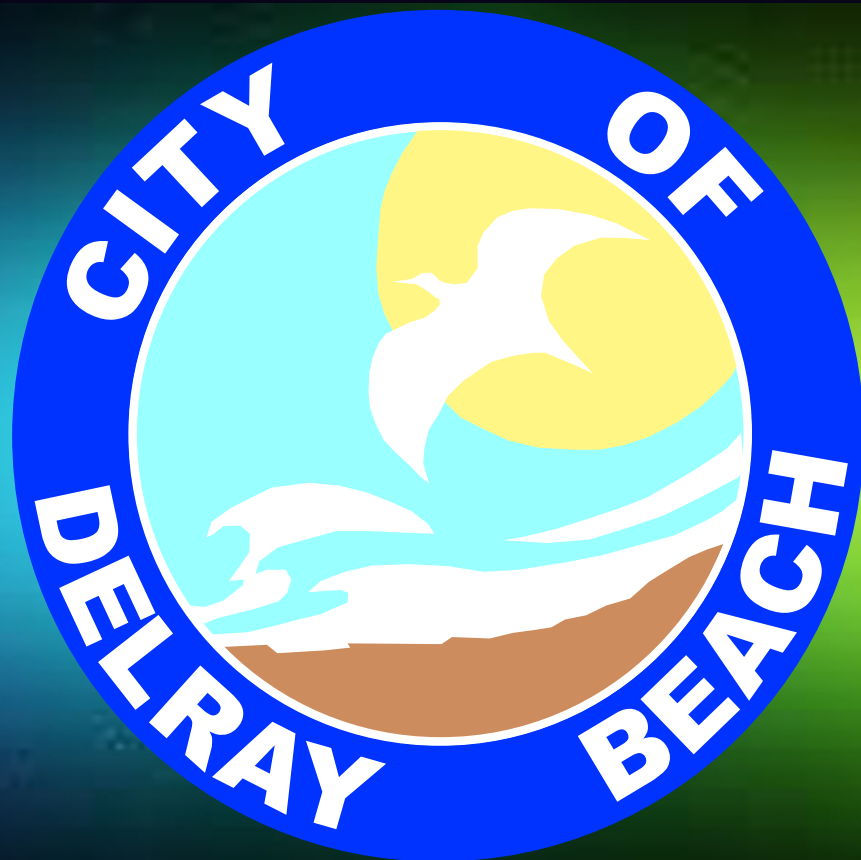
	Home/Branch Office	Facilities Capital Cost of Money	Overtime Premium Reimbursed	Direct Expense
Indirect Cost	143.86%	0.347%		4.08% (Home)

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

A handwritten signature in blue ink that reads "Carliayn Kell". The signature is written in a cursive, flowing style.

Carliayn Kell
Professional Services
Qualification Administrator



MATHEWS
CONSULTING

a BAXTER & WOODMAN company