CITY OF DELRAY BEACH
100 NW 1st AVENUE, DELRAY BEACH, FL 33444

AGREEMENT FOR PROFESSIONAL SERVICES

RFQ 2017-048 (918-42, 918-89, 906-56)

KIMLEY-HORN AND ASSOCIATES, INC.

AGREEMENT
FOR
PROFESSIONAL SERVICES (CCNA)

AGREEMENT NO. RFQ 2017-048 (918-42, 918-89, 906-56)

THIS AGREEMENT is made and entered into this ____ day of _____, 2018 (the "effective date"), by and between the **City of Delray Beach,** a Florida municipal corporation (hereinafter referred to as "City"), whose address is 100 NW 1st Avenue, Delray Beach, Florida, 33444, and **Kimley-Horn and Associates, Inc.** a North Carolina corporation (hereinafter referred to as "Consultant") authorized to do business in Florida, whose principal address is 421 Fayetteville Street, Ste, 600, Raleigh, North Carolina 27601.

WHEREAS, the City desires to retain the services of the Consultant to provide certain Professional Services in accordance with the City's Request for Qualifications RFQ 2017-048, Continuing Engineering, Surveying, and Landscaping Architectural Consulting Services (918-42, 918-89, 906-56), and the Consultant's response thereto, which are attached hereto and incorporated herein as Exhibit "A".

NOW, THEREFORE, in consideration of the mutual covenants and promises hereafter set forth, the Consultant and the City agree as follows:

ARTICLE 1. INCORPORATION OF REQUEST FOR QUALIFICATIONS

The terms and conditions of this Agreement shall include and incorporate the terms, conditions, and scope of services set forth in the City's Request for Qualifications, RFQ 2017-048, and the Consultant's response to the Request for Qualifications, including all addenda and documentation required thereunder.

ARTICLE 2. SCOPE OF SERVICES

The Consultant shall provide Professional Services to the City, under the following categories of work as defined in the Request for Qualifications:

a. Category(s)

i. Engineering Services
ii. Surveying/Mapping Services
iii. Landscape Architectural Services

The Consultant shall provide the services on an as-needed and project-by-project basis, based on work requests from City departments through the issuance of Service Authorizations.

ARTICLE 3. COMPENSATION

The City shall pay the Consultant for performing the Services based on the Prices and Rates shown in Exhibit "B", which is attached hereto and incorporated herein, or pursuant to a negotiated lump sum.

ARTICLE 4. TERM

The term of this Agreement shall be from the effective date until August 30, 2022, unless terminated beforehand as provided for in Article 5. Nothing contained in the Request for Qualifications or this Agreement shall be construed by the Consultant as a guarantee of work from the City. The City reserves the right to extend the Agreement for one, two-year term, providing all terms conditions and specifications remain the same, both parties agree to the extension, and such extension is approved by the City.

At the City's request, the Consultant shall continue services beyond the final expiration date. This extension period shall not extend for more than one year beyond the final expiration date of the Agreement. The Consultant shall be compensated at the rate in effect when this extension period is invoked by the City.

ARTICLE 5. TERMINATION

a. This Agreement may be terminated by the City, with or without cause, upon providing written notice to the Consultant. This Agreement may be terminated by the Consultant upon thirty (30) days' prior written notice to the City. Upon any such termination, the Consultant waives any claims for damages from such termination, including, but not limited to, loss of anticipated profits. Unless the Consultant is in breach of this Agreement, the City shall pay the Consultant for services rendered through the date of termination in accordance with the terms of this Agreement.

b. The continuation of this Agreement beyond the end of any fiscal year shall be subject to both the appropriation and the availability of funds in accordance with Florida law.

ARTICLE 6. LAW, JURISDICTION, VENUE, WAIVER OF JURY TRIAL

This Agreement shall be interpreted and construed in accordance with and governed by the laws of the state of Florida. All Parties agree and accept that jurisdiction of any controversies or legal problems arising out of this Agreement, and any action involving the enforcement or interpretation of any rights hereunder, shall be exclusively

in the state courts of the Fifteenth Judicial Circuit in Palm Beach County, Florida, and venue for litigation arising out of this Agreement shall be exclusively in such state courts, forsaking any other jurisdiction which either party may claim by virtue of its residency or other jurisdictional device. **BY ENTERING INTO THIS AGREEMENT, SECOND PARTY AND CITY HEREBY EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

ARTICLE 7. ATTORNEY'S FEES

Any costs or expense (including reasonable attorney's fees) associated with the enforcement of the terms and for conditions of this Agreement shall be borne by the respective Parties, however, this clause pertains only to the Parties to this Agreement.

ARTICLE 8. MISCELLANEOUS PROVISIONS

a. Notice Format. All notices or other written communications required, contemplated, or permitted under this Agreement shall be in writing and shall sent by certified United States Mail, postage prepaid, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or by hand delivery with a request for a written receipt of acknowledgment of delivery, addressed to the party for whom it is intended at the place last specified. The place for giving notice shall remain the same as set forth herein until changed in writing in the manner provided in this section. For the present, the Parties designate the following:

As to the City:
City of Delray Beach
100 NW 1st Avenue
Delray Beach, FL 33444
Attn: City Manager

With a copy to:
City of Delray Beach
200 NW 1st Avenue
Delray Beach, Florida 33444
Attn: City Attorney

As to the Consultant: **Kimley-Horn and Associates, Inc.**
1920 Wekiva Way, Suite 200
West Palm Beach, Florida 33411
Attn: Marwan Mulfleh, P.E., Senior Vice President

b. Headings. The headings contained in this Agreement are for convenience of reference only and shall not limit or otherwise affect in any way the meaning or interpretation of this Agreement.

c. The documents listed below are a part of this Agreement and are hereby incorporated by reference. In the event of inconsistency between the documents, unless otherwise provided herein, the terms of the following documents will govern in the following order of precedence:

i. Terms and conditions as contained in this Agreement.

ii. Terms and conditions of RFQ 2017-048.

iii. Consultant's response to RFQ 2017-048 and any subsequent information submitted by Consultant during the evaluation and negotiation process.

(The remainder of this page intentionally left blank)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date hereinabove first written.

CITY OF DELRAY BEACH, FLORIDA

By: _____
Shelly Petrolia, Mayor

ATTEST:

By: _____
Katerri Johnson, City Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

By: _____
R. Max Lohman, City Attorney

CONSULTANT

By: _____

MARWAN MUFLEH
Printed Name

PRINCIPAL
Title

(SEAL)

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this 11th day of June, 2018 by Marwan Mufleh, as Principal (name of officer or agent, title of officer or agent), of Kimley-Horn and Assoc. Inc (name of corporation acknowledging), a North Carolina (state or place of incorporation) corporation, on behalf of the corporation. He/She is personally known to me or has produced _____ (type of identification) as identification.

_____
Notary Public – State of FLORIDA

TAMATHA D CULPEPPER
Notary Public – State of Florida
Commission # GG 092219
My Comm. Expires Jul 4, 2021
Bonded through National Notary Assn.

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services

RFQ No. 2017-048

Table of Contents

Kimley»Horn

1. Letter of Intent

May 30, 2017

Kimley»Horn

Mr. Jose Hidalgo
City of Delray Beach, City Hall
100 N.W. 1st Avenue
Delray Beach, Florida 33444

Re: Continuing Engineering, Surveying, and Landscaping Architectural Consulting Services; RFQ No. 2017- 048

Dear Mr. Hidalgo and Members of the Selection Committee:

The City of Delray Beach has seen firsthand Kimley-Horn's attention to detail and commitment to client satisfaction. Whether it was our work for you on the roadway and streetscape improvements for Federal Highway and MLK Boulevard, or our ongoing chlorine residual study or water main design projects, we have enjoyed being a valued partner for your community. Through this contract, we look forward to the opportunity to strengthen our relationship and further support the City as it continues to prosper. ***Kimley-Horn pledges to serve the City as a trusted consultant who will deliver on our commitments.***

We are partners in the City of Delray Beach's future, with a local office to serve you. Kimley-Horn is invested in the City with a local office housing 26 staff members less than 10 minutes from City Hall. You will be primarily supported by professionals in our Delray Beach, Fort Lauderdale, and West Palm Beach offices. We pledge to be extremely responsive and available to you when called upon. ***We have over 250 employees in our four South Florida offices (Delray Beach, West Palm Beach Fort Lauderdale, and Miami) ready to serve you. Kimley-Horn is one of the largest civil engineering consultants in Florida with over 550 employees statewide. This means we will always have adequate staff to serve on your projects***

Fully integrated, multidisciplined, local firm. ***From our past experience with you, we know that any number of engineering or technical issues could arise under this type of general services contract.*** The City has experienced firsthand how our local staff were able to help you with a variety of design services and studies to respond to commissioners' requests—including traffic assessments on Atlantic Avenue; a Citywide parking study; a parking garage feasibility study/preliminary design layout; stormwater master plan updates; Citywide water supply and treatment feasibility studies; water treatment plant structural analyses and design; neighborhood water main upgrades; Complete Streets design, planning, and landscape architecture; and FDOT LAP agreements and permitting. ***Kimley-Horn has been the firm the City consistently turns to for multidisciplinary expertise on almost any type of project.*** More recently, Kimley-Horn's South Florida staff have been on the frontlines addressing public transit issues in South Florida, leading the planning and design services for both Fort Lauderdale's and Miami Beach's new streetcar systems.

Kimley-Horn can handle all the City's needs under this contract. Our depth of staff, resources, and the variety of expertise we provide means you will receive personal service that is responsive and always available. Our expertise includes, but is not limited to:

- Engineering
- Surveying/Mapping (with HSQ Consultants)
- Landscape Architectural Design
- Civil Engineering
- Mechanical/Electrical/Plumbing
- Structural Design
- Transportation
- Environmental/Natural Resources
- Water Resources/Stormwater Management
- Coastal/Marine Engineering

Integrated services. One feature that separates Kimley-Horn from other firms is our ability to provide integrated in-house services for your projects. This is made possible by our large and diverse professional staff. In fact, Kimley-Horn is one of the largest engineering firms in South Florida with over 550 employees. Infrastructure improvements, municipal beautification programs, and other community projects often require a comprehensive team of planning, design, permitting, agency coordination, and construction professionals who work together to quickly and successfully address the inevitable challenges that arise on every project. ***Kimley-Horn is corporately structured as one cost center, meaning all of our offices are managed as one cohesive unit.*** Employees from different offices frequently work together to serve our clients. For example, our Complete Streets expert, **Stewart Robertson, P.E.** is based in Fort Lauderdale, but he collaborates statewide with other Florida municipal clients, including West Palm Beach and St. Petersburg.

Experienced project management team. As project manager, **Marwan Mufleh, P.E.** has almost 30 years of experience in a wide variety of municipal and roadway design projects. Marwan has served the City successfully on our current contract and will continue to do so. He will be your main point of contact and assign qualified staff who will identify, establish, and maintain your projects' goals, scopes, budgets, and schedules consistent with the City's expectations. **Fannie Howard, P.E.** will serve as deputy project manager and the City's secondary point of contact. Both Marwan and Fannie will mobilize our project team when necessary and coordinate all efforts on your assignments as they have been doing on our current contract.

Outstanding in-house resources and technical expertise. One of the benefits Kimley-Horn offers the City is our extensive statewide and national resources and the ability to draw from those resources at any time. Kimley-Horn is not a one-person shop. Our diverse in-house talent and client-service culture means that Kimley-Horn has a track record of far fewer change orders and revisions than other consultants. ***Our team will always present solutions that save you money.***

Availability. Kimley-Horn is in an excellent position to handle the workload of any assignment under this contract. As you know from our work with you, our staff can respond quickly to your requests. Our team can handle several diverse aspects of any assignment simultaneously, which will further improve any project's overall schedule.

Summary. The Kimley-Horn project team is dedicated to partnering with the City on all projects associated with this continuing engineering, surveying, and landscaping architectural RFQ. Our goal is to provide you with technical excellence delivered in a professional, timely, and economical manner. Kimley-Horn looks forward to the opportunity to continue serving as your consultant.

Very truly yours,
KIMLEY-HORN

Marwan Mufleh, P.E.
Project Manager

Fannie Howard, P.E.
Deputy Project Manager

Note: *As a senior vice president with the firm, Marwan Mufleh is authorized to bind Kimley-Horn.*

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: Kimley-Horn and Associates, Inc.

Street Address: 1615 S. Congress Avenue, Suite 201, Dealray Beach, FL 33445

Mailing Address (if different from Street Address):

Telephone Number(s): 561-330-2345

Fax Number(s): N/A

Email Address: marwan.mufleh@kimley-horn.com

Federal Identification Number: 56-0885615

Acknowledged by:

Kimley-Horn and Associates, Inc.
Firm Name

Signature

May 15, 2017
Date

Marwan Mufleh, P.E., Senior 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)

2. Proposer's Statement of Organization

A. Legal contracting name including any dba: Kimley-Horn and Associates, Inc.

B. State of organization or incorporation: North Carolina

C. Ownership structure of Kimley-Horn: Corporation

D. W-9: A copy of Kimley-Horn's W-9 Form is included at the end of this section.

E. Contact information for Kimley-Horn's corporate headquarters:

Mark Wilson, CEO, Kimley-Horn, 421 Fayetteville Street, Suite 600, Raleigh, NC 27601; (919) 677-2000
mark.wilson@kimley-horn.com

Tammy Flanagan, CFO, Kimley-Horn, 421 Fayetteville Street, Suite 600, Raleigh, NC 27601; (919) 677-2000
tammy.flanagan@kimley-horn.com

F. Contact information for Kimley-Horn's local office:

Kimley-Horn, 1615 South Congress Avenue, Suite 201, Delray Beach, FL 33445
Marwan Mufleh, P.E., Sr. Vice President, (561) 330-2345; marwan.mufleh@kimley-horn.com

G. Contact information for Kimley-Horn's primary representative during this RFQ process.

Marwan Mufleh, P.E., Sr. Vice President, (561) 330-2345; marwan.mufleh@kimley-horn.com
Kimley-Horn, 1615 South Congress Avenue, Suite 201, Delray Beach, FL 33445

H. Contact information for Kimley-Horn's secondary representative during this RFQ process.

Fannie Howard, P.E., Deputy Project Manager, (561) 845-0665; fannie.howard@kimley-horn.com
Kimley-Horn, 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411

I. List of officers, owners and/or partners, or managers of the firm. Include names, addresses, and phone numbers.

Kimley-Horn and Associates, Inc. is wholly owned by Associates Group Services, Inc., which is wholly owned by APHC, Inc., which is owned by 441 Kimley-Horn employees, none of whom own 5% or more of the outstanding shares. The corporate address for Kimley-Horn and its parent companies is 421 Fayetteville Street, Suite 600, Raleigh, NC 27601. Our Board of Directors and their contact information is listed below:

- John Atz, President; 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411; (561) 845-0665
- Brooks Peed, Chairman of the Board; 445 24th Street, Suite 200, Vero Beach, FL 32960; (772) 794-4100
- Barry Barber, Director; 421 Fayetteville Street, Suite 600, Raleigh, NC 27601; (919) 677-2000
- Dean Penny, Director; 421 Fayetteville Street, Suite 600, Raleigh, NC 27601; (919) 677-2000
- Derrick Cave, Director; 445 24th Street, Suite 200, Vero Beach, FL 32960; (772) 794-4100
- Mike Schiller, Director; 7740 N. 16th Street, Suite 300, Phoenix, AZ 85020; (602) 944-5500
- Chris Squires, Director; 555 Capitol Mall, Suite 200, Sacramento, CA 95814; (916) 858-5800
- Nikki Kerry, Director; 660 South Figueroa Street, Suite 2050, Los Angeles, CA 90017; (213) 261-4040
- Emmy Montanye, Director, 817 West Peachtree Street, NW, The Biltmore, Suite 601, Atlanta, GA 30308; (404) 419-8700
- James Hall, Director, 12750 Merit Drive, Suite 1000, Dallas, TX 75251; (972) 770-1300
- Brad Tribble, Director; 2201 West Royal Lane, Suite 275, Irving, TX 75063; (214) 420-5600
- Steve Lefton, Director; 11400 Commerce Park Drive, Suite 400, Reston, VA 20191; (703) 674-1300
- Terry Murphy, Director; 11400 Commerce Park Drive, Suite 400, Reston, VA 20191; (703) 674-1300

J. Briefly summarize any current or pending litigation in which Proposer is a part to.

Kimley-Horn and its subsidiaries have provided services in all fifty states and numerous countries. Because of the many and varied projects we have completed, we are subject to various legal proceedings from time to time and in the ordinary course of business. It is not practical to provide a complete list as part of this proposal. None of the pending litigation matters, if decided against Kimley-Horn, would have a material impact on our financial statements or impair in any way our ability to serve our clients. Generally, these matters are covered by insurance, and we consider them to be without merit. From time to time, Kimley-Horn will file a lawsuit against a client for unpaid fees. We do not track these cases. If you would like to discuss our legal matters in more detail, please contact Kimley-Horn's General Counsel, Richard Cook, at 919.677.2058. The cases being litigated in Florida are as follows:

Sema Construction, Inc. v. City of Altamonte Springs: 18th Judicial Circuit Court, Seminole County; Case No. 215-CA-002951-15-W; filed 2016; alleged economic loss; pending.

Sunset Beach Investments, LLC v. Kimley-Horn and Associates, Inc.: 19th Judicial Circuit Court, St. Lucie County; Case No. 562013CA000383; filed 2013; alleged economic loss; pending.

Joan Weinstein v. Simon Property Group LP and The Town Center at Boca Raton Trust: 15th Judicial Circuit, Palm Beach County; Case No. 502016CA003199XXXXMB AG; filed 2016; personal injury claim; pending.

Deontra Williams v. Florida Department of Transportation, et al: 17th Judicial Circuit Court, Broward County; Case No. CACE-13-009427(05); filed 2015; bicycle accident, personal injuries claimed; pending.

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

There have been no changes in ownership to Kimley-Horn in the past 2 years or changes in leadership anticipated within six months of the due date of this document.

City of Delray Beach
RFQ 2017-048
Continuing Engineering, Surveying, and Landscaping Architectural Consulting Services
(918-42, 918-89, 906-56)

Form **W-9**
(Rev. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See **Specific Instructions** on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Kimley-Horn and Associates, Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only **one** of the following seven boxes:

☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) 5

Exemption from FATCA reporting code (if any)

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)

421 Fayetteville Street, Suite 600

Requester's name and address (optional)

6 City, state, and ZIP code

Raleigh, North Carolina 27601

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number

			–		–				

or

Employer identification number

5	6	–	0	8	8	5	6	1	5

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here **Signature of U.S. person ▶** Tammy [signature] **Date ▶** May 30, 2017

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at *www.irs.gov/fw9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

3. Minimum Qualifications Documentation

Evidence of Registration / Evidence of Time in Business

State of Florida
Department of State

I certify from the records of this office that KIMLEY-HORN AND ASSOCIATES, INC. is a North Carolina corporation authorized to transact business in the State of Florida, qualified on April 24, 1968.

The document number of this corporation is 821359.

I further certify that said corporation has paid all fees due this office through December 31, 2016, that its most recent annual report/uniform business report was filed on January 28, 2016, and that 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 Eighteenth day of May, 2016

Secretary of State

Tracking Number: CU4949004970

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

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State of Florida
Board of Professional Engineers
Attests that
Kimley-Horn & Associates, Inc.

FBPE

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: 2/28/2019
Audit No: 228201901966 R

CA Lic. No: 696

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

License No.: LB696
Expiration Date February 28, 2019

Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

KIMLEY-HORN AND ASSOCIATES, INC.
3001 WESTON PKWY
CARY, NC 27513-2301

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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

RICK SCOTT, GOVERNOR KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE

LICENSE NUMBER
LCC000219

The LANDSCAPE ARCHITECT BUSINESS
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017

KIMLEY-HORN AND ASSOCIATES INC
P O BOX 33068
RALEIGH NC 276363068

ISSUED: 11/04/2015 DISPLAY AS REQUIRED BY LAW SEQ # L1511040001291

RICK SCOTT, GOVERNOR KEN LAWSON, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF PROFESSIONAL GEOLOGISTS

LICENSE NUMBER
GB175

The GEOLOGY BUSINESS
Named below IS CERTIFIED
Under the provisions of Chapter 492 FS.
Expiration date: JUL 31, 2018

KIMLEY-HORN AND ASSOCIATES INC
5302 FAYETTEVILLE STREET
SUITE 600
RALEIGH NC 27601

ISSUED: 07/25/2016 DISPLAY AS REQUIRED BY LAW SEQ # L1607250001560

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

License No.: **LB7924**
Expiration Date February 28, 2019

Professional Surveyor and Mapper Business License
Under the provisions of Chapter 472, Florida Statutes

HSQ GROUP, INC.
1489 W PALMETTO PARK RD STE 340
BOCA RATON, FL 33486-3304

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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

ANNE M. GANNON
CONSTITUTIONAL TAX COLLECTOR
Serving Palm Beach County
Serving you.

P.O. Box 3353, West Palm Beach, FL 33402-3353
www.pbctax.com Tel: (561) 355-2264

LOCATED AT
1690 S. CONGRESS AVE, STE #100
DELRAY BEACH, FL 33445

TYPE OF BUSINESS	OWNER	CERTIFICATION #	RECEIPT #/DATE PAID	AMT PAID	BILL #
56-0016 ENGINEER BUSINESS	KIMLEY HORN AND ASSOCIATES INC	696	B16.511534 - 09/07/16	$33.00	B40132951

This document is valid only when receipted by the Tax Collector's Office.

B2 - 467

KIMLEY-HORN AND ASSOCIATES INC
KIMLEY HORN AND ASSOCIATES INC
1920 WEKIVA WAY STE 200
WEST PALM BEACH, FL 33411

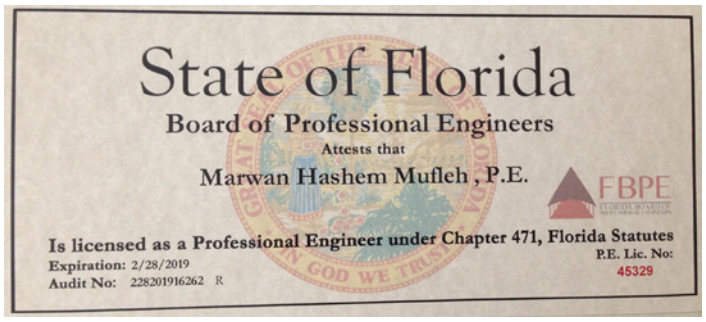
STATE OF FLORIDA
PALM BEACH COUNTY
2016/2017 LOCAL BUSINESS TAX RECEIPT

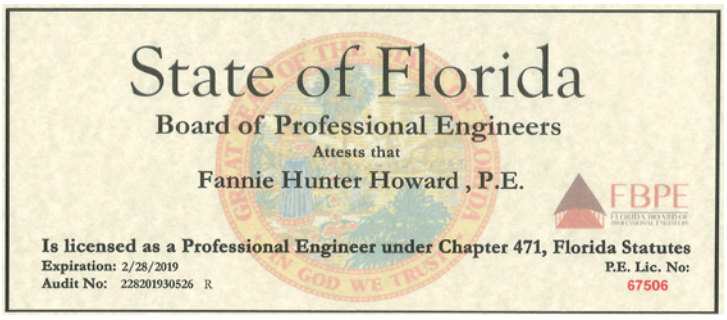
LBTR Number: 200812177
EXPIRES: SEPTEMBER 30, 2017

This receipt grants the privilege of engaging in or managing any business profession or occupation within its jurisdiction and MUST be conspicuously displayed at the place of business and in such a manner as to be open to the view of the public.

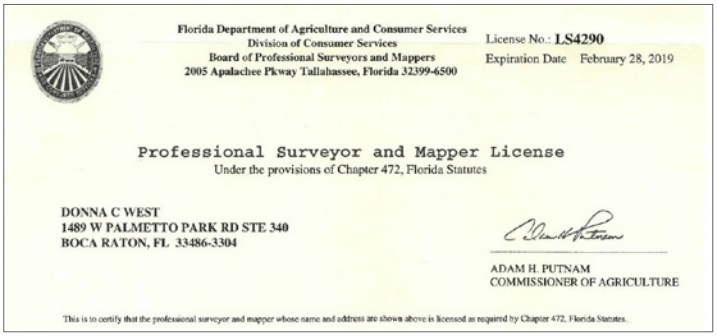
Individual Licenses

Engineering


State of Florida
Board of Professional Engineers
Attests that
Marwan Hashem Mufleh , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201916262 R
P.E. Lic. No: 45329


State of Florida
Board of Professional Engineers
Attests that
Fannie Hunter Howard , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201930526 R
P.E. Lic. No: 67506

Surveying

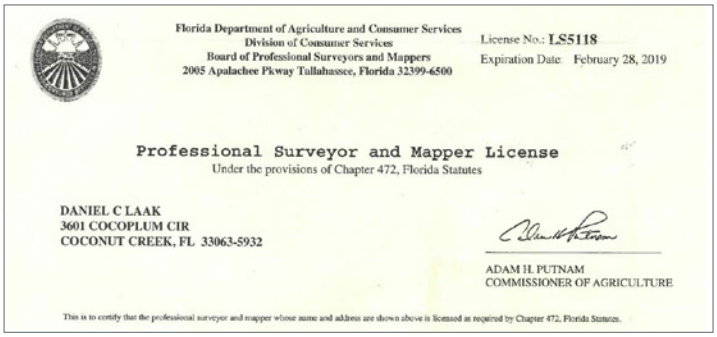

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
License No.: LS4290
Expiration Date: February 28, 2019

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

DONNA C WEST
1489 W PALMETTO PARK RD STE 340
BOCA RATON, FL 33486-3304

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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


Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
License No.: LS5118
Expiration Date: February 28, 2019

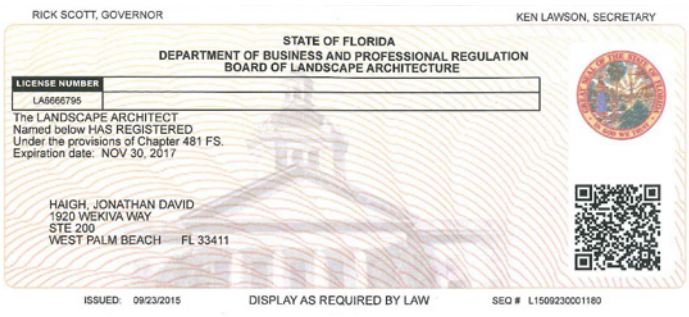
Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

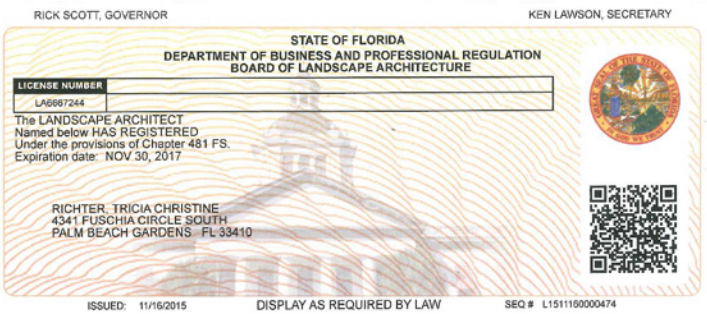
DANIEL C LAAK
3601 COCOPLUM CIR
COCONUT CREEK, FL 33063-5932

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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

Landscape Architecture


RICK SCOTT, GOVERNOR
KEN LAWSON, SECRETARY
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE
LICENSE NUMBER
LA6666795
The LANDSCAPE ARCHITECT
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017
HAIGH, JONATHAN DAVID
1920 WEKIVA WAY
STE 200
WEST PALM BEACH FL 33411
ISSUED: 09/23/2015
DISPLAY AS REQUIRED BY LAW
SEQ # L1509230001180


RICK SCOTT, GOVERNOR
KEN LAWSON, SECRETARY
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE
LICENSE NUMBER
LA6667244
The LANDSCAPE ARCHITECT
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017
RICHTER, TRICIA CHRISTINE
4341 FUSCHIA CIRCLE SOUTH
PALM BEACH GARDENS FL 33410
ISSUED: 11/16/2015
DISPLAY AS REQUIRED BY LAW
SEQ # L1511160000474

Additional Staff Licenses

State of Florida
Board of Professional Engineers
Attests that
John Edward Potts , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201922067 R
P.E. Lic. No: 22881

State of Florida
Board of Professional Engineers
Attests that
Kevin M. Schanen , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201906709 R
P.E. Lic. No: 60251

State of Florida
Board of Professional Engineers
Attests that
Jason R. Lee , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201911955 R
P.E. Lic. No: 67472

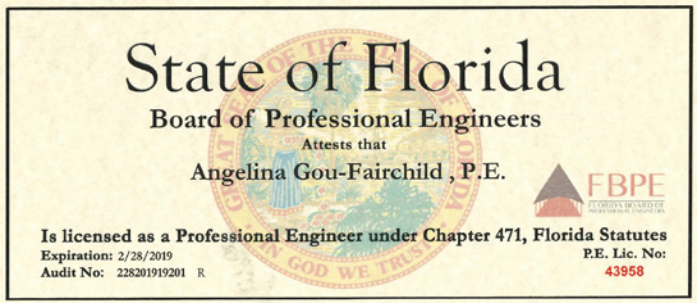
RICK SCOTT, GOVERNOR
KEN LAWSON, SECRETARY
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE
LICENSE NUMBER
LA6666795
The LANDSCAPE ARCHITECT
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017
HAIGH, JONATHAN DAVID
1920 WEKIVA WAY
STE 200
WEST PALM BEACH FL 33411
ISSUED: 09/23/2015
DISPLAY AS REQUIRED BY LAW
SEQ # L1509230001180

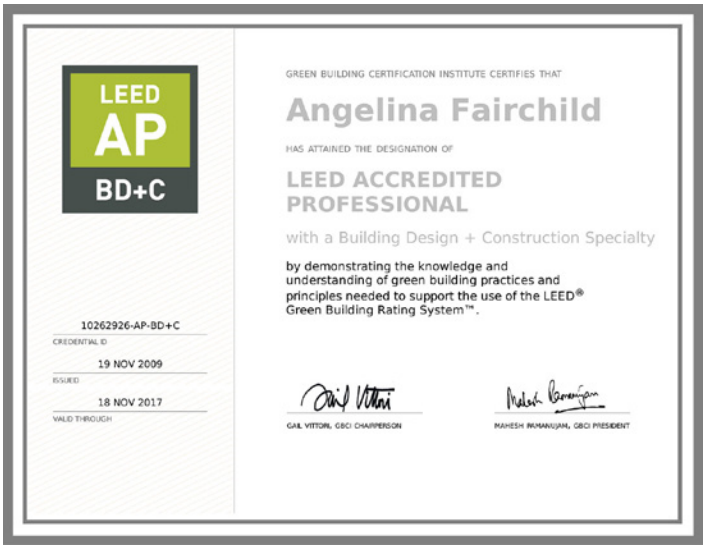
RICK SCOTT, GOVERNOR
KEN LAWSON, SECRETARY
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE
LICENSE NUMBER
LA6657289
The LANDSCAPE ARCHITECT
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017
FECCIA, STEPHEN
5344 LAKE BLVD
DELRAY BEACH FL 33484
ISSUED: 08/18/2016
DISPLAY AS REQUIRED BY LAW
SEQ # L1608180000608

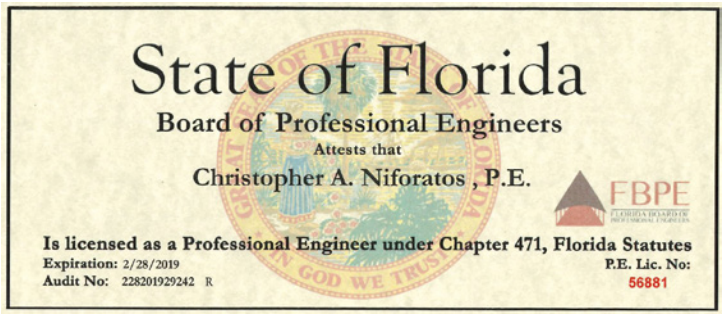
IMSA
Your Partner in PUBLIC SAFETY
Traffic Signal Renewal Program
Be It Known That
Stephen O. Orr
is hereby certified as a
Traffic Signal Field Technician Level II
by completing all requirements and examination
For Certification on this fifteenth day of August, 2014
Valid Thru 8/15/2017
Certificate Number BE21513
Michael T. Wilding - Executive Director

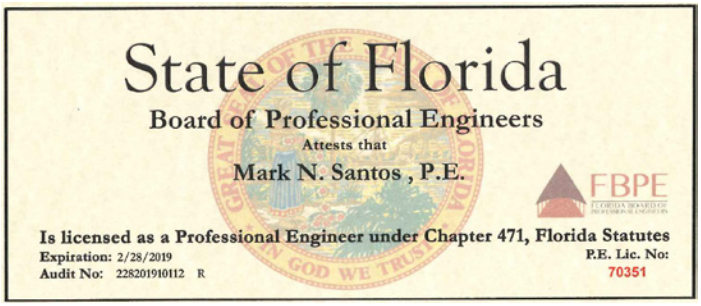
State of Florida
Board of Professional Engineers
Attests that
Anjuli Kristin Panse , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201926092 R
P.E. Lic. No: 71504

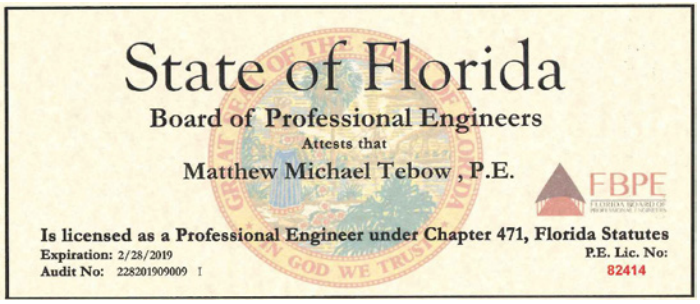
RICK SCOTT, GOVERNOR
KEN LAWSON, SECRETARY
STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF LANDSCAPE ARCHITECTURE
LICENSE NUMBER
LA6667244
The LANDSCAPE ARCHITECT
Named below HAS REGISTERED
Under the provisions of Chapter 481 FS.
Expiration date: NOV 30, 2017
RICHTER, TRICIA CHRISTINE
4341 FUSCHIA CIRCLE SOUTH
PALM BEACH GARDENS FL 33410
ISSUED: 11/16/2015
DISPLAY AS REQUIRED BY LAW
SEQ # L1511160000474


State of Florida
Board of Professional Engineers
Attests that
Angelina Gou-Fairchild , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201919201 R
P.E. Lic. No: 43958


LEED AP BD+C
GREEN BUILDING CERTIFICATION INSTITUTE CERTIFIES THAT
Angelina Fairchild
HAS ATTAINED THE DESIGNATION OF
LEED ACCREDITED PROFESSIONAL
with a Building Design + Construction Specialty
by demonstrating the knowledge and understanding of green building practices and principles needed to support the use of the LEED® Green Building Rating System™.
10262926-AP-BD+C
CREDENTIAL ID
19 NOV 2009
ISSUED
18 NOV 2017
VALID THROUGH
GAIL VITTORI, GBCI CHAIRPERSON
MAHESH RAMANUJAM, GBCI PRESIDENT


State of Florida
Board of Professional Engineers
Attests that
Christopher A. Niforatos , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201929242 R
P.E. Lic. No: 56881


State of Florida
Board of Professional Engineers
Attests that
Mark N. Santos , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201910112 R
P.E. Lic. No: 70351


State of Florida
Board of Professional Engineers
Attests that
Matthew Michael Tebow , P.E.
FBPE
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2019
Audit No: 228201909009 I
P.E. Lic. No: 82414


dbpr
DBPR ONLINE SERVICES
Licensee Details
License Information
License Type: Professional Engineer
Rank: Prof Engineer
License Number: 56881
Status: Current,Active
Licensure Date: 02/25/2000
Expires: 02/28/2019
Special Qualifications
Advanced Building Code Course Credit
Qualification Effective
02/28/2017
Alternate Names
View Related License Information
View License Complaint


GIS Certification Institute
This certifies that
Erin Emmons
has met the standards for ethical conduct and professional practice as established by the GIS Certification Institute for recognition as a
Certified Geographic Information Systems (GIS) Professional (GISP)
and is therefore entitled to all the rights and privileges thereunder.
This grant of certification shall expire or be deemed inactive on 10/25/2017 unless, by that date, the individual shall have successfully completed recertification.
Certification Number 68559 Date Certified 10/25/2012
Michael Vanhook, GISP
GISCI President
Sheila Wilson, GISP
GISCI Executive Director


dbpr
DBPR ONLINE SERVICES
Licensee Details
License Information
License Type: Professional Engineer
Rank: Prof Engineer
License Number: 64773
Status: Current,Active
Licensure Date: 02/13/2006
Expires: 02/28/2019
Special Qualifications
Civil
Qualification Effective
02/13/2006
Alternate Names
View Related License Information
View License Complaint

Conflict of Interest Statement

To the best of Kimley-Horn's knowledge, no employee of the City owns, directly or indirectly, any interest in Kimley-Horn.

4. Proposal Response Requirements Information

A. Experience, Background, References

Familiarity with Delray Beach

Kimley-Horn prides itself on being a successful consultant for the City and its CRA. In fact, we have two full-service offices within thirty minutes of City Hall—in Delray Beach and in West Palm Beach. We have had the opportunity to serve the City on various projects for more than fifteen years, including roadway and complete streets design, park design, stormwater master planning, stormwater design, traffic calming, signal design, water main design, water supply and water treatment studies, resurfacing, and pavement analysis. Our recent experience includes serving the City as general engineering consultant as well as landscape architectural consulting services for the CRA.

We consider ourselves to be an extension of your staff and are committed to the success of the City's projects as if they were our own. We are accessible for staff meetings and work sessions on short notice, and can offer expert knowledge about local conditions because we are a local team. Our professionals' combined experience in municipal design, administration, and construction phase services gives us the specific understanding of how to work with regulatory agencies, elected officials, and the local businesses and residents to negotiate support and buy-in—and effectively achieve your objectives. We have greatly enjoyed the opportunity to collaborate with City staff on the assignments you have given us.

Kimley-Horn has 250+ multidisciplined professional and technical staff in our South Florida offices (Delray Beach, West Palm Beach, Fort Lauderdale, and Miami) who are available to serve the City. We have assembled a full-service team who can tackle any assignment that may arise during the length of this contract: The **Professional Service Disciplines** for which we wish to be considered are outlined below:

1. **Engineering.** Kimley-Horn is a full-service, multidisciplinary consulting firm offering a broad range of on-call general engineering, planning, and environmental services to municipal clients nationwide. Kimley-Horn first became well-known in the late 1960s for its expertise in transportation planning and traffic engineering. In the early 1970s, the firm built an impressive track record in traffic engineering services for municipalities across the Southeast. During this period, the firm also added large practices in stormwater and water resources design, utility system design, bridge and roadway design, intelligent transportation systems, airport planning and design, streetscape design, and landscape architecture. Kimley-Horn established its first Palm Beach County office in 1968 and has successfully served the City of Delray Beach and its CRA since the 1990s.

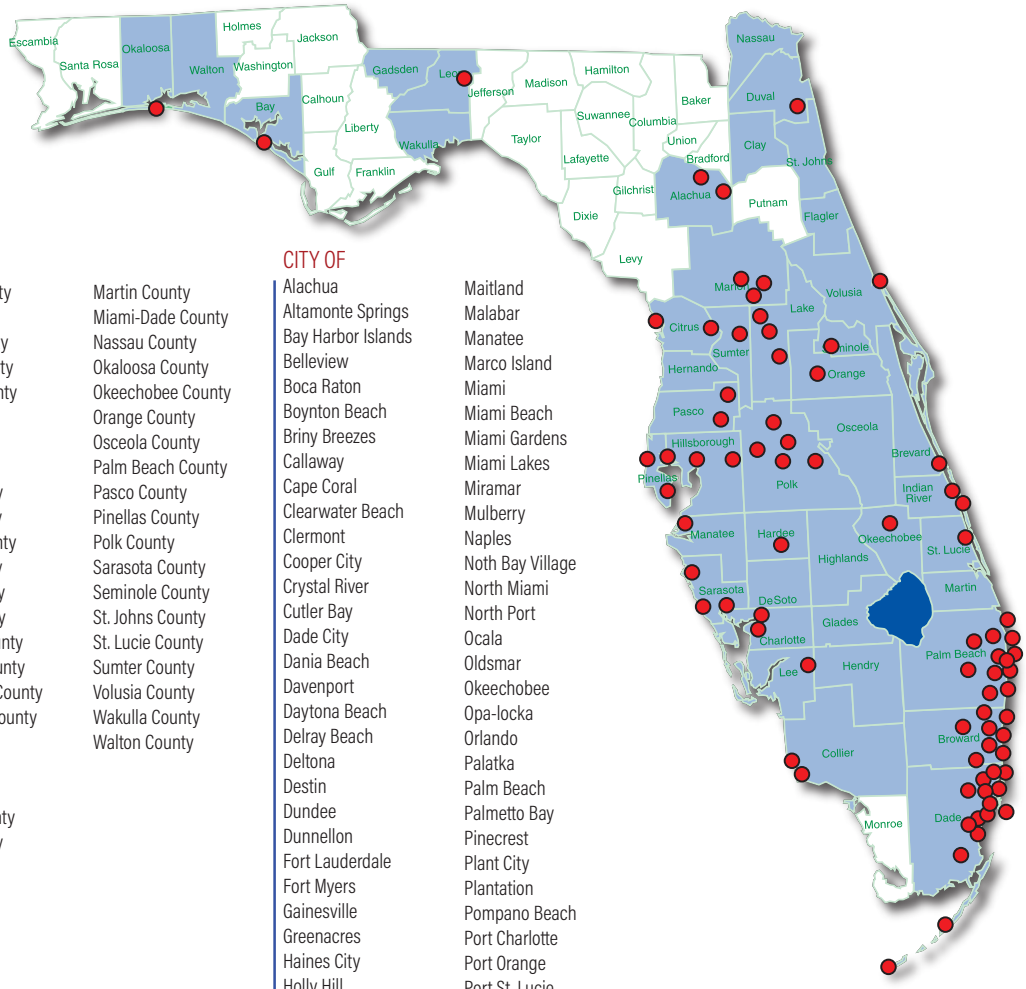
   We opened a full-service office in Delray Beach in 2007 and are proud of all the diverse multidisciplinary services we have provided to help the City enhance its infrastructure, including the recently completed **Federal Highway (US 1) Complete Streets Improvements; Citywide Utility System Assessments; SW 3rd Street, SW 6th Avenue, NW 8th Street Sidewalk and Roadside Improvements; NE 3rd Avenue and Artists Alley Improvements; MLK Drive Beautification; City of Delray Beach Christmas Tree Frame Evaluation; Downtown Parking Study; and Citywide Traffic Engineering Studies.** Kimley-Horn also prepared the **City's Stormwater Update** plan and designed improvements for many localized flooding areas.

   The diversity of services that we offer to our clients allows us to be a truly full-service consultant to them, *not just an on-call engineer. Kimley-Horn has served as municipal engineering consultant for dozens of cities, towns, and counties across Florida:*

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services RFQ No. 2017-048

The list and map shown below is a recent sample of the public clients in Florida for whom we have had the privilege to serve as a general engineering consultant over the past 10 years.

Florida Governments Served by Kimley-Horn



COUNTY

- Alachua County
- Bay County
- Brevard County
- Broward County
- Charlotte County
- Citrus County
- Clay County
- Collier County
- Desoto County
- Flagler County
- Gadsden County
- Glades County
- Hardee County
- Hendry County
- Hernando County
- Highlands County
- Hillsborough County
- Indian River County
- Lake County
- Lee County
- Leon County
- Manatee County
- Marion County
- Martin County
- Miami-Dade County
- Nassau County
- Okaloosa County
- Okeechobee County
- Orange County
- Osceola County
- Palm Beach County
- Pasco County
- Pinellas County
- Polk County
- Sarasota County
- Seminole County
- St. Johns County
- St. Lucie County
- Sumter County
- Volusia County
- Wakulla County
- Walton County

CITY OF

- Alachua
- Altamonte Springs
- Bay Harbor Islands
- Belleview
- Boca Raton
- Boynton Beach
- Briny Breezes
- Callaway
- Cape Coral
- Clearwater Beach
- Clermont
- Cooper City
- Crystal River
- Cutler Bay
- Dade City
- Dania Beach
- Davenport
- Daytona Beach
- Delray Beach
- Deltona
- Destin
- Dundee
- Dunnellon
- Fort Lauderdale
- Fort Myers
- Gainesville
- Greenacres
- Haines City
- Holly Hill
- Hollywood
- Homestead
- Inverness
- Islamorada
- Jacksonville
- Jupiter
- Jupiter Island
- Key Biscayne
- Key West
- Kissimmee
- Lady Lake
- Lake Park
- Lake Wales
- Lake Worth
- Lakeland
- Lantana
- Lauderdale Lakes
- Lauderhill
- Leesburg
- Lighthouse Point
- Longwood
- Maitland
- Malabar
- Manatee
- Marco Island
- Miami
- Miami Beach
- Miami Gardens
- Miami Lakes
- Miramar
- Mulberry
- Naples
- Noth Bay Village
- North Miami
- North Port
- Ocala
- Oldsmar
- Okeechobee
- Opa-locka
- Orlando
- Palatka
- Palm Beach
- Palmetto Bay
- Pinecrest
- Plant City
- Plantation
- Pompano Beach
- Port Charlotte
- Port Orange
- Port St. Lucie
- Punta Gorda
- Quincy
- Riviera Beach
- Royal Palm Beach
- St. Petersburg
- Sarasota
- Sebastian
- South Miami
- St. Marks
- Tallahassee
- Tampa
- Titusville
- Tavares
- Venice
- Vero Beach
- Wauchula
- Wellington
- West Palm Beach
- Wildwood
- Winter Haven
- Zephyrhills

KEY
- Counties served by Kimley-Horn
- Cities served by Kimley-Horn

2. **Surveying and Mapping.** Our subconsultant, **HSQ Group,** is based in Boca Raton. They will provide surveying services on an as-needed basis. HSQ has provided surveying services to several local agencies, including the City of Boca Raton, City of Homestead, City of Ft. Lauderdale, City of Tamarac, City of Lauderhill, Palm Beach County, Broward County, Miami-Dade County Transit, and the Florida Department of Transportation.

3. **Landscaping Architectural Design Services.** ***Kimley-Horn is one of the premier streetscape, park design, and landscape architectural firms in Florida.*** From implementation of downtown streetscapes and Riverwalks to the revitalization and design of community parks, we have successfully planned and implemented scores of landscape architecture projects in Florida, including **Phase I and Phase II Landscape Architectural Design Services for MLK Drive in Delray Beach.** We have successfully completed dozens of municipal streetscape and pedestrian walkway master plan projects for dozens of state, regional, and local government clients. Our professionals have a well-earned reputation for combining creative ideas, technical excellence, and client collaboration, resulting in dynamic landscapes that blend into their environments and become a part of the area they inhabit. We emphasize the development of a pleasing visual environment, meaningful themes, distinctive images, and strong sense of place, while remaining sensitive to your budget and long-term maintenance obligations.

   Revitalizing commercial districts, controlling traffic flows, and providing recreational areas and pedestrian and bicycle facilities in increasingly congested areas are some of the solutions designed by our landscape architects and planners. Kimley-Horn's engineers, landscape architects and urban designers tastefully integrate a project's identity into the surrounding community through aesthetics and repetition of unifying design elements—from structural feature components down to directional signage and pavement treatments. Kimley-Horn also ensures that its landscape and streetscape designs meet the requirements of the Americans with Disabilities Act (ADA) and Crime Prevention through Environmental Design (CPTED).

4. **Civil Engineering.** ***Multidisciplined, integrated civil engineering services forms the backbone of Kimley-Horn's professional services worldwide.*** In Florida, more than 100 of Kimley-Horn's staff are professionally registered as civil engineers. At Kimley-Horn, our professionals are experienced in parks and recreational facilities design, utility engineering, site planning and master planning, site grading, surface water management, water treatment, and hydraulic/hydrologic modeling, among other areas of expertise. Kimley-Horn has the in-house capabilities to satisfy any civil engineering need required; this depth of resources means that clients will benefit from experienced professionals who practice civil engineering for public sector clients every day.

   We are experienced in preparing permit applications for numerous federal, state, and local agencies, including the USACE, FDOT, FDEP, Palm Beach County Health Department, various water management districts, and municipal and county engineering divisions. Our engineers and environmental scientists maintain regular contact with virtually all key regulatory agencies and their decision-makers. This rich network of interpersonal relationships enables us to provide expeditious services relative to agency reviews and approvals.

5. **Mechanical / Electrical / Plumbing.** Kimley-Horn understands that mechanical/electrical/plumbing design services are often critical components of municipal projects. We are often faced with several design considerations, including determining where power is coming from, coordinating with permitting and utility companies, considering control schemes and standards, determining voltage drop calculations and lighting design, and investigating if the existing systems can operate with the new loads and equipment. Many requirements govern the installation of utility connections, electrical conduit, and our in-house engineers can incorporate those requirements into our designs. Our staff is thoroughly experienced in all aspects of mechanical/electrical/plumbing design for municipal projects, including LED conversions, development of standards and specifications, and SCADA system design.

6. **Structural Engineering.** Kimley-Horn offers you expertise in design, construction, inspection, and evaluation of bridges, roadway structures, buildings, parking facilities, retaining walls, bulkheads, pump stations, and water control structures. *The City has called on our experts to assist on a number of structural issues assessments for the City's tennis courts, annual Christmas tree installation, and Police Department cell tower.* Our engineers also have developed plans and specifications for more than 1,000 bridges and have inspected nearly 3,000 bridges

for programs in several states. Recently, for the Town of Palm Beach, we completed design and construction phase services for the rehabilitation of two bridges at Ibis Way and Island Road; their Pine Walk Transfer Facility; Seabreeze, Seaspray and Primavera Bulkhead repairs; the North Ocean Blvd. Seawall Replacement; the Reach 3 Seawall Assessment and Repairs, as well as several pump station and facility structural renovations. In addition, we provided hurricane preparedness and damage assessment services. Our engineers also have provided structural and foundation engineering for building structures and have a great deal of experience in structural failure analysis and forensic engineering. Key members of our team provided structural analyses for public facilities in the Town of Jupiter, City of West Palm Beach, City of Lake Worth, and City of Boynton Beach after the hurricanes of 2004 and 2005. Our comprehensive review of Jupiter's park facilities after Hurricane Jeanne in 2004 allowed them to save hundreds of thousands of dollars in lighting pole replacement costs that were recommended by others during a previous review.

7. **Transportation Engineering.** Now more than ever, municipalities are forced to maximize the efficiency and effectiveness of their limited resources. This means doing more with less—and pragmatic and practical transportation engineering solutions are some of the best ways to accomplish this goal. Kimley-Horn has seasoned staff that is ready to help the City strategize, analyze, and optimize the operations and safety of its roadway and signal network. Safe and efficient traffic flow is no accident—it results from experienced and trained traffic engineers paying attention to many details to provide functional traffic control systems. Our diverse team has the people and experience to handle a wide range of traffic engineering solutions for the City. Several our our local engineering design, streetscape, and Complete Streets projects in Delray Beach, Boca Raton, and Palm Beach have received statewide planning and engineering awards. *(See page 4-7.)*

   Collectively, Kimley-Horn has performed thousands of traffic impact studies statewide to estimate the amount of traffic generated by proposed improvements and determine the impact of that traffic. These studies have ranged from the basic and ordinary to complex and atypical. We also analyze the efficiency and safety of roadway networks in many environments that include examining access points, internal and external circulation patterns, and overall operations and impacts. We can analyze not only individual intersections and access points, but also the operation of the overall internal and external networks, accounting for bicycle, pedestrian, and truck traffic.

   Kimley-Horn is also greatly experienced in providing complete signalization plans, including structural design of mast arms, foundations, poles, and span wires; orientation and configuration of signal heads; design of all communication and power conduit, conductors, controllers, inter-connect cable, and wireless transmitters; design of vehicle detection systems, such as video, magnetic loop, and emergency preemption systems; development of timing and phasing plans; and preparation of final technical specifications. ***We currently serve as the City's consultant for on-call traffic control, signal design, intersection modifications, warrant analyses, and U-turn analysis. We also prepared the recent update to the transportation element of the City's Comprehensive Plan.***

8. **Environmental / Natural Resources.** Kimley-Horn maintains an experienced team of environmental scientists, geologists, hydrogeologists, and biologists with wide ranging experience in environmental planning services including permitting, site location studies, and environmental analyses. Environmental services provided by our in-house professionals include:
   - Wetlands jurisdictional evaluations mitigation plans, and remediation design
   - Threatened and endangered species coordination
   - Wildlife and habitat studies and mitigation planning
   - Contamination assessment for soils, groundwater, and surface water
   - Remedial planning, engineering design, and construction for cleanup of groundwater, surface water, soils, and waste materials (CERCLA, RCRA Corrective Action, underground tanks)
   - Comprehensive environmental compliance evaluations
   - Corridor evaluation and greenfields studies
   - Environmental permitting (RCRA, Clean Air, NPDES, dredge and fill, development)

- Stormwater handling, treatment, and permitting
- Air quality and noise analysis
- Aerial Photo and Geographic Information System (ARCINFO) interpretation and mapping
- Negotiation support, litigation support, and expert testimony
- Land use and development feasibility studies
- Hydrological and hydraulic analyses
- Environmental documentation
- Historical/archaeological/cultural resource assessments

9. Water Resources/Stormwater Management

Water Distribution & Wastewater Collection Systems. As utilities encounter aging infrastructure, the replacement of water distribution systems, water transmission mains and force mains has worked its way to the top of capital improvement programs. Kimley-Horn is one of the largest water resources consultants in South Florida. ***Our team brings a perspective many firms neglect: a consideration of the impact to residents, presenting a marginally invasive design solution through project phasing and sequencing of work to develop cost effective and constructible designs.*** Kimley-Horn is well-suited to perform hydraulic modeling of water and wastewater systems to confirm that pipes and pump stations are sized appropriately for long-term use. This foresight and knowledge brings a win-win solution to the utility and residents, with minimal complaints and impact to the surrounding area. This understanding is confirmed by our work history and satisfied clients.

Water Treatment Facilities. We have award-winning experience in the design of potable water treatment and distribution systems, including the design of wells, master pumping stations, and water storage facilities. Kimley-Horn's water treatment and distribution expertise ranges from systems as simple as aeration/chlorination to reverse osmosis, nanofiltration, membrane softening, ion exchange, and distillation. ***Several of our South Florida clients have received national water facility awards for projects which our professionals designed.***

Stormwater Management & Stormwater Modeling. Kimley-Horn understands the variety and complexity of urban stormwater projects. In fact, we prepared the City's stormwater master plan update in 2003. Our experience encompasses everything from traditional hydrologic and hydraulic analysis and design of storm drainage systems, culverts, and bridges to holistic urban watershed based solutions (including multiple BMPs, stream restoration, culvert improvements, public involvement/education, permitting, and mitigation banking) that address flood control, water quality, aesthetics, and mitigation needs.

Our stormwater modeling professionals ask the right questions and factor in real-world data—land use, total and distributed rainfall amounts, soil types, tributary basins, water table depths, and antecedent conditions—everything we need to extrapolate the past to predict your future. And we have the magnitude of experience to choose the best stormwater model for your location and regulatory requirements, not just the model best suited to our capabilities. Our stormwater services also include:

- Stormwater master plans
- Drainage system retrofitting
- NPDES monitoring and compliance programs
- Financing sources, including stormwater utility fee planning
- Surface water quality monitoring
- Erosion and sediment control plans
- Design of structural and non-structural BMPs
- Water control structure and pump station design

10. Coastal and Marine Engineering.

Kimley-Horn offers you expertise in seawall, breakwater, bulkhead, revetment, pier, and jetty design and permitting; marina planning, design, and permitting; erosion control projects; dredging; hydraulic modeling; and general marine and coastal construction. We are also experienced in the repair and refurbishment of seawalls, bulkheads, and the structural evaluation of existing bulkheads, seawalls, and docks. We have also designed and provided construction phase services for boat ramps, dune walkovers, boardwalks, fixed and floating docks, and boat mooring facilities.

Complementary Services

Sea Level Rise/Resiliency Plans. Many of Kimley-Horn's municipal clients are beginning to address the impacts of climate change on public facilities and their ability to reliably deliver services to citizens. Impacts can range from the acute shocks from major storms to the chronic effects of drought and long-term temperature elevation. Municipalities, states, and the federal government are moving from reactionary approaches to natural disasters to more forward-looking resilience plans to withstand, absorb, and rebound from the effects of climate change. As a leading-edge, multi-disciplined consultant focused on public infrastructure, community development, and the delivery of public services, Kimley-Horn's core engineering and planning strengths result in the perfect scenario for climate adaptation solutions.

Geographic Information Systems (GIS) Services. As the popularity and necessity of regional land management has expanded in the last decade, the growth of geographic information systems (GIS) has exploded. GIS is a computer-based tool that can analyze data, both spatially and thematically, and present it in a geographic context. The value of GIS to municipal land planners, engineers and environmental scientists is its ability to make use of various levels of topological information to develop infrastructure analysis systems (e.g., municipal pavement management programs, asset management systems, web-based apps for local bike and pedestrian trails) that track existing resources and forecast the need for additional services. Our experts can identify the level and types of data needed to gain the maximum possible benefit from the analytical capabilities of each GIS—ground truthing, ecosystem analyses, resource tracking, and impact evaluation can be combined with customized GISs to provide functional planning tools for any municipal department.

Geotechnical Services will be provided by our subconsultant, **Tierra South Florida.** TSF provides a complete range of geotechnical engineering services for buildings, airport facilities, transportation systems, landfills, dams, and other site civil engineering projects. TSF owns a large, diverse fleet of 8 drill rigs with automatic hammers (truck-mounted, track-mounted, rotary, tripod, ATV, barge/overwater) capable of drilling in challenging conditions including remote, soft, marshy, over-water, difficult access or environmentally sensitive areas. They also employ maintenance-of-traffic-certified staff to safely perform drilling services in high traffic areas.

Construction Phase Services. Kimley-Horn's professional staff has extensive experience in construction administration and will keep project contractors on task, on time, and within budget. Our experience will result in the delivery of quality projects that will make both the City and Kimley-Horn proud. Our client support includes value engineering, bid phase services, establishing financial controls to track contractor and project consultant progress, progress report development, community outreach and education, document control, and review of shop drawings and product submittals. Other services include answering questions from the contractors, subcontractors, and suppliers; observing progress in the field; schedule development and tracking; administering the testing process; performing equipment and process start-up; reviewing change order requests and payment applications; and making recommendations to the client. Most importantly, we serve as an extension of your staff to help you complete your most challenging assignments.

We work hard to make sure your interests are kept first and foremost while performing our observations in the field. Because our team members are already familiar with your work program, we can quickly determine whether a contractor is straying outside of the requirements of the plans and specifications. This allows us to make quick corrections before the project heads down the wrong path and has contributed to our many past successes on your projects. We are also well versed in providing construction phase services on projects that were not designed by Kimley-Horn. We have previously provided the City with a full-time construction field representative to observe contractor progress for multiple infrastructure projects, including the Federal Highway Complete Streets improvements.

Awards and Certifications

For more than 20 years, **Kimley-Horn** has received a variety of awards for its professional accomplishments in terms of both project excellence and exceptional management practices. Kimley-Horn is recognized nationwide for the quality of its work environment, for its stature as a business enterprise, and for the outstanding work of its consulting staff. The firm's record of technical achievements is enhanced by their reputation for effective management and personal service. While the honors we have received measure our internal culture and abilities within the industry, the benefits Kimley-Horn offers to its clients are equally measurable—***your team is made up of high-achieving, dedicated, and reliable consultants who are committed to your project.*** Listed below are just a few of the relevant achievements for which the firm has been recognized in the past several years.

"100 Best Companies to Work For," *FORTUNE* magazine – 2017, 2016, 2015, 2014, 2010, 2009, 2008, 2007, 2006, and 2005

2016 Additional FORTUNE Recognitions

"20 Best Workplaces in Consulting & Professional Services," *FORTUNE* magazine (#1)

"20 Best Workplaces for Gen X'ers," *FORTUNE* magazine (#2)

"100 Best Workplaces for Millennials," *FORTUNE* magazine (#3)

"50 Best Workplaces for New College Grads," *FORTUNE* magazine (#3)

In 2017, *Engineering News-Record* ranked Kimley-Horn 21 of the top 500 US Design Firms

Recent Awards

Roy F. Kenzie Award for "Best Transportation and Transit Enhancements, Florida Redevelopment Association – **Federal Highway (US 1) Interim and Final Enhancements, Delray Beach (2016)**

Award of Merit, Florida Institute of Consulting Engineers – **Federal Highway (US 1) Enhancements, City of Delray Beach (2017)**

Award of Merit, International Downtown Association – **Palmetto Park Road and Boca Promenade, Boca Raton (2015)**

Best Tasting Water in Region VIII, Runner Up, American Waterworks Association, Florida Section – **Martin County Membrane Water Treatment Plant (2017)**

Engineering Excellence Award, Florida Institute of Consulting Engineers – **Palm Beach Par 3 Golf Course Redesign (2011)**

Phoenix Award, U.S. Environmental Protection Agency – **Midtown Miami Brownfield Development (2011)**

Project of the Year - Historic Restoration/Preservation, Florida Chapter American Public Works Association – **Memorial Fountain, Town of Palm Beach (2016)**

Award of Merit, Florida Chapter American Society of Landscape Architects – **Regatta Park, Miami (2016)**

Award of Excellence, Plan Hillsborough; Public Sector Urban Excellence Award, Tampa Downtown Partnership – **The Riverwalk at Kennedy Boulevard Plaza, Tampa (2015)**


US 1 – Delray


Memorial Fountain, Town of Palm Beach

Best Project of 2014: Residential/Hospitality, Engineering News-Record – **Streamsong Resort, Polk County (2015)**

Project of the Year, ASCE, Florida Section – **Palm Beach Outlets and Marketplace, West Palm Beach (2015)**

Project of the Year, American Public Works Association Florida West Coast Branch – **Zephyrhills Skate Park, Zephyrhills (2015)**

Outstanding Development Award, Florida Planning and Zoning Association – **Nathan Benderson Park, Sarasota (2014)**

Client References

Engineering

City of Delray Beach/Delray Beach CRA General Civil Engineering Services

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 9/2006 – present
Key staff: Marwan Mufleh, P.E., Fannie Howard, P.E., John Potts, P.E., Kevin Schanen, P.E., Steve Orr, CET, Anjuli Panse, P.E., Adam Kerr, P.E., Jonathan Haigh, PLA, Sean Bukovich, E.I., Mark Santos, P.E., Erin Emmons, GISP, Ed Grady

Town of Palm Beach Continuing Engineering Services

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 12/2003 – present
Key staff: Kevin Schanen, P.E., Jason Lee, P.E., Adam Kerr, P.E., Anjuli Panse, P.E.

City of West Palm Beach Continuing Engineering Services

Reference: Laura Le, P.E., Senior Project Manager
Email: lle@wpb.org
Telephone: 561-494-1040
Dates of Service: 8/2006 – present
Key staff: Kevin Schanen, P.E., Fannie Howard, P.E., Anjuli Panse, P.E., Jason Lee, P.E., Adam Kerr, P.E.

Town of Jupiter Continuing Engineering Services

Reference: Amanda Barnes, P.E., Asst. Utilities Director
Email: amandab@jupiter.fl.us
Telephone: 561-741-2467
Dates of Service: 6/2009 – present
Key staff: John Potts, P.E., Kevin Schanen, P.E., Jason Lee, P.E., Adam Kerr, P.E.

City of Miramar Continuing Engineering Services

Reference: Bissy Vempala, P.E., City Engineer
Email: bjvempala@miramarfl.gov
Telephone: 954-602-3320
Key staff: Kevin Schanen, P.E., Jason Lee, P.E., Adam Kerr, P.E.

Surveying and Mapping (HSQ Surveyors & Mappers, Inc.)

Surveying for Delray Beach Water Mains, City of Delray Beach

Reference: Marwan Mufleh, P.E., Project Manager for Kimley-Horn, Prime Consultant
Email: marwan.mufleh@kimley-horn.com
Telephone: 561-330-2345
Dates of Service: 6/2016 -3/2017

Surveying for Delray Beach CRA Sidewalks FY 16, City of Delray Beach

Reference: Marwan Mufleh, P.E., Project Manager for Kimley-Horn, Prime Consultant
Email: marwan.mufleh@kimley-horn.com
Telephone: 561-330-2345
Dates of Service: 4/2016–8/2016

Landscape Architectural Design

MLK Drive Beautification Phases 1 & 2, Delray Beach CRA

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 8/2008–6/2017
Key staff: Jonathan Haigh, PLA, Tricia Richter, PLA, Steve Feccia, PLA, Marwan Mufleh, P.E., Anjuli Panse, P.E.

NE 3rd Avenue Streetscape, City of Delray Beach

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 5/2012-12/2016
Key staff: Marwan Mufleh, P.E., Jonathan Haigh, PLA

Welleby Park Expansion, City of Sunrise

Reference: Dave Abderhalden, Capital Projects Coordinator
Email: DAbderhalden@sunrisefl.gov
Telephone: 954-572-2264
Dates of Service: 6/2015-present
Key staff: Jonathan Haigh, PLA, Tricia Richter, PLA, Stefano Viola, P.E., Steve Feccia, PLA

OB Johnson Park, City of Hallandale Beach

Reference: Sarita Sharmah, Capital Improvements Director
Email: sshamah@hallandalebeachfl.gov
Telephone: 954-457-2995
Dates of Service: 7/2014-ongoing
Key staff: Jonathan Haigh, PLA, Tricia Richter, PLA, Stephen Feccia, PLA

Lake Worth Beach Redevelopment, City of Lake Worth

Reference: Jamie Brown, Public Services Director, City of Lake Worth
Email: jbrown@lakeworth.org
Telephone: 561-586-1720
Dates of Service: 3/2010-2/2014
Key staff: Jonathan Haigh, PLA, Tricia Richter, PLA, Stephen Feccia, PLA

Civil Engineering

Ballpark of the Palm Beaches, West Palm Beach

Reference: Mike Drye, Sr. Vice President, HKS Architects
Email: mdrye@hksinc.com
Telephone: 804-814-9697
Dates of Service: 2/2015-ongoing
Key staff: Ed Grady, Brady Walker, Kevin Schanen, P.E., Tricia Richter, PLA, Jason Webber, P.E.

Underground Palm Beach, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 7/2014-10/2016
Key staff: Anjuli Panse, P.E., Kevin Schanen, P.E., Tricia Richter, PLA

Town Hall Square Fountain Improvements and Streetscape, Town of Palm Beach

National Winner, 2016 Historic Preservation Project of the Year, American Public Works Association

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 7/2014-10/2016
Key staff: Kevin Schanen, P.E., Anjuli Panse, P.E., Tricia Richter, PLA, Jason Lee, P.E.

Worth Avenue Streetscape and Improvements, Town of Palm Beach

Reference: Eric Brown, P.E., Asst. Director of Public Works
Email: ebrown@townofpalmbeach.com
Telephone: 561-833-8827
Dates of Service: 5/2009-8/2012
Key staff: Anjuli Panse, P.E., Kevin Schanen, P.E., Fannie Howard, P.E., Steve Orr, CET, Adam Kerr, P.E, John Potts, P.E.

Abacoa Community Park, Town of Jupiter

Reference: Amanda Barnes, P.E., Asst. Utilities Director
Email: amandab@jupiter.fl.us
Telephone: 561-741-2467
Dates of Service: 3/2013 -11/2016
Key staff: Kevin Schanen, P.E., Jonathan Haigh, PLA, Tricia Richter, PLA, Brady Walker

Mechanical/Electrical/Plumbing

D-10 Stormwater Pump Station, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 7/2014-10/2016
Key staff: Jason Lee, P.E., Kevin Schanen, P.E., Anjuli Panse, P.E., Fannie Howard, P.E., Steve Feccia, PLA

A-7 Inline Booster Pump Station (20-inch and 24-inch force mains), Town of Palm Beach

Reference: Doug Terry, Water Resources Division Manager
Email: pworks@townofpalmbeach.com
Telephone: 561-833-8827
Dates of Service: 9/2012-8/2015
Key staff: Jason Lee, P.E., Kevin Schanen, P.E., Fannie Howard, P.E.

Mobile Bed Absorber (MBA) Improvements, Town of Jupiter

Reference: Amanda Barnes, P.E., Asst. Utilities Director
Email: amandab@jupiter.fl.us
Telephone: 561-741-2467
Dates of Service: 6/2009 – present
Key staff: Jason Lee, P.E., Anjuli Panse, P.E., John Potts, P.E.

Fort Pierce Utilities Authority Lift Station A Variable Frequency Drive (VFD) and Control System Upgrades

Reference: James Carnes, Environmental Engineer
Email: jcarnes@fpua.com
Telephone: 772-466-1600
Dates of Service: 3/2014-11/2015
Key staff: Jason Lee, P.E., Mark Miller, P.E.

A-39, A-41, A-42, A-43 Wastewater Pump Station Generator Replacements and Upgrades, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 1/2013-3/2015
Key staff: Jason Lee, P.E., Kevin Schanen, P.E.

Structural

Dixie Highway (US 1) Flyover Design-Build, FDOT District Four, Deerfield Beach

Winner, 2014 Prize Bridge Award, Medium Span Bridge, National Steel Bridge Alliance, Winner, 2013 FICE Engineering Excellence Award

Reference: Ms. Nadir Rodrigues, P.E., District Final Plans Engineer
Email: nadir.rodrigues@dot.state.fl.us
Telephone: 954-777-4635
Dates of Service: 10/2009-7/2012
Key staff: Jim Sumislaski, P.E., Jonathan Haigh, PLA, Tricia Richter, PLA

Parking Deck Design and Feasibility Evaluation, City of Delray Beach

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 9/2015 – 2/2017
Key staff: Mark Santos, P.E., Erin Emmons, GISP

Miscellaneous Structural Design Services for Sugar Cane Grower's Cooperative (SCGC), Belle Glade

Reference: Matthew Roberts, Power Systems Engineer
Email: mroberts@scgc.org
Telephone: 561-261-7702
Dates of Service: 6/2001-ongoing
Key staff: Angelina Fairchild, P.E., Fannie Howard, P.E., Kevin Schanen, P.E., John Potts, P.E.

Galleria Mall Garage Condition Assessments and Restoration, Fort Lauderdale

Reference: Mark Trouba CRX/CSM, General Manager, Galleria Mall
Email: mark.trouba@am.jll.com
Telephone: 954 564-1036
Dates of Service: 10/2012-ongoing
Key staff: Mark Santos, P.E.,Angelina Fairchild, P.E.

Transportation

Federal Highway (US 1) Enhancements, Delray Beach CRA

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 9/2015–2/2017
Key Staff: Marwan Mufleh, P.E., Sean Bukovich, E.I., Steve Orr, CET, Adam Kerr, P.E., Tricia Richter, PLA, Jonathan Haigh, PLA, Ed Grady

Las Olas Blvd. Corridor Safety Improvements and Colee Hammock Neighborhood Traffic Calming, City of Fort Lauderdale

Reference: Catherine Prince, Mobility Project Manager
Email: cprince@fortlauderdale.gov
Telephone: 954-828-3794
Dates of Service: 3/2015-present
Key Staff: Marwan Mufleh, P.E., Sean Bukovich, E.I., Tricia Richter, PLA, Ed Grady

SW 3rd St., SW 5th Ave., SW 6th Ave., NW 8th St. Sidewalk and Roadside Improvements, City of Delray Beach

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 6/2016–present
Key Staff: Marwan Mufleh, P.E., Sean Bukovich, E.I., Steve Orr, CET

NE 3rd Avenue and Artists Alley Improvements, City of Delray Beach

Reference: Jeff Costello, Executive Director, Delray Beach CRA
Email: costelloj@mydelraybeach.com
Telephone: 561-276-8640
Dates of Service: 5/2012-12/2016
Key Staff: Marwan Mufleh, P.E., Jonathan Haigh, PLA

Wiles Road Design Phases I and II, Broward

Reference: Michael Hammond, Engineering Capital Program Administrator, Highway
Email: mchammond@broward.org
Telephone: 954-577-4558
Dates of Service: 5/2013-present
Key staff: Marwan Mufleh, P.E., Sean Bukovich, E.I., Steve Orr, CET, Jim Sumislaski, P.E., Adam Kerr, P.E.

Environmental/Natural Resources

Boynton Beach Community Redevelopment Agency (CRA) Mangrove Mitigation Monitoring

Reference: Michael Simon, Interim Executive Director, Boynton Beach CRA
Email: SimonM@bbfl.us
Telephone: 561-600-9091
Dates of Service: 7/2006-7/2011
Key staff: Brady Walker, Lynn Kiefer

Lake Worth Beach Redevelopment Environmental Services, City of Lake Worth

Reference: Julie Parham, P.E., Asst. Water Utilities Director
Email: jparham@lakeworth.org
Telephone: 561-586-1798
Dates of Service: 4/2010-2/2014
Key Staff: Brady Walker, Lynn Kiefer

Wetland Mitigation Parcel Review, Okeechobee County

Reference: Lee Evett, P.E., Okeechobee County Public Works Director
Email: levett@co.okeechobee.fl.us
Telephone: 863-763-3514
Dates of Service: 4/2016-ongoing
Key staff: Brady Walker

Environmental Assessment (EA) for Miami River-Miami Intermodal Center Capacity Improvement (MR-MICCI), South Florida Regional Transportation Authority

Reference: Bill Cross, P.E., Director of Planning and Capital Improvements, SFRTA
Email: crossw@sfrta.fl.gov
Telephone: 954-788-7916
Dates of Service: 9/2012-ongoing
Key staff: Lynn Kiefer, Brady Walker

Wave Streetcar Alternatives Analysis/Environmental Assessment and Small Starts Application, South Florida Regional Transportation Authority

Reference: Bill Cross, P.E., Director of Planning and Capital Improvements, SFRTA
Email: crossw@sfrta.fl.gov
Telephone: 954-788-7916
Dates of Service: 12/2011-2/2016
Key staff: Lynn Kiefer, Brady Walker

Water Resources/Stormwater Management

10-Year Water Supply Master Plan, City of Delray Beach

Reference: Victor Majtenyi, Deputy Director of Public Utilities
Email: majtenyi@mydelraybeach.com
Telephone: 561-243-7000 *Extension:* 4205
Dates of Service: 7/2014-6/2016
Key Staff: Fannie Howard, P.E., John Potts, P.E., Erin Emmons, GISP

Water Treatment Plant #3 and #11 Assessment, Pilot Study, Design, and Construction Phase Services, Palm Beach County Water Utilities Dept.

Reference: Jim Stiles, Utility Director
Email: jstiles@pbcwater.com
Telephone: 561-493-6109
Dates of Service: 6/2016-ongoing
Key Staff: Fannie Howard, P.E.,John Potts, P.E., Jason Lee, P.E., Toral Hertzberg, P.E., Mark Miller, P.E.

15.0-MGD Nanofiltration Water Treatment Plant (WTP) Construction Phase Services, Town of Jupiter

Reference: Amanda Barnes, P.E., Assistant Utilities Director
Email: amandab@jupiter.fl.us
Telephone: 561-741-2467
Dates of Service: 11/2010-1/2013
Key Staff: John Potts, P.E., Kevin Schanen, P.E, Jason Lee, P.E., Fannie Howard, P.E., Mark Miller, P.E.

Tamarind Avenue Stormwater and Infrastructure Improvements, City of West Palm Beach

Reference: Laura Le, P.E., Senior Project Manager
Email: lle@wpb.org
Telephone: 561-494-1040
Dates of Service: 8/2012-4/2015
Key staff: Anjuli Panse, P.E., Fannie Howard, P.E., Kevin Schanen, P.E., Jonathan Haigh, PLA, Tricia Richter, PLA

Lift Station 23 Rehabilitation, Town of Palm Beach

Reference: Edna Bonelli, Project Manager
Email: ebonelli@wpb.org
Telephone: 561-494-1157
Dates of Service: 11/2010-10/2016
Key Staff: Fannie Howard, P.E., Anjuli Panse, P.E, Toral Hertzberg, E.I., Jason Lee, P.E, Samantha Graybill, P.E.

Coastal/Marine Engineering

North Ocean Boulevard Seawall Design Phase, Town of Palm Beach

Reference: Jeff Sanon, P.E., Project Engineer
Email: jsanon@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 7/2014-10/2016
Key staff: Anjuli Panse, P.E., Kevin Schanen, P.E. ,Angelina Fairchild, P.E., Tricia Richter, PLA

Sand Transfer Station Damage Assessment and Repair Design, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 2/2013-10/2014
Key staff: Kevin Schanen, P.E., Fannie Howard, P.E.

Reach 3 Seawall Repair Project, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 2/2013-10/2014
Key staff: Kevin Schanen, P.E.

Palm Beach Country Club Tunnel Assessment, Palm Beach

Reference: Steven Bielsky, General Manager/COO
Email:: steven@palmbeachcountryclub.org
Telephone: 561-844-3501
Dates of Service: 5/2013-1/2014
Key staff: Anjuli Panse, P.E., Angelina Fairchild, P.E., Kevin Schanen, P.E.

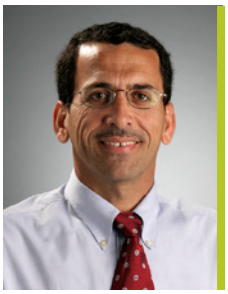
Australian, Brazilian, and Peruvian Town Dock Condition Assessment and Repairs, Town of Palm Beach

Reference: Patricia Strayer, P.E., Town Engineer
Email: pstrayer@townofpalmbeach.com
Telephone: 561-838-5440
Dates of Service: 4/2013-6/2014
Key staff: Anjuli Panse, P.E., Kevin Schanen, P.E.

Key Personnel

Our multidisciplined team has a long history of working together on large and small municipal infrastructure improvements. The resumes of the professionals who will serve on this contract highlight each staff member's breadth of experience and capability.

Marwan Mufleh, P.E. – Project Manager/Transportation

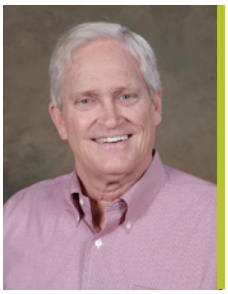


Marwan has 30 years of infrastructure and highway design experience in South Florida. His principal areas of practice include project management, roadway design, streetscape, Complete Streets design, drainage design, pavement marking, maintenance of traffic, and construction administration. Marwan has worked extensively on projects throughout South Florida, and has directed numerous projects for Broward County, Palm Beach County, FDOT, and several municipalities. He served as project manager for Federal Highway (US 1) Complete Streets Improvements for the City of Delray Beach. He was also involved with the redevelopment of NE 3rd Avenue and the adjacent Artists Alley and MLK Boulevard improvements, East Atlantic Avenue intersection upgrades, and sidewalk improvements for a number of Delray Beach streets.

Fannie Howard, P.E. – Deputy Project Manager/Engineering/Civil Engineering

Fannie has more than 13 years of utility and water resources engineering experience, including hydraulic modeling, water distribution, water treatment, and wastewater collection. She has managed the design of several wastewater and reuse projects throughout Florida. Fannie is extremely qualified in the areas of design, permitting, and piping system modeling and analysis. Fannie has provided analysis of hydraulic models for potable water, wastewater, and reclaimed water collection and distribution systems. Her experience includes ICPR, WaterGems, WaterCAD, and Hydranautics (IMS design software programs). She has served as project manager for multiple City of Delray Beach projects, including the Water treatment and Supply Feasibility Study, 8-inch Watermain Connections project, and the Distribution System Residual Chlorine Depletion Study.

John Potts, P.E. – Principal-in-Charge/Engineering/Civil Engineering/Water Resources/ Stormwater Management



Few water experts know more about the ins and outs of utility system design, operation, and start-up in South Florida than John Potts. He has more than 48 years of utilities experience and is recognized as one of the country's leading water experts, specifically in the field of advanced water treatment. He has a long history of work in South Florida, especially for the Town of Jupiter, where he represented the Town in all engineering-related matters for many years. John also served as Utility Director for South Martin Regional Utility after its inception in 1998. He served as the President of the Southeast Desalting Association and first Vice President of the American Desalting Association. These are two of the world's premiere organizations specializing in educating water resources professionals worldwide in membrane treatment technologies.

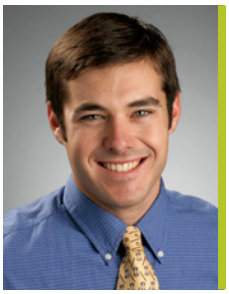
Steve Orr, CET – Quality Assurance/Quality Control

Steve has 44 years of roadway design experience and serves as project manager and designer on many of the firm's roadway planning and design projects. He serves as Kimley-Horn's senior QA/ QC reviewer for Florida municipal projects. Steve has worked on projects throughout Florida that have included safety and operations studies and plans; transportation planning and transit; traffic operations; speed zoning studies; signing and marking studies and plans; roadway planning and design; plans, specifications, construction administration; planning studies; transportation services for land development; traffic impact analysis; access, circulation, parking studies; urban area transportation planning; and new transit systems.

Kevin Schanen, P.E. – Engineering/Civil Engineering

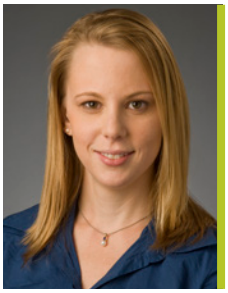
With more than 18 years of diverse engineering and project management experience, Kevin is highly skilled in a wide variety of municipal and utility projects, including water and wastewater treatment, distribution, storage, pumping, collection, and transmission systems. Kevin has managed the modeling analysis of area-wide force main systems and the design of regional wastewater pump stations, and he has served as the project manager for a wide variety of municipal infrastructure projects from golf courses to roadway streetscapes. Kevin works closely with our engineering team on utility projects daily and has a passion for serving municipal and utility clients. Kevin currently serves the Town of Palm Beach, City of West Palm Beach, Town of Jupiter, Town of Lantana, and the City of Boynton Beach, performing similar assignments to those requested in your RFP.

Jason Lee, P.E. – Engineering/Civil Engineering/MEP



Jason has 13 years of utility consulting of experience and has served as a project engineer for various utility projects throughout southeast Florida. Jason's utility projects include design, permitting, and construction phase services for several master wastewater pump stations, treatment plants, and thousands of feet of gravity sewers and force mains. In addition, Jason is currently working closely with the Town of Palm Beach as they construct the renovation of the A-7 Master Lift Station. Jason is currently serving as project manager for several municipal clients, including the City of Fort Pierce, the Town of Palm Beach, and the Town of Jupiter.

Anjuli K. Panse, P.E. – Engineering/Civil Engineering/Coastal/Marine Engineering



Juli has 12 years of engineering experience. Her project experience includes structural analyses, seawall repair and rehabilitation, and design of water and wastewater treatment facilities, bulkheads, bridges, marine structures, and pump stations. Juli is proficient with several structural engineering design programs, including RC-Pier, Shoring Suite, and RetainPro. Juli is also experienced in small and large diameter pressure pipe design, gravity sewer system design and repair, stormwater collection systems design, surface water management system design, permitting, and construction administration.

Matthew Tebow, P.E. – Water Resources/Stormwater Management

Matt is a water resources engineer with 11 years of engineering and project management experience designing and coordinating the multidisciplinary teams for water and wastewater treatment plant improvements, rehabilitations, and expansions. He has created and calibrated wastewater process and hydraulic models; established control weir elevations and hydraulic profiles; designed yard piping and facility layouts; designed chemical storage and feed facilities; and modeled, analyzed, and designed constant speed and variable speed pump stations. Matt has coordinated and obtained FDEP permits, created opinions of probable construction costs, coordinated bid phase services, provided project management and professional services during construction, and directed construction observation services. Matt has 17 years of active duty and reserve service in the Army Corps of Engineers and currently serves as a Captain in the National Guard.

Casey Long, P.E. – Structural/Coastal/Marine Engineering

Casey has 21 years of diverse civil and structural engineering experience on infrastructure improvement projects in Florida, Texas, Virginia, and the Caribbean. His professional background includes project management and design services for seaport, industrial, commercial, military, and educational facilities. Casey also has significant experience in port planning and design, as well as marine structure and container yard design. He has provided design and general consulting services for complete building systems including warehouses, office buildings, public safety facilities, and cruise terminals.

Angelina Fairchild, P.E., LEED AP – Structural Design

Angelina has 30 years of engineering experience implementing projects from conceptual design and plans preparation through construction. She has been involved in the design, rehabilitation, repair, construction, and inspection phase services on a variety of structural engineering projects that have included conventional reinforced concrete, precast, prestressed concrete, post-tensioned concrete, and structural steel on bridges; industrial and commercial buildings; parking decks; highway structures; and retaining walls. At the Port of Palm Beach, Angelina served as project engineer for the planning, permitting, and design services for the installation of a heated underground pipeline to offload asphalt cargo ships and the development of an asphalt and diesel terminal. At the Port of Miami, Angelina provided structural design for improvements to an existing terminal to support command and control center functions. Her experience also includes the assessment, repair, and design of multiple seawall and bulkhead projects for municipal and private owners in South Florida.

Mark Santos, P.E. – Structural Design

Mark has 17 years of experience in structural design and parking facility planning, design, and restoration. He specializes in both public and private-sector projects with an emphasis on complex mixed-use projects, including the new Brightline Stations in Miami and Fort Lauderdale, Boca Raton Hospital Oaks Plaza Parking Study, Miami Marlins Ballpark Garages, the Tampa Port Authority Channelside Garage Expansion, the Town of Bay Harbor Parking Facility, and the Miami Parking Authority Courthouse Center.

Adam Kerr, P.E. – Transportation

Adam has 15 years of experience in a variety of transportation planning and traffic engineering projects in South Florida. His experience includes preparation of major developments of regional impact (DRIs), FDOT action plan analyses, data collection coordination, and computer modeling. He has prepared traffic studies, signal warrant analyses, and traffic signal designs throughout Palm Beach County and South Florida. Adam has significant project experience in the City of Delray Beach. He has also served as the City Traffic Engineer for the City of Greenacres and has provided traffic and planning consulting services for the Town of Jupiter and City of Boca Raton. He is the vice president of the Palm Beach Planning Congress and a member of the Congress for the New Urbanism.

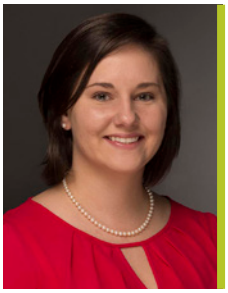
Sean Bukovich, E.I. – Transportation

Sean has five years of experience as a member of the firm's roadway design division. He provides support to senior engineers on projects that involve roadway and drainage design. His project experience includes Wiles Road Improvements in Broward County, the Palm Beach County Interchange Master Plan for FDOT, the Lake Worth Interchange Turn Lane Project for Florida's Turnpike, and various turn lane improvement projects in Palm Beach County. His responsibilities include preliminary roadway and drainage design, developing roadway profiles, cutting cross-sections, performing calculations, and coordinating plans preparation.

Jonathan Haigh, PLA – Landscape Architecture

Jonathan is a native of Palm Beach County and has 22 years of experience as a practicing professional landscape architect. He is a skilled designer with park-related project experience throughout the southeast United States: eight community parks of 60 acres and greater, more than 20 passive parks of varying size, and more than 50 miles of dedicated greenways. He served as lead landscape architect for the firm's services for the Federal Highway (US 1) Improvements and the MLK Boulevard Improvements (Phases 1 and 2). His experience is strongest in applying a practical and budget-friendly, yet creative design approach to each project. He has thoroughly embraced the application of sustainable principles in project design and incorporating the design of Florida-friendly landscapes and water-efficient irrigation systems.

Tricia Richter, PLA – Landscape Architecture



Tricia has more than five years of experience in landscape design, GIS analyses, construction document preparation, and in preparing presentation graphics. Her landscape architecture and amenities design experience includes shade trees in tree grates, new sidewalks, and site furnishings, streetscape design, irrigation design, and decorative crosswalks and intersection treatments.

Stephen Feccia, PLA – Landscape Architecture

Steve has four years of experience developing, reviewing, and modifying design concepts, technical drawings, and graphics for complex landscape architectural projects. He has extensive experience conducting site inventory and analysis studies using GIS software to prepare customized maps and diagrams. His software experience includes ArcGIS and AutoCad.

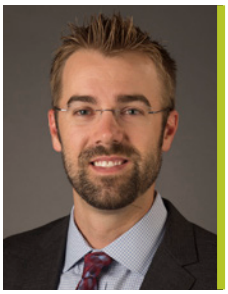
Peter Syntax, P.E. – Mechanical/Electrical/Plumbing

With 13 years of engineering experience on municipal government projects, Pete has performed all phases of engineering including project administration; cost estimating; feasibility studies and assessments; life-cycle evaluations; system design and analysis for electrical, lighting, phone, data, fire, security and pumping systems; drawings and technical specifications; and project scheduling, estimating, field inspections, construction administration and submittal review. Peter has completed several renovations, modifications, and upgrades to existing electrical systems for both horizontal and vertical construction. Most recently, he has completed multiple electrical design projects involving upgrades to existing systems, lighting and energy analysis, lighting control schematics and designs involving day light harvesting, and power design including additions of generators to existing facilities.

Lynn Kiefer – Environmental/Natural Resources

Lynn is a senior environmental scientist with 25 years of experience. She leads a team of environmental scientists in the collection and analysis of environmental data and in the preparation of various NEPA documents, including environmental impacts statements, environmental assessments, categorical exclusions, and PD&E documents. She has prepared wetland evaluation reports, endangered species biological assessments, contamination screening assessments, air quality reports, essential fish habitat assessments, and SEIRs. She has also led environmental evaluations and permitting for a variety of projects and has had extensive experience in mitigation design and listed species permitting, coordination, and documentation.

Brady Walker – Environmental/Natural Resources



Brady has 13 years of experience conducting endangered species surveys, delineating wetlands, designing wetland mitigation and restoration areas, and permitting projects throughout Florida and California. He has excavated more than 250 gopher tortoise burrows and successfully relocated over 125 gopher tortoises with the assistance of a backhoe. He has also permitted and conducted subsequent monitoring events to ensure the success of several mitigation areas (both creation and habitat enhancement) associated with commercial land development. In addition, he has worked on environmental assessments for several large PD&E studies in Florida including Florida's Turnpike from Boynton Beach to Lake Worth and Florida's Turnpike from Lake Worth to Jupiter in Palm Beach County.

Tori O'Malley – Environmental/Natural Resources

Tori has four years of experience working with state and federal agencies conducting endangered species surveys, delineating wetlands, designing wetland mitigation and restoration areas, and permitting projects throughout Florida. She has extensive experience gathering fisheries data using gill nets, crab traps, minnow traps, bottomless lift nets, hook and line, PIT tagging, surgically inserted acoustic tags, extraction and reading of otoliths. She also has experience capturing birds using mist-nets and landing nets and experience capturing small to medium-sized mammals using a variety of live traps. Her software expertise includes ArcGIS (ArcMap), SAS, PRIMER, and FAMS. Tori has Advanced SCUBA Diver certification with 100+ logged dives and certifications in Cavern Diver, Nitrox, and pending certification with the American Academy of Underwater Sciences (AAUS).

Organization Chart and Resumes

An organization chart and resumes for our key team members and subconsultant staff are included on the following pages.

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services RFQ No. 2017-048

Organization Chart

Principal-in-Charge
John Potts, P.E.

Project Manager
Marwan Mufleh, P.E.

Quality Assurance/ Quality Control Manager
Steve Orr, CET

Deputy Project Manager
Fannie Howard, P.E.

Engineering
John Potts, P.E.
Kevin Schanen, P.E.
Jason Lee, P.E.
Fannie Howard, P.E.
Anjuli Panse, P.E.
Michael Spruce, P.E.
Jason Webber, P.E.
Stefano Viola, P.E.

Transportation
Marwan Mufleh, P.E.
Adam Kerr, P.E.
Sean Bukovich, E.I.
Stewart Robertson, P.E.
Chris Heggen, P.E.
Ali Hanes, P.E.
Gin Ng, P.E.

Landscape Architectural Design
Jonathan Haigh, PLA
Tricia Richter, PLA
Stephen Feccia, PLA
George Puig, PLA
James Pankonin, PLA
Kim Misek, ASLA

Civil Engineering
Fannie Howard, P.E.
John Potts, P.E.
Anjuli Panse, P.E.
Kevin Schanen, P.E.
Jason Lee, P.E.
Bill Reese, P.E.
Samantha Graybill, P.E.

Mechanical/Electrical/ Plumbing
Jason Lee, P.E.
Peter Syntax, P.E., LEED AP
Alan Garri, P.E.
Matt Shoesmith, P.E. (NC)

Structural Design
Angelina Fairchild, P.E., LEED AP
Casey Long, P.E.
Mark Santos, P.E., LEED AP
Arnoldo Artiles, P.E.
Jamea Long, P.E.
Rosemay Alcid, E.I.

Environmental/ Natural Resources
Brady Walker
Lynn Kiefer
Tori O'Malley
Mike Kiefer
Oliver Basse

Water Resources/ Stormwater Management
John Potts, P.E.
Fannie Howard, P.E.
Matt Tebow, P.E.
Mark Miller, P.E.
Lance Littrell, P.E.
Toral Hertzberg, E.I.

Coastal/Marine Engineering
Casey Long, P.E.
Anjuli Panse, P.E.
Kevin Schanen, P.E.
David Stewart, P.E.
Wayne White, P.E.

Surveying/Mapping
Donna West, PSM
Daniel Laak, PSM
HSQ Consultants, Inc.

ADDITIONAL SERVICES

Geotechnical Services
Raj Krishnasamy, P.E.
Francois Thomas, P.E.
Tierra South Florida, Inc.

Sea Level Rise/ Resiliency
Chris Niforatos, P.E.
Ken Dierks, REM

Public Involvement
Lisa Stone, P.E.
Matt Fursetzer, P.E.
Sara Lopez, E.I.

GIS Services
Erin Emmons, GISP

Construction Phase Services
Ed Grady
Mike Parsons
Jim Farrell

Key Staff *Add'l Support Staff* *Subconsultants*

Marwan H. Mufleh, P.E.

Project Manager/Transportation

Special Qualifications

- Has 30 years of civil engineering experience
- Principal areas of practice include project management from the design concept stage through the construction administration phase, roadway design, streetscape, Complete Streets, traffic calming, drainage design, pavement marking, and maintenance of traffic
- Served as project manager on numerous successful municipal roadway design and construction projects
- Familiar with County staff and procedures
- Experienced in Microstation, Geopak, and Microsoft office programs

Education and Training

- Bachelor of Science, Civil Engineering, University of Texas, Arlington, 1986

Registrations and Certifications

- Professional Engineer in Florida, #45329, March 27, 1992

Professional Affiliations

- American Society of Civil Engineers (ASCE)
- American Society of Highway Engineers (ASHE)
- Florida Engineering Society

Project Experience

Federal Highway (US 1) Interim and Final Enhancements, Delray Beach CRA, Delray Beach — Project manager. This multi-phased project included a study and conceptual design, temporary implementation of the design for a trial period and final design of the permanent improvements. This project included two miles of the US 1 one-way pair in each direction in Delray Beach. The City and its Community Redevelopment Agency (CRA) adopted the Downtown Delray Beach Master Plan, which has as one of its key elements a reconfiguration of the two one-way segments of US 1 from three lanes to two lanes. Accordingly, Kimley-Horn was retained to evaluate potential changes to the lane configuration along southbound (NE/SE 5th Avenue) and northbound (NE/SE 6th Avenue) segments of US 1 from north of Linton Boulevard (SE 10th Street) to George Bush Boulevard. Kimley-Horn developed alternatives, forecasted future traffic volumes for review with the City and the CRA, and led several public involvement workshops at which detailed traffic engineering and design data were presented. The design provided two lanes each way with on-street parking for both avenues, City residents and visitors will soon enjoy the benefits of on-street, buffered parking; slower speeds and a safer, more pedestrian-friendly environment; landscaping beautification and decorative, environmentally sensitive street lighting; bicycle lanes; and a new sense of continuity with the Downtown area.

Delray Beach General Engineering Consulting Services, Delray Beach — Serves as project manager for on-call continuing services to the Cities of Delray Beach and Hollywood. Through responsive service, high quality, and our specialized expertise in a number of disciplines, we have been reselected for this contract multiple times and have been serving Delray Beach for several years. The contract allows us to provide a variety of services including updates to their master plans including traffic and water supply components of their comprehensive plans as well as design of CIP projects, utility design, drainage design, transportation and traffic studies, streetscape design, park design, parking analysis, roadway lane reduction studies and design, signal design, and FDOT LAP project design. Through our relationships with FDOT and the County, we have been the go-to firm for the Cities of Delray Beach and Hollywood to tackle complex projects, especially those requiring coordination with FDOT or intense public involvement.

Martin Luther King, Jr. (MLK) Drive Beautification, Delray Beach CRA — Project engineer for final design of roadway, landscape, lighting, and hardscape enhancements for the entire length of MLK Drive in Delray Beach. The 1.5-mile corridor will incorporate MLK commemorative design elements placed in the right of way. The design concept includes the continuation of an existing sidewalk network; decorative lighting; right-of-way plantings with flowering trees, palms, and other landscaping; a program for live oaks to be planted outside of the right-of-way; and artwork on existing utility poles. The master plan also addressed prioritization and phasing of the proposed improvements with respect to budget.

NE 3rd Avenue Streetscape, Delray Beach — Project manager. The project included redevelopment of NE 3rd Avenue and the adjacent Artists Alley. In the study phase of the project, Kimley-Horn was tasked with developing the concept for the reconstruction and redevelopment of the street and the alley, which involved a number of stakeholder meetings and coordination with the arts community to develop a unified vision. Kimley-Horn assessed existing conditions and developed alternative concepts that were presented to the public. Kimley-Horn's planners, landscape architects, and engineers collaborated closely with City and CRA staff to develop presentations for the public meeting and address public comments.

Las Olas Boulevard Corridor Safety Improvements & Traffic Calming, City of Fort Lauderdale — Project manager for redevelopment of several pieces of City property from existing surface parking lots to a new multi-story parking garage, active park and plaza areas, and general open space to enhance the pedestrian and beachgoer experience in

the Fort Lauderdale beach area. We are serving as prime consultant for safety and traffic calming improvements. As a subconsultant to another firm for major streetscape improvements, Kimley-Horn is also in charge of site civil engineering design, roadway design, permitting coordination, stormwater, utility, and franchise utility coordination.

SW 3rd Street, SW 5th Avenue, SW 6th Avenue, NW 8th Street, Sidewalk and Roadside Improvements, City of Delray Beach — Project manager for design services for several local streets under our general consulting services contract. Design services include sidewalk connectivity, roadside swale improvements, ADA ramp upgrades, utility coordination and adjustments, landscape impact assessments, addressing private property encroachments into street rights-of-way and coordination with both City and CRA staff throughout the entire project.

Lyons Road from Clint Moore Road to Atlantic Avenue, Delray Beach — Led the Kimley-Horn team for roadway and structural design services for a new Lyons Road bridge over the Lake Worth Drainage District (LWDD) L-38 Canal adjacent to the existing bridge. Careful attention needed to be maintained when working adjacent to existing large underground utilities and overhead electric lines that could interfere with bridge pile driving. Kimley-Horn coordinated closely with LWDD for the design of the new bridge and consideration of canal access. We also provided drainage design and all environmental permitting services for the entire corridor. Three contaminated sites were known to exist along the corridor. Kimley-Horn was responsible for the assessment and mitigation of these sites in coordination with the Florida Department of Environmental Protection. We also provided wetland delineation, endangered species assessments, and wood stork foraging analyses. Other permitting services included an Environmental Resource Permit (ERP) through South Florida Water Management District and a Dredge and Fill permit through USACE.

Wiles Road Design from Rock Island Road to US 441 (SR 7), Coral Springs — Project manager for the Kimley-Horn team selected by the Broward County Engineering Division to prepare complete contract plans for the reconstruction and widening of Wiles Road as a six-lane divided urban arterial from Rock Island Road to US 441 (SR 7). Broward County and FDOT are sharing in the cost of improvements which include drainage, lighting, landscaping, irrigation, bicycle lanes, signalization, utility coordination, and detailed traffic control plans.

Seacrest Boulevard Roadway Improvements, Boynton Beach — Project manager. This project includes the redevelopment of Seacrest Boulevard from the Boynton Canal to Boynton Beach Boulevard. Provided streetscape design, permitting procurement and creation of construction documents for the CRA of Boynton Beach. Provided coordination with the CRA, Palm Beach County Streetscape Division, and the City of Boynton Beach. Provided coordination with Kimley-Horn roadway team, civil engineer, and lighting engineer. Special attention to beautify this blighted part of Seacrest Boulevard which had no trees within the public right of way by incorporating canopy and palm trees, a new sidewalk design, landscaped medians, decorative crosswalks, and street lighting.

South Shore Boulevard Design, Phase II from Lake Worth Road to Pierson Road, Wellington — Project manager for the reconstruction of 1.1 miles of South Shore Boulevard from a two-lane, undivided roadway to a two-lane, divided roadway with sidewalks and equestrian trails. Responsibilities included horizontal and vertical design, plans preparation, generating cross-sections, back-of-sidewalk profiles, preparing maintenance of traffic concepts, and signing and pavement marking plans. In addition to roadway design, the project also had landscape design elements.

Hypoluxo Road (East of Lyons Road to Hagen Ranch Road), Lake Worth — Project manager for the widening of Hypoluxo Road from two to four lanes and construction of bridge over the Florida Turnpike. The project included major drainage improvements and drainage analysis and connection to a number of existing ponds. It also included expanded signalized intersections, extensive coordination with the Florida Turnpike Enterprise and local drainage district for the construction of the new bridge.

Intersection Improvements On-Call Contract, Palm Beach County — Project manager for this contract to provide intersection improvements across Palm Beach County. Our team provided professional services for the following projects: Australian Avenue at 13th Street; Blue Heron Boulevard at Australian Avenue; Southern Boulevard at Lyons Road; Military Trail at Forest Hill; Lake Worth Road at Palm Beach State College; and Atlantic Avenue at Florida's Turnpike.

Lake Worth Beach Redevelopment, Lake Worth — Client manager overseeing the development of site plan exhibits, associated cost estimates, public presentations, and City and Palm Beach County coordination on this project. Supported the City in developing design criteria and site plan alternatives for a proposed redevelopment of its public beach. Proposed improvements included boardwalks, parking lots, roads, utility and drainage infrastructure, walkways, landscaping, street furnishings, pavilions, beach lockers, playground equipment, lighting, restrooms, and other site amenities. Also assisted the City in negotiating a new interlocal agreement with Palm Beach County to secure up to $5 million in funding for the public improvements. Kimley-Horn is assisting with LEED certification of the Casino building.

Fannie H. Howard, P.E.

Deputy Project Manager/Engineering/Civil Engineering/Water Resources/Stormwater Management

Special Qualifications

- Project engineer with 13 years of experience with all aspects of utility projects throughout southeast Florida
- Extensive hydraulic modeling, water distribution, wastewater collection, and piping system modeling and analysis experience
- Has provided analysis of hydraulic models for potable water, wastewater, and reclaimed water collection and distribution systems
- Proficient with ICPR, GIS, WaterGems, WaterCAD, and Hydranautics (IMS design software programs)

Education and Training

- Master of Science, Environmental Engineering, University of South Florida, 2003
- Bachelor of Science, Chemical Engineering, University of Florida, 2001

Registrations and Certifications

- Professional Engineer in Florida, #67506, January 17, 2008

Professional Affiliations

- Florida Engineering Society

Project Experience

10-Year Water Supply Feasibility Study, City of Delray Beach — Project manager for development of a 10-year water supply master plan. We developed a 20-year linear population projection model using assembled data to meet the needs of the plan update and identify projects for the City and its service area during this growth period. Kimley-Horn prepared the water treatment master plan to recommend facilities, treatment process, treatment capacities, facility locations, planning level budget estimates, and construction timing.

Martin Luther King, Jr. (MLK) Drive Reclaimed Water Main Improvements (4 inches, 6 inches, and 10 inches), City of Delray Beach — Project engineer for design of the 4-, 6-, and 10-inch reclaimed water main pipelines in conjunction with a streetscape project in Delray Beach. Hydraulic modeling was performed using WaterGEMS software to size the water main, as well as project future demands throughout the mixed commercial and residential areas along the alignment. The design of a remote actuated control valve was also included so the line could be automatically isolated in the event of an emergency at the wastewater plant that provides the effluent.

Bermuda Water Company Water Treatment Services, Devonshire, Bermuda— Serving as project engineer for a variety of water treatment related issues. These assignments have included investigating the cause of sea water wells being very high in turbidity and organic matter, as well as pretreatment of the sea water as it is sent to the reverse osmosis process. One project involved the construction of a 1.0-MG storage tank by a stateside contractor. Kimley-Horn is investigating the appropriate treatment process to replace the utility's aging electro-dialysis reversal water treatment system.

Harbor Branch Reverse Osmosis Water Treatment Plant, Fort Pierce — Served as project engineer involved in the planning, design, permitting, and construction phase services for the Harbor Branch Oceanographic Institute's (HBOI) expansion of its existing reverse osmosis water treatment plant (ROWTP) from a capacity of 33,780 GPD to 66,000 GPD. HBOI owns and operates a ROWTP that converts surficial aquifer water to drinking water to serve their main campus. HBOI intended to increase capacity to meet the growing demands of the facility. Kimley-Horn performed a due diligence review of the existing ROWTP and was able to identify and recommend improvements that would both increase the plant's capacity and make the operations of the plant more cost effective.

Design the South County Algal Turf Scrubber Stormwater Collection and Brine Conveyance System, Indian River County — Project engineer. As part of the County's engineering continuing services contract, Kimley-Horn is providing survey, pot-holing, design, hydraulic analysis, and construction phase services. In addition, Kimley-Horn will conduct hydraulic analysis of the piping system and evaluate mechanical impacts to the existing reverse osmosis (RO) plant.

Finish Water Stabilization (Lime Slurry Injection) to Reverse Osmosis (RO) Water Treatment Plants (WTPs) and Finish Water Stabilization Corrosion Study, Indian River County — Served as project engineer for an evaluation of the stabilization methods for Indian River County's consolidated water system. Indian River County required an improvement to their existing corrosion control method which utilized zinc orthophosphate. The Kimley-Horn team evaluated alternative treatment methods, conducted pilot testing using lime slurry and carbon dioxide injection, and designed and permitted chemical stabilization systems for Indian River County's North Hobart reverse osmosis (RO) water treatment plant (WTP) rated at 17.1 MGD, and their South Oslo Road RO WTP, rated at 8.5 MGD. The project included a carbon dioxide and lime slurry feed system which enhances finish water alkalinity and hardness, major contributors to enhancing the Langelier Saturation Index (LSI) of the finish water.

Southern Boulevard Bridge Subaqueous 16-inch Water Main Replacement and Route Study (14-inch pipeline), City of West Palm Beach — Project engineer involved in the design and construction of a 16-inch HDPE pipeline under the Intracoastal Waterway between the City of West Palm Beach and the Town of Palm Beach. As a result of the Southern Boulevard Bridge reconstruction project, a 16-inch water main owned by the City of West Palm Beach needed to be relocated. Kimley-Horn provided an initial route study to identify potential pipeline routes and hydraulic modeling to determine that the pipe diameter could be reduced to lower construction costs. Kimley-Horn also provided design, permitting, bidding, and construction phase services for the project. Permits were obtained from the U.S. Army Corps of Engineers, Florida Department of Environmental Protection, and Florida Department of Transportation.

Tamarind Avenue Infrastructure Preliminary Design Report and Infrastructure Improvements, City of West Palm Beach — Project engineer for the design of approximately 2,700 linear feet of 30-inch water main and 1,400 linear feet of 20-inch water main along Tamarind Avenue for the City of West Palm Beach. Specifically involved with preparation of construction documents for utility, sanitary sewer, stormwater, and water main elements.

Northwood Railroad Corridor Phase 1A Utility Relocations (16-inch to 30-inch pipelines), City of West Palm Beach Project engineer for the design of utility relocations associated with railway improvements in the Northwood industrial area in West Palm Beach. As part of a FDOT project to provide greater connectivity between the CSX and FEC railroads, Kimley-Horn was selected by the City of West Palm Beach to design multiple utility relocations for water, sewer, and stormwater infrastructure to meet strict vertical clearance requirements between the rails and the tops of the pipelines. This required rerouting multiple gravity sewers to new lift stations, adjacent sanitary basins, or lowering in place and rebuilding downstream infrastructure. It also involved lowering and rerouting multiple water and stormwater pipelines to avoid the new railroad infrastructure being proposed by the FDOT. The project included multiple jack and bore designs for casings ranging in size from 16 to 30 inches.

WTP #11 Finish Water Quality Evaluation and Corrosion Study, Palm Beach County — Project engineer. This project is part of Kimley-Horn's general water treatment plant engineering services contract. Kimley-Horn was retained by Palm Beach County Water Utilities Department to evaluate water quality in the distribution system, coordinate and conduct a coupon corrosion study and prepare a summary report for the Lake Region Water Treatment Plant. The study includes collecting and reviewing water quality data; conducting a disinfection by-product evaluation; testing coupon corrosion units; conducting a corrosion study; and preparing a corrosion report.

Par 3 Golf Course Reverse Osmosis (RO) Irrigation Quality (IQ) Water Plant, Town of Palm Beach —Project engineer for design of a reverse osmosis water treatment system intended to provide irrigation water to the Town's renovated Par 3 golf course. These services included preparation of a preliminary design report which identified options, features, and sizing of the proposed water treatment system. This report allowed the Town to participate in selecting the features most beneficial to the intended use of this facility. The ultimate design was approximately 250,000 gallons per day, but allowed the opportunity to expand the treatment capacity in the future. A unique feature of this project was the relatively simplistic approach to automation and controls of the treatment system since its function was to produce irrigation water and not drinking water.

Lift Station 13 Rehabilitation, City of West Palm Beach — Served as project engineer. Kimley-Horn was retained by the City of West Palm Beach for the addition of a new electrical room and associated improvements at this lift station in West Palm Beach. Our team designed a new electrical room and placed the new electrical components of the building at an increased elevation to avoid future flooding problems. An evaluation of the existing pumps was also performed to determine if the station can be converted from a triplex to a duplex station once the City begins to bypass flow from Lift Station 5. Kimley-Horn's services included the design of the bypass piping, new landscaping, a new bridge crane, and an overhead door to aid in operations and maintenance, as well as the design of submersible actuators in the dry pit.

Lift Station 23 Rehabilitation, City of West Palm Beach — Served as project engineer for the design of the rehabilitation improvements to this wastewater pumping station located in Currie Park. This project includes replacement of three existing 2,000 gpm pumps with VFD driven electric submersible pumps in a dry pit installation, wetwell rehabilitation, expansion of the existing electrical building, upgrading the existing FPL service from 240V to 480V service, installation of an electric pump hoist, new ventilation system, and other associated improvements.

Palm Beach S-2 Master Sanitary Inline Booster Station, Palm Beach — Project engineer for the design, permitting, bidding, and construction phase services for the conversion of the Town's largest sanitary repump station from a traditional wetwell style station to an inline booster style station. The design included influent and effluent force main modifications; construction of five new VFD driven centrifugal wastewater pumps within a converted wetwell of an existing master lift station; installation of a new emergency generator; and various other station structural, mechanical, and electrical improvements.

John E. Potts, P.E.

Principal-in-Charge/Engineering/Civil Engineering/Water Resources/Stormwater Management

Special Qualifications

- More than 40 years of water treatment plant design and utility system design, operation, and start-up experience
- Recognized as one of the country's leading water experts, specifically in the field of advanced water treatment
- Served for 17 years on board of directors for the American Membrane Technology Association; Chairman of the American Water Works Association Desalting Committee for three years; board member and founding member of the Southeast Desalting Association
- Served as Utility Director as a consultant to the Town of Jupiter Island for five years
- Recipient of the Hall of Fame Award from the American Membrane Technology Association

Education and Training

- Bachelor of Science, Mechanical Engineering, University of South Alabama, 1972

Registrations and Certifications

- Professional Engineer in Florida, #22881, July 13, 1979

Professional Affiliations

- American Membrane Technology Association
- American Water Works Association (AWWA)
- Florida Engineering Society
- Southeast Desalting Association

Project Experience

15.0-MGD Nanofiltration Water Treatment Plant (WTP) Construction Phase Services, Town of Jupiter — Project manager during the construction phase of this $37-million-dollar plant in the Town of Jupiter. Kimley-Horn developed a unique teaming approach with the Town during construction that has allowed the Town staff to be very involved throughout the process. This has allowed the Town to save a significant amount of money by reducing the amount of consultant fees that would normally be expected on a project of this magnitude.

WTP 11 Clearwell and Post-Treatment Evaluation, West Palm Beach — QA/QC reviewer for an overall evaluation of the post-treatment system to the reverse osmosis water treatment plant. The report provided recommendations to help improve the water quality produced at Lake Region Water Treatment Plant. Kimley-Horn was retained to conduct an evaluation of the clearwell, chemical addition, degasification, and off-gas system. Our team developed finish water quality goals, conducted a clearwell evaluation, evaluated second-stage scrubber and lift station issues, and prepared a summary report. Recommendations included within the report were immediately incorporated into a series of design-build contracts.

Delray Beach 10-Year Water Supply Master Plan, Delray Beach — Project engineer for development of a 10-year water supply master plan. We developed a 20-year linear population projection model using assembled data to meet the needs of the plan update and identify projects for the City and its service area during this growth period. Kimley-Horn prepared the water treatment master plan to recommend facilities, treatment process, treatment capacities, facility locations, planning level budget estimates, and construction timing.

South Martin Regional Utility (SMRU) 8.0-MGD Brackish Water Treatment Plant (WTP), Jupiter Island — Served as project manager for preliminary planning, water withdrawal permitting, well construction, concentrate discharge permitting, WTP basis of design documents, construction of an ocean outfall for concentrate disposal, water plant construction, and water plant start-up. This program encompassed approximately five years and resulted in a reverse osmosis (RO) WTP with a production capacity of 2.0 MGD and expandable to a production of capacity of 4.0 MGD. Two water supply wells were constructed, each approximately 1,500 feet deep and each capable of producing 1,750 GPM of brackish groundwater. drilling techniques. Basis of design documents were prepared for the WTP and construction was procured using a design-build process. Kimley-Horn served as the owner's representative throughout the construction and start-up phases.

Tropical Farms 14.0-MGD Brackish Water Treatment Plant Expansion, Martin County — Served as project manager. Over the last decade, Kimley-Horn has provided a variety of services for the Tropical Farms WTP and Wastewater Treatment Plant (WWTP). Tropical Farms is intended to be a regional treatment facility to serve Martin County's southern service area. Kimley-Horn is providing all phases of design, permitting, construction, and SCADA system integration for their 14.0-MGD reverse osmosis (RO) WTP expansion. Some of our other project services included consumptive use permitting for Martin County's entire consolidated system, which includes decommissioning two smaller treatment facilities and reducing their groundwater allocation. *The Tropical Farms WTP has been recognized by the Florida Department of Environmental Protection as a winner of the 2012 Water Plant Operations Excellence Award.*

Project Experience, cont.

Palm Beach County Water Utilities Department (PBCWUD) Water Treatment Plant #11 (WTP #11) Operational Improvements — Principal-in-charge. Kimley-Horn helped to restore plant capacity and greatly improve operations at the 10-MGD Lake Region Reverse Osmosis (RO) Water Treatment Plant (WTP). The facility had struggled with a rapid decline in raw water quality. Kimley-Horn was instrumental in helping restore plant capacity through enhancements to the WTP and operational improvements. Services includes the design of energy recovery improvements to the RO system and several operational changes to optimize system recovery. Enhancements to the SCADA system were also implemented, which allowed the automatic download of operating data to their normalization program, greatly reducing staff time needed to manage operating data. With these improvements, Kimley-Horn was able to eliminate the nearly 30% reduction in capacity the plant had experienced.

Reverse Osmosis Water Treatment Plant, City of Venice — Served as project manager for renewal of their permit from FDEP to discharge concentrate from the reverse osmosis water treatment plant. This water treatment plant is one of the oldest in Florida and discharges concentrate into the nearby Intracoastal Waterway. As a surface discharge of reverse osmosis concentrate, this permit renewal involved not only quality of the concentrate, but also mixing with ambient waters as well as potential toxicity matters. The permit was renewed with no additional monitoring requirements imposed on the City of Venice.

Reverse Osmosis Water Treatment System, Town of Manalapan — Served as project manager for an evaluation of the reliability of their existing reverse osmosis water treatment system. This project included a review of historical water production data to determine a planning horizon for future water requirements and identifying significant deficiencies within the existing treatment system. This project also identified areas within the treatment system that could be modified to improve the efficiency, either in production capacity or cost to produce. Kimley-Horn produced a report which identified the deficiencies, areas lacking reliability, and inefficient components. We ranked these factors and provided budgetary costs for revision.

Seacoast Utility Authority Nanofiltration Water Treatment Plants, Palm Beach Gardens — Serving as project manager for several components of their new reverse osmosis and nanofiltration water treatment plants. One of these assignments was to conduct a peer review of the water treatment construction documents. This review is intended to identify constructability, cost reduction, and plant durability issues which can be implemented to save the utility construction dollars, operation cost, and maintenance requirements.

Nanofiltration Plant Standard Operating Procedures Manual, Jupiter — Served as project manager. Kimley-Horn prepared a Standard Operating Procedures (SOP) manual for the Town of Jupiter on completion of their new 15.0-MGD nanofiltration water treatment plant (WTP). The automatic control system at this facility is very robust as the WTP is fully automated and operating staff are in a separate building. This manual was developed to assist the operating staff in both learning about the new WTP, it's control system, and its operating parameters. The SOP manual included photos of instrument panels with annotations on specific instruments to be recorded, screenshots of the SCADA operating system with annotations on key operating parameters, and a description of the operating control logic for each of approximately 35 separate systems within the WTP. The SOP manual gives each operator a reference manual for information on virtually any occurrence at the WTP.

Riverbend Pump Station Chlorination Facilities, Town of Jupiter — Served as project manager. Kimley-Horn was called upon by the Town of Jupiter water system to design facilities to allow interim or temporary application of chlorine at a remote ground storage and repumping facility. These new chlorination facilities will allow this repumping station to produce free chlorine residual disinfectant when conditions within the service area require reduction of nutrient levels or add chlorine to the combined chlorine residual disinfectant when low flow condition in the service area requires a boost of combined chlorine level.

Jupiter Water System Lime Plant Demolition, Jupiter — Served as project manager. The Town of Jupiter operates a water treatment system that includes brackish water reverse osmosis (RO) treatment, nanofiltration water treatment, ion exchange water treatment, and a lime softening facility. On completion of the nanofiltration treatment project, it became apparent that the lime softening facilities were no longer needed and space could be made available on the existing site by removing the lime softening structures and facilities. The project started with gathering all possible information on the location of existing facilities and potential isolation valves. Throughout the project, the balance of the plant had to be kept in service. This project did not leave the piping abandoned in place, but chose the more difficult route of removing every underground pipe or conduit, regardless of size. Kimley-Horn provided all design services for this project, which also included replacement sulfuric acid storage facilities for the RO water plant, a new source of water for the RO electrical cooling system, and additional on-site stormwater treatment facilities.

Steve Orr

QA/QC Manager

Special Qualifications

- Has 45 years of design experience on FDOT and municipal improvement projects
- Serves as Kimley-Horn's senior roadway QC/QA reviewer for Florida roadway projects

Education and Training

- Associate of Arts, Engineering, Palm Beach Junior College, 1983
- Associate of Science, Drafting and Design Technology, Palm Beach Junior College, 1972

Registrations and Certifications

- Certified Engineering Technician, National Institute Certification of Engineering Technicians, 1990

Professional Affiliations

- American Society of Civil Engineers (ASCE

Project Experience

Federal Highway (US 1) Interim and Final Enhancements, Delray Beach CRA, Delray Beach — Traffic signal design and QA/QC for multiple tasks. This multi-phased project included a study, conceptual design, temporary implementation of the design for a trial period, and final design of the permanent improvements. Temporary improvements were installed to study the real-world effects of fewer and narrower lanes. In 2010, the CRA asked Kimley-Horn to move forward with designs for permanent improvements. City residents and visitors now enjoy the benefits of on-street, buffered parking; slower speeds and a safer, more pedestrian-friendly environment; landscaping beautification and decorative, environmentally sensitive street lighting; bicycle lanes; and a new sense of continuity with the Downtown area.

SR A1A Streetscape Improvements, Fort Lauderdale — Quality control reviewer for improvements to the sidewalk on both sides of the street outside of the curbing in order to provide modern and cohesive look, a definitive delineation between the pedestrian zone and the outdoor restaurant café zone, and improve pedestrian experience while walking along the beach and to its businesses. The trees and light poles are being consolidated near the back of curb to open up the pedestrian zone and provide a clear walking path. Kimley-Horn is the prime consultant responsible for civil engineering, permitting, and coordination.

Town Hall Square Streetscape and Infrastructure Improvements, Town of Palm Beach — Quality control reviewer for this historic fountain restoration and roadway beautification project within the heart of the Town's commercial corridor. Phase I of the project included the restoration of the Mizner Memorial Fountain constructed in 1929. Phase II of the project included streetscape improvements consisting of landscaped nodes, decorative pedestrian crossings, updated urban park landscaping that creates a public gathering area in the median of a roadway where the fountain feature resides, modification of various underground utilities, replacement of sidewalks with decorative tabby concrete, and the introduction of many landscaping and architectural elements throughout the area.

15th Street Streetscape, West Palm Beach — Quality assurance/quality control reviewer. Kimley-Horn is currently developing plans for streetscape improvements for 15th Street in West Palm Beach. This streetscape features a full complement of Complete Street elements, such as dedicated bike lanes, on street parking, improved accessibility, street furnishings, and new landscaping. The bike lanes will be emphasized with a green performance asphalt coating. The street also features new bulb-out islands to help better define and organize parking as well as act as percolating bioswales that will take in stormwater from the existing gutter.

Black Creek Trail Segment A Construction Documents, Miami-Dade County
Senior QA/QC reviewer on the Kimley-Horn team that prepared construction documents for this 9.1-mile, multi-use greenway trail in southern Miami-Dade County. Kimley-Horn was responsible for all phases of this project ranging from programming and schematic design through construction phase services. We assisted the Miami-Dade County Parks and Recreation Department (MDPR) in identifying potential trail alignments, amenities, trailhead locations, and neighborhood connections.

Broward Avenue and Volusia Street Signal Design - Florida Atlantic University, Boca Raton — Served as project engineer. Kimley-Horn designed a traffic signal at the intersection of Broward Avenue and Volusia Street on the FAU Boca Raton campus. The signal is a trombone-style mast arm. The signal serves a busy intersection with a significant amount of pedestrian traffic. Kimley-Horn worked

closely with the trombone-style mast arm manufacture to ensure that the design would meet the wind loading requirements for coastal Florida.

SR A1A (Flagler Memorial Bridge) Replacement Design-Build Criteria Package and Construction Phase Services, FDOT District Four, West Palm Beach — Senior quality control reviewer and signalization designer for development of design-build criteria package for replacement of the existing four-lane bascule bridge across the Intracoastal Waterway. Kimley-Horn was responsible for the concept design and the development of the construction RFP with an estimated cost of $98 million. The design of the approach roadways, drainage systems, and construction phasing TCP is developed to 90% and included concept development of signing/marking, signalization, lighting, structures and landscape plans. The scope also included extensive public involvement, permitting, and utility coordination efforts. Our services will also include reviews of design-build plans, construction documents, and additional coordination with stakeholders, permitting agencies, and utilities.

Gateway Boulevard Widening, Boynton Beach — Member of the Kimley-Horn team that provided design, permitting, and construction phase services for the widening of an urban arterial from four to six lanes. This one-mile stretch is located immediately to the west of Gateway Boulevard's interchange with I-95. The project included detailed longitudinal profile design as the roadway section was converted from flush outside shoulders to curb and gutter. It included detailed analysis of the roadway's drainage system and that of adjacent developments receiving a portion of the roadway's surface water runoff. Coordinated closely with the local drainage district and South Florida Water Management District and successfully negotiated compensating storage to avoid acquisition of property for stormwater ponds. Also coordinated closely with utility agencies to resolve a number of utility conflicts in a fully developed corridor. Alternative designs to avoid the need for construction easements if property owners were not willing to cooperate to meet project schedules. We also coordinated with the City to address impacts to existing landscaping and irrigation and with a local improvement district to street lighting conduits. Project construction was completed in early 2009.

I-595 Corridor Improvements (Zone 5) from West of Pine Island Road to West of University Drive, FDOT District Four, Broward County — Senior quality assurance/quality control reviewer. Kimley-Horn is responsible for this design-build project from west of Pine Island Road to west of University Drive (Zone 5). Responsibilities within this section include roadway, temporary traffic control, drainage, bridge structures, and lighting. This project includes the design-build, finance, and operation and maintenance of the I-595 corridor for I-75 to west of I-95, including two miles of Florida's Turnpike (a total of approximately 10.5 miles). Kimley-Horn is also responsible for the roadway lighting design of approximately 8 of the 10.5 miles of the project.

I-95 Master Plan for 17 Interchanges from Linton Blvd. to Northlake Blvd., FDOT District Four, Palm Beach County Served as designer and QC reviewer for this project that entailed the identification of 17 interchange improvement projects (from south of Linton Boulevard to north of Northlake Boulevard) that could move into the design phase in FY 2013/14 and FY 2014/2015. To accomplish this, Kimley-Horn developed a methodology that proposed a two-tier approach to identify and prioritize those interchanges that could advance quickly and have conceptual improvement plans completed by July 1, 2013; the remaining interchange studies were completed February 2015 and documented in an Interchange Master Plan (IMP).

La Mancha Avenue Improvements - Royal Palm Beach, Royal Palm Beach — As project manager, worked with the Village to design an alternate roadway connection, within the La Mancha subdivision, to Okeechobee Boulevard and a future connection to the proposed SR 7 extension that would reduce the traffic levels near Okeechobee Boulevard and Royal Palm Beach Boulevard. Key to the success of this proposed connection would be the development of plans that enhanced the quality of life of residents within the La Mancha subdivision without attracting pass-through drivers through the community. These goals where accomplished by providing the local residents with a new roadway, bicycle lanes along both sides of the street, a 10-foot-wide multiuse path on the east side, and a continuous sidewalk along the west side of the roadway. A lower speed limit coupled with the addition of multiple roundabouts of various sizes along the roadway discourages pass-through drivers from entering the residential area.

M-Path Intersection Safety Improvements Project, Miami — Senior quality control/quality assurance (QC/QA) reviewer for Kimley-Horn team that developed a corridor master plan for the nine-mile, eight-foot-wide multiuse M-Path Trail, which connects Downtown Miami to SW 67th Avenue (Ludlam Road) in South Miami. The M-Path was built within the elevated Miami-Dade County Metrorail right-of-way, but discontinuities exist and the path does not meet current trail design standards for bi-directional multiuse paths. The plan's objective was to address operational issues and problem areas along the alignment with a comprehensive program for the path as a whole.

Kevin M. Schanen, P.E.

Engineering/Civil Engineering/Water Resources/Stormwater Management/Coastal/Marine Engineering

Special Qualifications

- Has 19 years of diverse engineering and project management experience
- Experienced Project Manager with a wide variety of municipal projects, including water, wastewater, and stormwater utilities, structures, restoration and rehabilitation, community parks, streetscapes, and infrastructure improvements
- Software experience includes Ad-ICPR, WaterGEMS, STAAD, AutoCAD Civil3D, ASAD, and MathCAD
- Past recipient of the Engineer of the Year award from the Florida Engineering Society, Palm Beach County Chapter
- Past recipient of an Outstanding Young Alumnus Award from the University of Florida
- Graduate of the Florida Engineering Leadership Institute (FELI)

Education and Training

- Bachelor of Science, Civil Engineering, University of Florida, 1998

Registrations and Certifications

- Professional Engineer in Florida, #60251, June 23, 2003

Professional Affiliations

- American Public Works Association (APWA)
- Florida Engineering Society
- National Society of Professional Engineers (NSPE)
- Palm Beach County League of Cities (Associate Member)

Project Experience

15.0-MGD Nanofiltration Water Treatment Plant (WTP) Construction Phase Services, Jupiter — Served as assistant project manager during the construction phase of this $37 million plant in the Town of Jupiter. Kimley-Horn developed a unique teaming approach with the Town during construction that has allowed the Town staff to be very involved throughout the process. This has allowed the Town to save a significant amount of money by reducing the amount of consultant fees that would normally be expected on a project of this magnitude.

Jupiter Island Continuing Services, Jupiter Island — Project engineer on the Kimley-Horn team retained by the Town of Jupiter to assist in its consideration of the purchase of two privately owned water and wastewater utilities. The firm's responsibilities included evaluation of the existing facilities, preparation of engineering reports to accompany municipal bond prospectus, identifying future capital improvements needed for integrating the two utilities, and providing advice relative to operation of the facilities to be purchased. The Town completed this purchase in September 1998 and formed a utility enterprise within the Town government, naming it South Martin Regional Utility (SMRU). The firm has remained the utility's engineering consultant responsible for all engineering functions of the utility.

Indian River Plantation Connection and Sewer System Hydraulic Analysis, Martin County — Served as project engineer. With Martin County's (MCU) purchase of the Indian River Plantation (IRP) water and sewer system from Utilities, Inc., the Kimley-Horn team helped developed a scope to integrate IRP's sewer system to meet Martin County standards and connect a new master pump station to MCU's consolidated sewer system. The scope of services consisted of reviewing the existing sewer system data, topographic survey, design, preparation of drawings and specifications, decommissioning a wastewater treatment plant, regulatory agency permitting, and bidding assistance for the diversion of wastewater from the existing IRP WWTP to the MCU consolidated sewer system.

24-Inch Water Main and Force Main Subaqueous Intracoastal Crossings, West Palm Beach — Served as engineer of record for the design of 2,700 linear feet of twin 24-inch HDPE pipelines under the Intracoastal Waterway between the City of West Palm Beach and the Town of Palm Beach. As a result of the Flagler Memorial Bridge reconstruction project, a 24-inch water main owned by the City of West Palm Beach needed to be relocated. Kimley-Horn provided an initial route study to identify potential pipeline routes. Once a route was selected, Kimley-Horn provided design, permitting, bid and construction phase services for the project. The design of over 1,000 linear feet of upland pipeline was also performed through downtown West Palm Beach. Permits were obtained from the U.S. Army Corps of Engineers, the FDEP, and the FDOT. To save construction costs, the Town of Palm Beach elected to replace their aging force main crossing in conjunction with this project. Kimley-Horn provided the design, permitting, bid, and construction phase services for this work as well.

42-Inch/48-Inch Force Main Emergency Response Plan (ERP), West Palm Beach — Serves as project manager. The City of West Palm Beach identified a need to create a plan that would serve as a guide in the event the City needed to respond to a break of their system's largest force main. The force main currently transmits up to 29 MGD of wastewater from the Town of Palm Beach and the City of West Palm Beach to the East Central Regional Treatment Plant. The plan being developed identifies roles and responsibilities for City staff to provide a quick and efficient response to a variety of failure scenarios.

D-10 Stormwater Pump Station Expansion, Palm Beach — Served as project manager for the design of this stormwater pumping station. Project includes expanding the existing station from a capacity of 78,000 GPM to 150,000 GPM, wetwell expansion, generator and ventilation system design, and associated collection system upgrades.

D-15 Stormwater Pumping Station, Palm Beach — Served as project manager for the rehabilitation of this stormwater pump station's cooling water system. The project included the rehabilitation and conversion of two existing cooling water wells from a suction to a pressurized system and the design of heat exchanger replacements to support the cooling needs of eight diesel engine driven hydraulic stormwater pumps and one electric generator. The project also included various cooling piping modifications. The result of this project reduced station cooling system alarm rates by 85% which significantly reduced operation costs.

D-8 Emergency Stormwater Pumping Station and Collection System Piping, Palm Beach — Served as project engineer for the design, bidding, and construction phase services of this stormwater pumping station in the Town of Palm Beach. The project included expanding the existing station from a capacity of 30,000 GPM to 105,000 GPM, construction of a new pipe and outfall discharge structure in the Intracoastal Waterway, expansion of an existing mechanical building, new SCADA system design, installation of new 750 kW and 100kW emergency generators and associated cooling and ventilation system improvements as well as the design of various collection system upgrades and utility relocations near the station. Noise mitigation design was performed so that the exterior of the station did not emit noise levels louder than 65 dBA. Because the existing wetwell could not hydraulically accommodate a flow rate of 105,000 gpm and could not be expanded due to a lack of available real estate, a satellite station was constructed below the adjacent roadway to contain one of the 33,833 gpm pumps.

El Vedado Road Utility Improvements, Palm Beach — Served as project manager for the design and permitting for the replacement of an existing force main, pressurized air line, and water main along this residential street in Palm Beach. The redesign of the roadway pavement grades was also performed to solve drainage issues.

Indian River Plantation 12-inch Force Main Construction, Martin County — Served as project engineer. Kimley-Horn was retained to construct a new subaqueous 12-inch force main across the Indian River Intracoastal Waterway between Hutchinson Island and Sewall's Point connection at Ocean Boulevard and Sewall's Point road in Martin County. The scope of services for this project consisted of reviewing the existing sewer system data, preparing topographic survey, design, preparation of drawings and specifications, decommissioning the wastewater treatment plant, and regulatory agency permitting and bidding assistance for the diversion of wastewater from the existing Indian River Plantation wastewater treatment plant to the Martin County Utilities consolidated sewer system.

Inlet Village/A1A Corridor Utility and Concept Master Plan, Jupiter — Project manager. Kimley-Horn was selected by the Town of Jupiter to develop a master plan of improvements to enhance the bike/pedestrian experience along this corridor, which is known as the Inlet Village District. A component of the master planning process included the undergrounding of approximately one mile of overhead electric, telephone, and cable facilities. The Kimley-Horn master plan guided the development of sidewalks, bike paths, streetscape design, utility undergrounding design, and stormwater design. Public meetings were held along with the development of an opinion of probable construction cost for the project.

Jupiter High-Service Pumps 17 and 18 Installation, Jupiter — Served as project manager for the installation of two high service pumps at the Central Blvd. water storage facility. Due to water restrictions, the peak flows demanded by the system outpaced the high service pumping capacity of the water treatment plant on the days that irrigation is allowed by the water management district. The installation of the final two pumps in the transmission system matrix allowed the Town to keep pace with the irrigation demand while maintaining a consistent system pressure.

Lift Station 23 Rehabilitation, West Palm Beach — Serves as project manager for the design of the rehabilitation improvements to this wastewater pumping station located in Currie Park. This project includes replacement of three existing 2,000 gpm pumps with VFD driven electric submersible pumps in a dry pit installation, wetwell rehabilitation, expansion of the existing electrical building, upgrading the existing FPL service from 240V to 480V service, installation of an electric pump hoist, new ventilation system, and other associated improvements.

15th Street Streetscape, West Palm Beach — Principal-in-charge. Kimley-Horn is currently developing plans for streetscape improvements for 15th Street in West Palm Beach. This streetscape features a full complement of Complete Streets elements, such as dedicated bike lanes, on street parking, improved accessibility, street furnishings, and new landscaping. The bike lanes will be emphasized with a green performance asphalt coating. The street also features new bulb-out islands to help better define and organize parking as well as act as percolating bioswales that will take in stormwater from the existing gutter.

Jason R. Lee, P.E.

Engineering/Civil Engineering/Mechanical/Electrical/Plumbing/

Special Qualifications

- Has 13 years of experience
- Mechanical engineering design experience includes providing HVAC systems for water plant safe rooms, ventilation and boiler system designs for condominiums, sound attenuated generator rooms, fleet fueling stations, and stormwater and sanitary pump stations
- Project engineer for various utility projects throughout southeast Florida

Education and Training

- Bachelor of Science, Mechanical Engineering, Florida Atlantic University, 2003

Registrations and Certifications

- Professional Engineer in Florida, #67472, January 17, 2008

Professional Affiliations

- Florida Engineering Society
- Southeast Desalting Association

Project Experience

A-39, A-41, A-42, A-43 Wastewater Pump Station Generator Replacements and Upgrades, Town of Palm Beach — Served as project manager for the design of generator replacements and service upgrades to four 1960s-era wastewater pump station sites ranging in size from 125 kW to 200kW. Three of the units were outdoor installations requiring sound-rated weather enclosures. The interior unit required custom-designed sound attenuation and ventilation systems. At the A-39 site, we also re-designed the replacement of the 30-year-old air compressor station which serves six air ejector stations. The new air compressor station uses two 40 HP rotary screw compressors, a new 1000-gallon pneumatic tank, and new piping and instrumentation. Additional services included redesign of the air piping systems and electrical service upgrades. All improvements were designed to meet updated hurricane wind load requirements.

Western Emergency Water Distribution Interconnect for Town of Jupiter and Seacoast Utility Authority— Served as project manager for the design, permitting, and bid phase services for the installation of approximately 800 LF of 10-inch water main and an aboveground dual meter interconnect located in a fenced gravel compound located in the County right-of-way. The improvements lrequired extensive coordination with the two utility systems and Palm Beach County to determine the best route and location for the interconnect. This project also included the design of a 12-inch HDPE water main crossing the Donald Ross Road right-of-way utilizing the horizontal directional drilling method

Indian River Plantation 12-inch Force Main Construction, Martin County — Served as project engineer. Kimley-Horn was retained to construct a new subaqueous 12-inch force main across the Indian River Intracoastal Waterway between Hutchinson Island and Sewall's Point connection at Ocean Boulevard and Sewall's Point road in Martin County. The scope of services for this project consisted of reviewing the existing sewer system data, preparing topographic survey, design, preparation of drawings and specifications, decommissioning the wastewater treatment plant, and regulatory agency permitting and bidding assistance for the diversion of wastewater from the existing Indian River Plantation wastewater treatment plant to the Martin County Utilities consolidated sewer system.

Palm Beach D-4 Stormwater Pump Station, Town of Palm Beach — Served as project engineer. The Town of Palm Beach asked Kimley-Horn to assume the role of successor engineer on the D-4 stormwater pump station project. In 2014, Kimley-Horn was called in to take over and update the plans on a very tight timeframe to get the project out to bid for the summer construction season. The Kimley-Horn team studied and modified another consultant's original design to make a few key changes that saved the Town over $300,000, eliminating road work, minimizing traffic impacts, and reducing the project construction duration. Kimley-Horn worked with the Town's selected generator vendor to significantly reduce exterior generator noise and worked with the Town's electrical engineer to reuse conduits at two other satellite pump stations. Kimley-Horn became the Town's trusted advisor for pump station construction, operation, and maintenance.

Lift Station A and Island Water Reclamation Facility (IWRF) Variable Frequency Drive (VFD) and Control System Upgrades, Fort Pierce Utilities Authority — Project engineer. FPUA's main sewer Lift Station A and their IWRF effluent pump electrical gear are antiquated and beginning to fail rapidly. FPUA called upon the Kimley-Horn team to prepare documents to expedite removal and replacement of the existing VFDs and control panel. The Kimley-Horn team evaluated the existing VFD at both facilities, including the programmable logic controllers (PLCs), which are more than 20 years old and in need of replacement. The Kimley-Horn team identified that both VFD and PLC replacement were critical facilities that needed immediate replacement. We prepared a detailed phasing plan, which allowed both facilities to remain in service while certain components could be replaced and fully tested before removing other equipment from service. Direct purchase of key components which were long-lead items gave

the team the opportunity to work on the detailed design while critical equipment was being manufactured. Our team also provided SCADA system and PLC programming to give the operations staff more comfort in operating the new equipment and ease the transition to the newer operating system.

Lift Station 23 Rehabilitation, West Palm Beach — Serves as project engineer for the design of the rehabilitation improvements to this wastewater pumping station located in Currie Park. This project includes replacement of three existing 2,000 gpm pumps with VFD driven electric submersible pumps in a dry pit installation, wetwell rehabilitation, expansion of the existing electrical building, upgrading the existing FPL service from 240V to 480V service, installation of an electric pump hoist, new ventilation system, and other associated improvements.

Lift Station 13 Rehabilitation, West Palm Beach — Project engineer. Kimley-Horn was retained by the City for the addition of a new electrical room and associated improvements at this lift station in West Palm Beach. In March of 2011, LS 13 experienced a significant failure which prompted the City to re-evaluate the layout of the existing electrical room in this master pump station, which serves a large portion of the downtown area. Kimley-Horn is now designing a new electrical room that will replace all electrical components of the building and place them at an increased elevation to avoid future flooding problems. An evaluation of the existing pumps is also being performed to determine if the station can be converted from a triplex to a duplex station once the City begins to bypass flow from Lift Station 5. Kimley-Horn is performing the design of the bypass piping, new landscaping, a new bridge crane, overhead door to aid in operations and maintenance, as well as the design of submersible actuators in the dry pit.

Palm Beach S-2 Master Sanitary Inline Booster Station, Palm Beach — Served as project engineer for the design, permitting, bid and construction phase services for the conversion of the Town's largest sanitary repump station from a traditional wetwell style station to an inline booster style station. This new station, with a peak capacity of 8 MGD, will allow the Town of Palm Beach to pump wastewater directly into the City of West Palm Beach force main transmission system and allow the abandonment of Lift Station 22 in West Palm Beach. The design included influent and effluent force main modifications; construction of five new VFD driven centrifugal wastewater pumps within a converted wetwell of an existing master lift station; installation of a new emergency generator; and various other station structural, mechanical and electrical improvements. Once completed, the existing station wetwells will be completely abandoned and a new chemical injection system will be installed to reduce hydrogen sulfide levels in the wastewater prior to discharge into the West Palm Beach force main system.

Miles Grant Sewer System Conversion, Martin County Utilities — Project engineer. Martin County Utilities (MCU) purchased the Miles Grant Water and Sewer (MGWS) Company Utility Systems from Utilities, Inc. In order to meet MCU's goals and objectives of consolidating privately-held utilities and to provide regionalized service, the water and wastewater treatment components of the Miles Grant facilities will be decommissioned and taken out of service. Kimley-Horn performed the design, permitting, bid phase, and is currently moving into the construction phase for the installation of approximately 8,500 LF of sewer force main, two sanitary lift stations, improvements and upgrades to four lift stations, and the decommissioning of the existing wastewater treatment plant. This project included the design of a 12-inch force main crossing SE Dixie Highway and FEC Railroad right-of-ways utilizing the horizontal directional drilling method.

South Hutchinson Island Storage and Repump Facility, Fort Pierce Utilities Authority — Served as project engineer. To meet increasing demands and improve operating efficiency of the South Hutchinson Island Repump and Storage Facility, Kimley-Horn upgraded variable frequency drives (VFDs) and cabinets, replaced older electrical gear, upgraded of the remote communication to a more robust Ethernet radio system, replaced older technology altitude valve with a true control valve, added a new standby auxiliary powered generator with automatic transfer switch, and upgraded the liquid chlorine and ammonia feed systems. These improvements also included the installation of an interlocked dual-feed main disconnect with a generator receptacle, and programmable logic controller with radio communication. The existing electrical room was enclosed and included an HVAC system to maintain climate control in the enclosed electrical room. The design also included a phasing plan, which allowed the station to run continuously while these improvements were implemented.

North Hutchinson Island Repump #1 Improvements, Fort Pierce Utilities Authority — Served as project manager. The Kimley-Horn team provided design services to Fort Pierce Utilities Authority (FPUA) to rehabilitate and demolish their primary remote potable water storage and repump facility, repump #1. The Kimley-Horn team designed and permitted construction of FPUA's repump #1 facility. The pumps employ variable frequency drives (VFDs), which allow the pumps to maintain discharge pressure. Phasing of this project was key to maintaining service while the building skin and structure were demolished.

Anjuli K. Panse, P.E.

Engineering/Civil Engineering/Coastal/Marine Engineering

Special Qualifications

- Has 12 years of experience in water and wastewater transmission main design, stormwater collection systems and pumping station design, stormwater collection system modeling and drainage calculations, surface water management system design, grading, structural analysis and design, and surface water management and utility permitting
- Proficient with AdICPR and StormCAD modeling software
- Proficient with several structural engineering design programs, including STAAD, RC-Pier, Shoring Suite, and RetainPro

Education and Training

- Bachelor of Science, Civil Engineering, University of Florida, 2005

Registrations and Certifications

- Professional Engineer in Florida, #71504, June 25, 2010

Professional Affiliations

- American Society of Civil Engineers (ASCE)

Project Experience

Federal Highway (US 1) Interim and Final Enhancements, Delray Beach — Project engineer on a multi-phased project providing water main design services, relocation of piping for new drainage facilities, and design of water main crossings. This project included two miles of the US 1 one-way pair in each direction in Delray Beach. The City and CRA adopted the Downtown Delray Beach Master Plan, which has as one of its key elements a reconfiguration of the two one-way segments of US 1 from three lanes to two lanes.

Emergency Water Distribution Interconnect, Manalapan — Serving as project engineer. Kimley-Horn provided design, permitting, bidding, and construction phase services associated with the emergency water distribution interconnect for the Town of Manalapan.

FEC Train Depot Relocation, Jupiter — Project engineer. Kimley-Horn was retained by the Town of Jupiter to provided structural engineering services in conjunction with relocating the historic Florida East Coast Railway train station from Tequesta, Florida back to Jupiter, Florida. Kimley-Horn was hired by the Town so the structure could be moved successfully and without damage and on time.

Southern Boulevard Bridge Subaqueous 16-inch Water Main Replacement and Route Study (14-inch pipeline), West Palm Beach — Project engineer. This project involves the design of a 16-inch HDPE pipeline under the Intracoastal Waterway between the City of West Palm Beach and the Town of Palm Beach. As a result of the Southern Blvd. Bridge reconstruction project, a 16-inch water main owned by the City of West Palm Beach needed to be relocated. Kimley-Horn provided an initial route study to identify potential pipeline routes and hydraulic modeling to determine that the pipe diameter could be reduced to lower construction costs. Kimley-Horn is now providing design, permitting, bidding, and construction phase services for the project. Permits are being obtained from the U.S. Army Corps of Engineers, Florida Department of Environmental Protection, and Florida Department of Transportation.

Fern Street Streetscape and Complete Streets Design, West Palm Beach
Engineer of record for streetscape and roadway improvements, civil engineering and landscape architectural design services, which features complete streets pedestrian and bicycle enhancements within portions of the Fern Street corridor between Tamarind Avenue and Flagler Drive in Downtown West Palm Beach. The design program includes curbside bioswale planters, pedestrian-level lighting, replacement of portions of existing sidewalk to remediate pedestrian hazards, restriping of the roadway to better organize parking and add a combination of dedicated bike lane and shared-use bicycle markings (sharrows), and decorative crosswalks.

15th Street Streetscape, West Palm Beach — Engineer-of-record. Kimley-Horn completed plans for streetscape improvements for 15th Street in West Palm Beach. This streetscape features a full complement of Complete Street elements, such as dedicated bike lanes, on street parking, improved accessibility, street furnishings, and new landscaping. The bike lanes will be emphasized with a green performance asphalt coating. The street also features new bulb-out islands to help better define and organize parking as well as act as percolating bioswales that will take in stormwater from the existing gutter.

24-Inch Water Main and 24-inch Force Main Subaqueous Intracoastal Crossings, West Palm Beach — Served as project engineer for the design of 2,700 linear feet of twin 24-inch HDPE pipelines under the Intracoastal Waterway between the City of West Palm Beach and the Town of Palm Beach. The design of over 1,000 linear feet of upland pipeline was also performed through downtown West Palm Beach.

24-inch West Wastewater Transmission System Inline Booster Station (includes Eight-Mile Force Main Transmission System), Indian River County — Project engineer on the

Kimley-Horn team who developed plans and specifications for Indian River County's longest force main transmission system and their first in-line booster pump station. As part of their master plan to divert wastewater capacity from their south regional wastewater treatment facility to their west regional wastewater treatment facility, Kimley-Horn permitted, designed, and is overseeing the construction of more than eight miles of 24-inch force main transmission piping.

42-Inch/48-Inch Force Main Emergency Response Plan (ERP), West Palm Beach — Serves as project engineer. The City of West Palm Beach identified a need to create a plan that would serve as a guide in the event the City needed to respond to a break of their system's largest force main. The force main currently transmits up to 29 MGD of wastewater from the Town of Palm Beach and the City of West Palm Beach to the East Central Regional Treatment plant. The plan being developed identifies roles and responsibilities for City staff to provide a quick and efficient response to a variety of failure scenarios.

Bryan Street House Restoration, Kissimmee Community Redevelopment Agency (CRA), Kissimmee — Project engineer. Kimley-Horn provided structural and civil engineering services for the restoration of this historic house in Kissimmee. A host of structural deficiencies needed to be addressed, including a failing foundation. The entire house was lifted up, a new reinforced concrete foundation was poured, and the house was secured to the new foundation—a requirement to make the structure meet building codes. The home is now used as a museum and offices for the CRA.

Golden Sands Park, Vero Beach — Project engineer on the Kimley-Horn team that provided planning, engineering, and environmental services for the design, permitting, and reconstruction/relocation of this oceanfront park. This project involved negotiating a land swap between a land developer, the County, and the Florida Department of Environmental Protection. After the land swap was approved, Kimley-Horn coordinated the approvals for demolition of the existing park, as well as the design and construction of the new park. The limits of protected vegetation were assessed and delineated to micro-site park components in order to minimize and avoid potential impacts to the extent practicable. In addition to parking lot construction and drainage improvements, this project involved the construction of a major, non-habitable structure, minor structures and hardscape improvements, and the clearing and planting of an emergency vehicular access to the beach.

Indian River Plantation 12-inch Force Main Construction, Martin County — Served as project engineer. Kimley-Horn was retained to construct a new subaqueous 12-inch force main across the Indian River Intracoastal Waterway between Hutchinson Island and Sewall's Point connection at Ocean Boulevard and Sewall's Point road in Martin County. The scope of services for this project consisted of reviewing the existing sewer system data, preparing topographic survey, design, preparation of drawings and specifications, decommissioning the wastewater treatment plant, and regulatory agency permitting and bidding assistance for the diversion of wastewater from the existing Indian River Plantation wastewater treatment plant to the Martin County Utilities consolidated sewer system.

Jupiter 15.0-MGD Nanofiltration Water Treatment Plant (WTP) Construction Phase Services — Project engineer during the construction phase of this $37-million-dollar plant in the Town of Jupiter. Kimley-Horn developed a unique teaming approach with the Town during construction that has allowed the Town staff to be very involved throughout the process. This has allowed the Town to save a significant amount of money by reducing the amount of consultant fees that would normally be expected on a project of this magnitude.

Molasses Tank Design and Construction for the Florida Sugar and Molasses Exchange, Canal Point — Project engineer for site grading and drainage. The purpose of this project is to convert approximately 7.5 acres of a prior sugar cane mill site into a molasses storage, unloading, and rail shipping facility, including two 4 million-gallon above ground steel storage tanks, a truck unloading facility, truck and rail scales, a rail loading facility, a truck trailer parking lot for 40 trailers, and an office/lab building. The project was completed in December 2014.

North Jupiter Water Main Improvements, Jupiter — Project engineer. Kimley-Horn was selected to provide design, construction document preparation, permitting, bid and construction phase services for the North Jupiter water main Improvements project. The purpose of the project is to replace aging infrastructure, enhance system water pressure, increase service reliability, and enhance fire protection in the community. The scope of the project includes the replacement of all backyard asbestos concrete pipe (over 15,260 linear feet) with new water main (over 11,400 linear feet) located at the front of the homes and replacement of new water services and house connections for more than 190 homes. The project also includes point repair improvements for areas outside of the water main replacements for the addition of new fire hydrants and isolation valves.

Jonathan Haigh, PLA, ASLA

Landscape Architectural Design

Special Qualifications

- Has 21 years of experience as a practicing professional landscape architect
- Skilled designer with public sector project experience throughout the Southeast United States
- Directed the preparation of FDOT and streetscape-related construction drawings, detailing, and specifications
- Experienced in applying a practical and budget-friendly, yet creative design approach to each project
- Proficient in applying sustainable principles in project design and incorporating the design of Florida-friendly landscapes and water-efficient irrigation systems

Education and Training

- Bachelor of Landscape Architecture, University of Arkansas

Registrations and Certifications

- Professional Landscape Architect in Florida, #6666795, May 25, 2005

Professional Affiliations

- American Society of Landscape Architects (ASLA)
- U.S. Green Building Council - South Florida Chapter
- Florida Recreation and Parks Association

Project Experience

Martin Luther King, Jr. (MLK) Drive Beautification, Delray Beach — Project manager on the Kimley-Horn team. Provided landscape architectural master planning services for the design of landscape, lighting, and hardscape enhancements for the entire length of Martin Luther King, Jr. (MLK) Drive in Delray Beach. This 1.5-mile corridor will also incorporate MLK commemorative design elements placed in the right-of-way. The design concept included the continuation of an existing sidewalk network; decorative lighting; right-of-way plantings with flowering trees, palms, and other landscaping; a program for live oaks to be planted outside of the right of way; and artwork on existing utility poles. The master plan will also address prioritization and phasing of the proposed improvements with respect to budget. Similar to other community enhancement master plans, public involvement is a key element in the success of this project. The Kimley-Horn team coordinated closely with a committee of community representatives to identify community assets and to solicit their ideas and preferences for incorporation into the master plan.

Palmetto Park Road Improvements and Downtown Boca Raton Pedestrian Promenade, Boca Raton — Landscape architect. For this retail district through the downtown area, Kimley-Horn provided full roadway and streetscape design and landscape architectural design to create a pedestrian friendly downtown with emphasis on a promenade connecting Plaza Real with Mizner Park. Intersections were redesigned to reduce pavement crossing width, minimize turn lanes, emphasize pedestrian crossings and modify signal timing to improve the pedestrian and downtown environment. Special emphasis was placed on providing an inviting pedestrian experience along retail businesses and providing on-street parking. Improvements include brick paved intersections, introduction of curbless streets along NE 1st Avenue, reconstruction of Boca Raton Road with an inverted crown roadway with wider sidewalks and on-street parking. Curbless streets were introduced to enable their use for special events when streets can be closed for fair events. Landscape and hardscape improvements include planter islands and wide brick paver sidewalks on both sides of the roadways. Improvements along Palmetto Park Road include construction of wider brick paver sidewalks, raised brick paver intersections, lighted bollards, and new decorative street lighting. Planned pergola structures, which we anticipate will be added in 2012, will accent the streets providing shade and a seating area for pedestrians.

Hollywood US 1 Corridor Study, Hollywood — Project manager of the Kimley-Horn team selected to design a new cross section for a portion of US 1 that would allow for wider medians, improved sidewalk plantings, and extended medians to control access and improve safety through the corridor. In order to accomplish the City's goals for the corridor, Kimley-Horn worked with FDOT to designate this section of the road under their Transportation Design for Livable Communities (TDLC) program. The TDLC designation allows for a more advantageous horizontal clearance that will allow for larger trees to be planted closer to the curbs and paves the way for allowing the design speed of the corridor to be lowered to match the designated speed, which will allow for a typical section to be approved with narrower drive lanes. Kimley-Horn also presented traffic and crash data analysis to determine where medians could be extended throughout the corridor, allowing for more landscape space in medians and creating less crossing turning movements through the corridor for safety. Renderings of proposed development scenarios were worked through with City staff for use in upcoming public presentations.

Vizcaya Park, Miramar — Landscape architect. This 20-acre park in Miramar provides several active recreational opportunities, including a soccer/multiuse field, two full-size basketball courts, and a 7,600-square-foot community center. The park's passive features include open picnic areas, a playground, and a jogging/fitness trail along the perimeter of the project site. Kimley-Horn provided master planning; landscape

architecture; design, engineering, and permitting services; and construction observation and administration. This project serves as the City's first Leadership in Energy and Environmental Design (LEED®) building, which obtained Gold Certification. The City also plans to construct a 10,000-square-foot civic center, press box, concession stand, and storage area at the site during later phases.

Lake Worth Beach Redevelopment, Lake Worth — Landscape architect and planner for the preliminary site plan development for the redevelopment of the public beach site. Assisted in developing graphics and cost estimates that were instrumental in securing a new interlocal agreement with Palm Beach County for funding the beach design. Also assisted with LEED® certification of the Casino building.

Lake Worth Streetscape Design-Build (includes 10th Avenue North/6th Avenue South Enhancement Project), Lake Worth — Landscape architect for construction phase. Kimley-Horn developed a series of streetscape beautification guidelines, as well as private sector setback and building massing guidelines for the two primary east/west corridors connecting downtown Lake Worth to I-95. The project consisted of more than 8 miles of streetscape design guidelines, including landscape material, decorative lighting, street furniture, hardscape palette gateway features, intersection layouts, and special signage. The blocks abutting the roadways were studied to provide appropriate setbacks to maximize pedestrian usage along the corridor. Construction for 6th Avenue South was completed in December 2009, 10th Avenue North was completed in April of 2010.

Lloyd Estates Streetscape and Drainage Improvements, Oakland Park — Landscape architect for the Kimley-Horn team providing the landscape architectural design of streetscape improvements for the Lloyd Estates Residential and Industrial Area Drainage Project. The project comprised of residential streetscape enhancements with trees, palms, new turf, and shrubs in the medians and larger islands. We overcame design challenges in placing and selecting plant material under overhead utilities and providing clear sight and offset clearances from numerous driveways and intersections. Also designed a new irrigation system with new well and pump station, as well as paver sidewalks and crosswalk enhancements.

Royal Palm Boulevard Improvements, Margate — Landscape architect. Our services included the engineering design and development of construction documents for Royal Palm Boulevard Improvements beginning approximately 200 feet± east of the Margate Canal and extending east to the west half right-of-way of SR 7 (441), approximately one mile in total length. The project involved realignment of the roadway, east- and westbound left-turn lanes, access management modifications, renovation of an existing bridge and medians, construction of pedestrian bridges, base enhancements, milling and resurfacing, providing new asphalt areas, swale improvements, minor drainage improvements, and lighting improvements. Professional services included design, permitting, coordinating with utility providers for adjustments and/or relocations, preparing quantity calculations and engineers' estimates of probable costs, and limited construction phase services.

Quadrille Boulevard Streetscape Improvements, West Palm Beach — Project manager and landscape architect. The City of West Palm Beach tasked Kimley-Horn to provide engineering and landscape architectural design services to implement streetscape improvements for Quadrille Boulevard from Okeechobee Boulevard to Datura Street. Improvements included new sidewalks along the west side of Quadrille, street trees, landscaping, site furnishings, irrigation, street lighting, and decorative crosswalks. Landscaping for the corridor features a low-water use perennial peanut groundcover in lieu of turf grasses and large Live Oak shade trees that will overhang the sidewalk and provide shade to pedestrians. The project was funded with a Metropolitan Planning Organization grant administered by FDOT under the Local Agency Program (LAP).

West Clematis Street Streetscape Improvements, West Palm Beach — Project manager and landscape architect. Kimley-Horn provided streetscaping services for this recently completed LAP project. It included the addition of a landscaped median, shade trees in tree grates, new sidewalks, and site furnishings for West Clematis Street. The addition of a median to this one-block section between Tamarind Avenue and Sapodilla Avenue acts as a traffic calming measure while also providing room for additional shade trees, providing pedestrians with a comfortable walk to and from the adjacent Tri-Rail station.

Tamarind Avenue Streetscape, West Palm Beach — Project manager and landscape architect. Kimley-Horn worked with the City of West Palm Beach to perform streetscape design improvements to the Tamarind Avenue corridor between Palm Beach Lakes Boulevard and 25th Street that included landscape islands, new street trees and plantings, irrigation, and decorative crosswalks and intersection treatments. The intersection treatments included a baseball-themed intersection design that encompasses the entire 20th Street intersection as a tribute to the days when Hank Aaron, Jackie Robinson, and Satchel Paige played baseball in this neighborhood a half-century ago. The project design is complete and construction is expected to begin later this year.

Tricia Richter, PLA

Landscape Architectural Design

Special Qualifications

- Five years of experience with landscape design, construction document preparation, and in preparing presentation graphics

Education and Training

- Bachelor of Landscape Architecture, Landscape Architecture, University of Florida, 2011

Registrations and Certifications

- Professional Landscape Architect in Florida, #LA6667244, Nov. 16, 2015

Professional Affiliations

- American Society of Landscape Architects (ASLA), Member

Project Experience

Vizcaya Park, Miramar — Landscape architect. This 20-acre park in Miramar provides several active recreational opportunities, including a soccer/multiuse field, two full-size basketball courts, and a 7,600-square-foot community center. The park's passive features include open picnic areas, a playground, and a jogging/fitness trail along the perimeter of the project site. Kimley-Horn provided master planning; landscape architecture; design, engineering, and permitting services; and construction observation and administration. This project serves as the City's first Leadership in Energy and Environmental Design (LEED) building, which obtained Gold Certification. The City also plans to construct a 10,000-square-foot civic center, press box, concession stand, and storage area at the site during later phases.

Professional Services for the Welleby Park Expansion, Sunrise — Landscape architect for the redevelopment of Welleby Park. Kimley-Horn is providing conceptual plans.

Fort Lauderdale Las Olas Boulevard Corridor Improvement Project, Fort Lauderdale — Landscape architect. Kimley-Horn is providing preliminary design, evaluation, and due diligence services for the multi-use project for the City of Fort Lauderdale Community Redevelopment Agency. The project consists of the redevelopment of several pieces of City property from existing surface parking lots to a new multi-story parking garage, active park and plaza areas, and general open space to enhance the pedestrian and beachgoer experience in the Fort Lauderdale beach area. Las Olas Boulevard is being improved to provide a "Complete Streets" design in order to better connect the shops, restaurants, and other businesses with the new Oceanside Plaza on the south side of Las Olas Boulevard.

Lake Worth Beach Redevelopment, Lake Worth — Landscape architect on the Kimley-Horn team that developed design criteria and site plan alternatives for a proposed redevelopment of its public beach. Proposed improvements included boardwalks, parking lots, roads, utility and drainage infrastructure, walkways, landscaping, street furnishings, pavilions, beach lockers, playground equipment, lighting, restrooms, and other site amenities. Our team also assisted the City in negotiating a new interlocal agreement with Palm Beach County to secure up to $5 million in funding for the public improvements.

OB Johnson Park, Hallandale Beach — Landscape architect for this 6.4-acre park. The park included a 42,000 SF multi-generational facility that included a teen center, indoor basketball courts, after school and senior programming, exercise room, administrative offices, and other accessory uses for computer and dance classes, food distribution, and other programming for all ages. The exterior park amenities included a walking trail, playground, tennis courts, a field house, and a football/soccer field. Additionally, the park improvements included a centrally located surface parking lot, site infrastructure and landscaping.

Town of Palm Beach Town Hall Square Streetscape and Infrastructure Improvements, Palm Beach — Landscape architect for Kimley-Horn, retained by the Town of Palm Beach for this historic fountain restoration and roadway beautification project within the heart of the Town's commercial corridor. Phase I of the project included the restoration of the Mizner Memorial Fountain constructed in 1929. Phase II of the project included streetscape improvements consisting of landscaped nodes, decorative pedestrian crossings, updated urban park landscaping that creates a public gathering area in the median of a roadway where the fountain feature resides, modification of various underground utilities,

replacement of sidewalks with decorative tabby concrete, and the introduction of many landscaping and architectural elements throughout the area.

15th Street Streetscape, West Palm Beach — Landscape architect. Kimley-Horn is currently developing plans for streetscape improvements for 15th Street in West Palm Beach. This streetscape features a full complement of Complete Street elements, such as dedicated bike lanes, on street parking, improved accessibility, street furnishings, and new landscaping. The bike lanes are emphasized with a green performance asphalt coating. The street also features new bulb-out islands to help better define and organize parking as well as act as percolating bioswales that will take in stormwater from the existing gutter.

Fern Avenue Streetscape, West Palm Beach — Landscape architect. Kimley-Horn is currently developing plans for streetscape improvements for Fern Street in West Palm Beach. This streetscape features new landscaping, roadway re-striping, the addition of bike lanes, bioswales that will take in stormwater from the existing gutter to support planting, and pedestrian level lighting.

West Clematis Street Streetscape Improvements, West Palm Beach — Landscape architect. Kimley-Horn provided streetscaping services for this recently completed LAP project. It included the addition of a landscaped median, shade trees in tree grates, new sidewalks, and site furnishings for West Clematis Street. The addition of a median to this one-block section between Tamarind Avenue and Sapodilla Avenue acts as a traffic calming measure while also providing room for additional shade trees, providing pedestrians with a comfortable walk to and from the adjacent Tri-Rail station.

Tamarind Avenue Streetscape, West Palm Beach — Landscape architect. Kimley-Horn worked with the City of West Palm Beach to perform streetscape design improvements to the Tamarind Avenue corridor between Palm Beach Lakes Boulevard and 25th Street that included landscape islands, new street trees and plantings, irrigation, and decorative crosswalks and intersection treatments. The intersection treatments included a baseball-themed intersection design that encompasses the entire 20th Street intersection as a tribute to the days when Hank Aaron, Jackie Robinson, and Satchel Paige played baseball in this neighborhood a half-century ago. The project design is complete and construction is expected to begin later this year.

Westside Blueway Trail Phase II, Miami Gardens — Landscape architect on the Kimley-Horn team that is performing all the necessary planning and design services associated with the development of the Westside Blueway Trail, inclusive of the site amenities and furnishings. The firm is providing full construction documents and specifications as required for the bidding, construction observations, and administration of the project.

Boynton Beach Gateway Enhancements - Welcome Signage, Boynton Beach — Landscape architect. Project manager. Kimley-Horn provided landscape architecture, structural engineering, signage design, construction plans preparation, and construction observation services to design and construct two “Welcome to Boynton Beach” signs. One sign is located at the north city limits along Federal Highway (just west of Ocean Inlet Drive) and another sign at the south city limits in the median of Federal Highway (just north of Gulfstream Blvd). These beautification and general improvements are part of Boynton Beach CRA’s overall plan to improve the City’s aesthetic and provide enhanced gateways into the community. The signs were installed in January 2016.

Marcus Neuroscience Institute at Boca Raton Regional Hospital, Boca Raton — Serving as landscape analyst. Kimley-Horn provided civil engineering services as a subconsultant to another firm for the addition of the Marcus Neuroscience Institute at Boca Raton Regional Hospital. Tasks included site plan preparation and submittal of same to the City of Boca Raton for approval. This facility serves as a new, state-of-the-art nexus of care for neurologic and neurosurgical patients and transform the landscape of clinical capabilities available in the region. The 72,895-square-foot facility houses a 22-bed neuro-intensive care and step-down unit.

Stephen M. Feccia, PLA

Landscape Architectural Design

Special Qualifications

- Experienced in developing, reviewing, and modifying design concepts, technical drawings, and graphics for complex landscape architectural projects
- Experienced with conducting site inventory and analysis studies using first hand documentation and GIS software to prepare specialized maps and diagrams
- Works with professional landscape architects, engineers, planners, and other professionals in an interdisciplinary setting as design project manager for selected efforts
- Software experience includes ArcGIS and AutoCAD

Education and Training

- Master of Landscape Architecture, Landscape Architecture, Florida International University, 2014
- Bachelor, Environmental Horticulture, University of New Hampshire, 2008

Registrations and Certifications

- Professional Landscape Architect in Florida, #6667289, August 18, 2016

Project Experience

Boynton Beach Boulevard Widening, Palm Beach County — Landscape architect that created conceptual planting opportunity plans for the 8 mile corridor, the Lantana Toll Plaza, the West Palm Beach Service Plaza, and four separate alternatives for the Hypoluxo Road Interchange. Opportunities were identified using standards set forth in FDOT Indices 546 & 700, and the FTE preferred landscape setbacks document. Plant species were noted to be selected from 'Landscape Brand Guidelines' provided by the FTE, and per the culture of the proposed planting locations. Project is under FTE review. Our design required extensive agency coordination to permit with Lake Worth Drainage District, South Florida Water Management District, Palm Beach County, and the Florida Department of Transportation (FDOT). Within the project, elements of the FDOT access management plan were implemented and coordinated with the local developments. We developed the construction documents and specifications, and administered the construction phase of the project with inspectors and a designated project engineer who oversaw the project.

Delray Medical Center (DMC) Bed Tower, Delray Beach — Landscape architect for the Kimley-Horn team providing services during the construction of a 120-bed bed tower addition to convert a portion of the facilities semi-private beds to private beds. Also included are new parking area, new Central Energy Plant, and a 400-space parking garage.

Doral Legacy Park (NW 114th Avenue Park), Doral — Serving as landscape architect on the Kimley-Horn team that prepared the conceptual plan and construction plans of an 18-acre park located on the corner of NW 82nd Street and NW 114th Avenue. The concept for the park consists of two adjacent sites with both active and passive recreational amenities. Park amenities include the following recreational components: community center building, baseball fields, tennis courts, basketball courts, sand volleyball, soccer fields, playground, multi-use field, walkways, boardwalk, and wetlands.

OB Johnson Park, Hallandale Beach — Served as landscape architect on the Kimley-Horn team. This 6.4-acre park in Hallandale Beach Park was part of the City-wide park master plan that set forth a program to enhance 13 of the City's parks and recreation areas in support of community-wide goals and neighborhood needs. As part of the development, the park included a 42,000 square foot multigenerational facility that included a teen center, indoor basketball courts, after school and senior programming, exercise room, administrative offices, and other accessory uses for computer and dance classes, food distribution, and other programming for all ages. The exterior park amenities included a walking trail, playground, tennis courts, a field house, and a football/soccer field. Additionally, the park improvements included a centrally located surface parking lot, site infrastructure, and landscaping. Kimley-Horn provided master planning, landscape architecture, engineering design and permitting services, as well as construction observation and administration.

Regatta Park, Miami — Served as landscape architect on the Kimley-Horn team that provided landscape architecture services for Regatta Park in the City of Miami, a new 15-acre waterfront passive park that will transform the underutilized waterfront into a more cohesive and vibrant public space that will help connect the general public to the waterfront. The main features of the park include the Expo Lawn, Regatta Lawn, Tropical Gardens, Promenade, Multi-use Path Connector,

Tree Alee and Children's Play Area. Kimley-Horn was tasked with the landscape architectural and civil engineering design of the park from concept through construction administration.

Regatta Park, Miami — Served as landscape architecture analyst on the Kimley-Horn team that provided landscape architecture services for Regatta Park in the City of Miami, a new 15-acre waterfront passive park that will transform the underutilized waterfront into a more cohesive and vibrant public space that will help connect the public to the waterfront. The main features of the park include the Expo Lawn, Regatta Lawn, Tropical Gardens, Promenade, Multi-use Path Connector, Tree Alee and Children's Play Area. Kimley-Horn was tasked with the landscape architectural and civil engineering design of the park from concept through construction administration.

Deerfield Station, Deerfield Beach — Landscape architect for this mixed-use project that is proposed to include 226 residential units and 12,000 square feet of office and retail space. Kimley-Horn's responsibilities include site plan and plat amendment assistance, site plan traffic impact study, on-site civil preliminary engineering drawings, and landscape architectural services.

Experience prior to joining Kimley-Horn:

Miami Beach Recreational Corridor, City of Miami Beach — Provided irrigation design services for the Calvin, Giordano, and Associates team that was assisting the City with this recreational corridor project. This 1.75-mile project area stretched from Indian Beach Park northward to Allison Park at the intersection of Collins and 65th Street. The overall system consisted of three water meters and was designed to encompass the new native coastal plantings within 30 feet of the corridor.

Fort Lauderdale International Airport Expansion, Broward County — Provided tree inventory and mitigation services for the JBC Planning and Design team that was providing the County with landscape services for this airport expansion project. He was brought on board to survey and document the existing vegetation within the project limits and produce construction drawings to be submitted to Broward County.

Peter M. Syntax, P.E., LEED AP®

Mechanical/Electrical/Plumbing

Special Qualifications

- Has 14 years of electrical engineering experience from engineering firms and U.S. Navy ships
- Background includes providing mechanical and plumbing designs for commercial projects
- Performs all phases of engineering including project administration; cost estimating; feasibility studies and assessments; life-cycle evaluations; system design and analysis for electrical, lighting, phone, data, fire, security and pumping systems; drawings and technical specifications; and project scheduling, estimating, field inspections, construction administration and submittal review
- Has completed multiple electrical design projects involving upgrades to existing systems, lighting and energy analysis, lighting control schematics and designs involving day light harvesting, and power design including additions of generators to existing facilities

Education and Training

- Bachelor of Science, Marine Engineering Systems, United States Merchant Marine Academy, 2004

Registrations and Certifications

- Registered Professional Engineer in Florida, #74259, April 2, 2012
- LEED Accredited Professional

Project Experience

Scottsdale Booster Pump Station 83B MCC Evaluation, Scottsdale, AZ
Lead electrical engineer responsible for evaluating and recommending upgrades at Booster Pump Station 83B. The existing Motor Control Center (MCC) equipment at the site has been retrofitted with new variable frequency drives (VFD). During summer months, the MCC can reach temperatures above 200 degrees Fahrenheit, causing equipment failure. Additionally, the existing shade structure is welded directly to the MCC. Kimley-Horn evaluated the existing conditions, provided a review of alternatives to condition the MCC, and provided recommendations related to both short- and long-term solutions.

Water Campus Evaluation, Scottsdale, AZ — Lead electrical engineer responsible for identifying options for interconnecting alternative energy into the existing electrical systems for the City. The scope requires Kimley-Horn to evaluate several alternative energy types including solar, wind, hydro turbine, and methane generation. The evaluation includes reviewing the existing electrical service entrance equipment at the Scottsdale Water Campus, the future alternative energy project proposed at the site, and interconnection requirements with the utility company (Arizona Public Service). Kimley-Horn prepared a Technical Memo (TM) on the existing electrical conditions of the site and the interconnection opportunities for future alternative energy that can be tied to the existing services.

CCWRD 701-Main Power Plant Monitoring System, Las Vegas, NV — Electrical engineer for design of the power monitoring system for the CCWRD Main Plant. As part of the project, power monitors will be installed on all load centers, switch gear, and motor control centers. The power monitoring system will be integrated with the existing supervisory control and data acquisition (SCADA) system and will allow tracking patterns of power usage, can identify energy users and energy conservation methods, and will allow for budgeting of power usage by areas.

APS Commerce Substation (23rd Avenue & Union Hills), Phoenix, AZ
Project manager and lead electrical engineer for design of a new 300 foot by 300 foot 69kV/12.47kV substation. The site included civil design, structural design for 10-foot walls, and landscape architecture along with electrical service design. The substation electrical design included three 41 MW transformers, four incoming 69kV switches, tie breakers, controls, SCADA, and PLC design. A new control house with the relays and control panels was designed. The system includes interconnection with a third party microgrid system. This project was designed from start to finish in less than three months, though normally it is an 18-month process.

APS Lincoln South Substation Security Hardening, Phoenix, AZ — Project manager and lead electrical engineer. APS contracted Kimley-Horn to upgrade the Lincoln South Substation security to Tier 3 Standards. Kimley-Horn provided preliminary design, design development, and final design elements for this project located in downtown Phoenix at 3rd Avenue and Lincoln Street. Kimley-Horn's services included new walls, foundations, new rolling gates, security infrastructure design, security IT design, electrical site modifications, conduit, and cable and interconnection details; a technical drainage memo; fire hydrant relocation plans; and construction phase services.

APS North Gila Substation Security Hardening, Yuma County, AZ — Project manager and lead electrical engineer for design of security infrastructure upgrades to Tier 1 Security Requirements for the 500 kV Electrical Substation in Yuma County, Arizona. Our scope of work includes site civil engineering, structural engineering, electrical engineering, and security infrastructure improvements. Specific project elements include design of a new security fence around the

perimeter wall of the site, preliminary engineering design and site plan developments, grading/paving plans, renderings, communications plans, SWPPP plans, cost estimation, and stakeholder coordination with APS, Yuma County, and other private entities.

Central Arizona Project (CAP) Standby Power at Checks, Turnouts and Microwave Sites, Phoenix, AZ — Lead electrical engineer responsible for design plans and details for the replacement of existing generators, automatic transfer switch, panels, and LPG tank at four check structure locations and replace the UPS system at one turn-out location. Design included instrument and controls, electrical design, structural design of wall penetration, mechanical design of the exhaust and air cooling system for indoor generators, and site civil design of LPG tank area.

Street Lighting Standards, City of Scottsdale, AZ — Electrical engineer for development of the City's street lighting standards through an on-call contract. Kimley-Horn updated the City's Design Standards and Policy Manual to provide uniform lighting standards across the City, clarify requirements, and review processes for proposed street lighting improvements. Kimley-Horn coordinated with several stakeholders throughout the project to come to a consensus on the standards approach. The street lighting standards include a lighting design check list for designers to streamline the submittal process.

Highline Canal Multi-Use Path, Tempe, AZ — Electrical engineer for development of plans, specifications, and cost estimates for the Highline multi-use path (MUP), which will provide critical connections to parks, schools, and employment centers in Tempe's westernmost neighborhoods. The 10-foot-wide concrete path will be located within canal right-of-way and extend from Avenida del Yaqui to the Knox Road alignment, a distance of 3.8 miles. Kimley-Horn is also designing site features such as porticos and gateway points, site furnishings, plantings and irrigation, lighting, wayfinding signage, signalized crossings, and bicycle/pedestrian bridge structures across the canal.

Downtown Courts Electrical Upgrades, Maricopa County, AZ — Project manager for an electrical site assessment, evaluation, and design of six buildings. The electrical system is made up of a 15-kV network feeding 480-V distribution through each building. There are 12 main distribution boards, 200 panels, and 100 transformers. The design included site assessment of the existing conditions, infrared scanning of equipment, 72-hour load studies, and construction documents upgrading the existing system. This project required electrical analysis including energy use, life-cycle evaluation and code analysis of the existing facilities. Final construction documents included phasing plans, new standards for county projects, under load and overload evaluations, consolidation recommendations, and safety recommendations for proper use of the facility.

Maricopa County Elections Building Generator Upgrades, Phoenix, AZ — Project manager for design of upgrades to the existing 230-kW generator for the Maricopa County Elections Building to a 600-kW generator. The electrical design included replacing the existing 2500-Amp service with a new 1000-Amp service and 1000-Amp Automatic Transfer Switch (ATS). The new 600-kW generator system is designed to carry the entire load of the building including emergency lighting, HVAC, and server equipment. The new electrical service integrates the existing solar Photovoltaic (PV) array on the roof.

Massachusetts Bay Transportation Authority (MBTA) Systemwide Transformer Station Upgrade, Boston, MA — Electrical engineer for a risk assessment of MTA's systemwide transformer station upgrade. It included an assessment of the risks associated with replacing the traction power transformers, how to mitigate the risks, and opportunities for improved safety. As part of the risk assessment, a workshop was held with the stakeholders and design teams to walk through the risks, how to manage the risks, and reduce concerns. In addition, as part of the workshop we were able to identify areas of cost savings for the transformer replacements in excessive of $500,000.

NRG Energy, eVgo Electric Charging Stations, Multiple Locations, VA and MD — Electrical engineer. Kimley-Horn partnered with eVgo to design electric vehicle charging stations for more than 10 stations in Northern Virginia and Maryland. We evaluated each site to identify where, how many, and what type of stations should be installed. Our services included due diligence/site selection, electrical engineering, remote monitoring, environmental permitting support, site civil, utility coordination, county coordination, lighting requirements, signage, structural engineering, construction management, and LEED coordination.

Angelina G. Fairchild, P.E., LEED AP®

Structural Design

Special Qualifications

- A lead engineer in our Florida region structural division with 30 years of experience
- Principal areas of practice include industrial facilities, municipal projects, parks, marinas, bridges, and condition assessments
- Involved in the design, rehabilitation, repair, construction, and inspection phase services on a variety of structural engineering projects that have included conventional reinforced concrete, precast prestressed concrete, post-tensioned concrete, and structural steel

Education and Training

- Master of Science, Civil Engineering, University of Texas, Austin, 1988
- Bachelor of Science, Architectural Engineering, University of Texas, Austin, 1985

Registrations and Certifications

- Professional Engineer in Florida, #43958, April 1, 1991
- LEED® Accredited Professional

Professional Affiliations

- Florida Engineering Foundation Trustee
- Member: Florida Engineering Society, Past President; U.S. Green Building Council - National Capital Region

Project Experience

Countess De Hoernle Park Value Engineering (VE) Services, Boca Raton
Served as project manager/lead structural engineer. The Greater Boca Raton Beach and Park District selected Kimley-Horn and their professional estimator subconsultant to perform an independent cost evaluation of the project being designed by the City's consultant and to perform a VE analysis of the design performed to date. The VE study was based on of the review of the 60 percent plans and specifications for the proposed eight athletic fields and a two-building complex facility. The VE study identified that the project, as currently designed, was several million dollars over budget and that proposed VE alternatives totaled savings of up to $6 million (with changes ranging from site drainage to building consolidation) that would provide the needed facilities at a cost that meets the available budget. The project was redesigned to include many of the recommended changes.

Boca Beach Club Hotel, Boca Raton — Kimley-Horn provided roadway and retaining wall design for the redevelopment of the Boca Beach Club Hotel property in Boca Raton as part of a large consultant team. Kimley-Horn was responsible for designing approximately 1,200 feet of elevated "spine" entry road from the main entrance to second and third level arrival plazas and parking garage entrances for the refurbished hotel and a new condominium building. The spine road is to be constructed in close proximity to an existing bulkhead that separates the upland development from the Boca Inlet. The design also included a pedestrian access tunnel under the elevated roadway from a boat landing on the Boca Inlet to the hotel and an ADA ramp to the new condominium building. Other responsibilities included coordination with the building architects and structural engineers, the site civil engineer, the landscape architect, and the bulkhead designer to ensure compatibility of designs.

Miami Beach Convention Center Seawall/Collins Canal, Miami Beach — The Miami Beach Convention Center is bordered to the north by the Collins Canal. The City of Miami Beach is proposing improvements to the convention center which will include the canal. The canal is currently stabilized by an existing seawall whose cap is less than 2 feet above mean high water level and tidal waters periodically overtop the wall. The seawall is also in various stages of failure, with approximately 200 feet of the wall having completely failed. The City retained the services of Kimley-Horn to perform a preliminary assessment of the canal's seawall. These services consisted of an alternatives analysis for rehabilitating the wall, as well as a general approach to providing stormwater management to the area surrounding the convention center. The alternatives also took into consideration the City's desire to save as many of the existing trees as practicable which lay between the canal and convention center.

Dona Bay Watershed Environmental Restoration - Sarasota County — Served as structural engineer responsible for the design of the water control structure associated with this project. The structure included an 8-barrel culvert with 8-foot by 8-foot operable gates, as well as a sheetpile weir wall. The culvert and gate structure was part of a bridged access road connecting both sides of the reservoir, and it included a pedestrian walkway for maintenance and gate operation access. The Dona Bay Watershed Environmental Restoration project involves the design work to implement the results of the Dona Bay Watershed Management Plan. Kimley-Horn designed a 180-acre wetland restoration area, stormwater conveyance facilities from Cow Pen Slough to the Venice Minerals site, and a major water control structure. In addition, Kimley-Horn's engineers and technicians developed

several proprietary GIS tools specifically designed to automate the stormwater modeling process and generate the specific GIS deliverables required by Sarasota County, including easement acquisition.

Ferreira Construction Company Facility, Martin County — Project manager and lead structural engineer for the design of this waterfront boat manufacturing facility which included the dredging of a new harbor and associated mooring and bulkhead facilities; Florida Department of Environmental Protection permitting; site plan approval, planning and design of two 100-ton travel lift wells, parking, landscaping, stormwater management, and utility infrastructure.

Port of Palm Beach Asphalt and Diesel Terminals, Riviera Beach — Project manager and lead structural engineer. The South Florida Material Corporation (SFMC) is the only private property land-locked by the Port of Palm Beach. Kimley-Horn's structural engineering team was the lead consultant in charge of the construction plans for the development of an asphalt terminal on the original site. The terminal consists of three 48-foot-high, 90-foot-diameter asphalt storage tanks located in a three-acre containment area surrounded by a five-foot cast-in-place concrete wall. The improvements also included site access ramps, drainage, lighting, and the refurbishment of an existing storage building to house offices, restrooms, and the control room for the new loading rack and weigh station facility. Ancillary facilities to house generators, heaters, and other instrumentation and equipment were also part of this project. Once this main terminal was completed, two other above-ground tanks for diesel fuel storage were added, along with a second loading rack in 2007. Our team also designed and oversaw the construction of a polymer modified asphalt (PMA) plant located within the original containment area. The PMA plant includes a hopper system, a conveyor, two vertical mixing tanks, and three 35,000-gallon storage tanks. A recent modification to this facility was a 1,200-square-foot expansion to the refurbished building, completed in 2008. Currently, Kimley-Horn is assisting the client with an expansion to the PMA operations to add 2 more mixing tanks, a scrubber and 2 additional pumps.

American Airlines Concourse 'D' at Miami International Airport — Structural engineer for all site civil structures for the $16.5 million North Terminal Development Concourse 'D' Extension Apron and Utilities project at Miami International Airport. The project involved significant apron and utility work that included asphalt and concrete pavement demolition and construction and pavement marking, as well as underground utility installation, demolition and relocation.

Browns Farm Road Bridge Over Shawano Canal, Belle Glade — Served as project manager responsible for the design of bridge replacement. Duties for this three-span precast slab bridge included the initial inspection, replacement recommendations, design, and construction administration services such as bidding, contractor award, review of shop drawings, site reviews, and approval of contractor pay requests.

Cooling Tower Design Cell # 4, Belle Glade — Served as project manager for the design of structural concrete tank to support an oversized cooling tower. Our design included a weir and flume, as well as return pipes for a flow of 30,000 gallons per minute.

Everglades Agricultural Area (EAA) Storage Reservoirs, Phase I, PIRs, Palm Beach and Hendry Counties — Served as co-project manager for development of a hydraulic model for the EAA. The EAA Storage Reservoirs project was one of the first 10 Comprehensive Everglades Restoration Program (CERP) projects authorized by Congress under WRDA 2000. Project deliverables included preparation of about 60 supporting documents and reports and the development of the screening and evaluation criteria for analysis of the proposed alternative plans, in accordance with USACE and SFWMD requirements.

Miami International Airport (MIA) Terminal D-E-F Wrap Expansion Program — Served as structural engineer for the site civil structures, tunnels, and foundation design of a proposed $280-million terminal expansion at MIA. The project consisted of 850,000 square feet of new building construction and 600,000 square feet of existing terminal renovation. The scale of the expansion required extensive utility relocations, nine underground baggage and conveyor tunnels, and drainage and pavement modifications to be made while maintaining tenant operations at one of the world's busiest airports.

Skypass Bridge, Port of Palm Beach, Riviera Beach — Structural engineer for design of a 1,900-foot, four-lane bridge over US 1. Kimley-Horn's fast-track design of roadway approaches and the bridge, which rises to 69 feet, allowed for the elevation of US 1 to improve port operations. The bridge was constructed in two sections to maintain existing traffic. Design and contract plans were produced in less than nine months.

Mark N. Santos, P.E.

Structural Design

Special Qualifications

- More than 17 years of experience in parking planning, structural design, and restoration projects on a national scale
- Expertise in complex and mixed-use projects in the entertainment, government, transit, retail, healthcare, and private sectors
- Highly skilled in the financial planning, functional design, operational consulting, and rehabilitation of parking facilities

Education and Training

- Bachelor of Science, Civil Engineering, Pennsylvania State University, 2000

Registrations and Certifications

- Professional Engineer in Florida, #70351, September 15, 2009

Professional Affiliations

- American Concrete Institute
- International Parking Institute, Member
- Urban Land Institute
- Florida Parking Association - Board Member; ULI – Member; Switchboard of Miami - Board Member

Project Experience

City of Delray Beach, Parking Design and Feasibility Evaluation — Provided conceptual design services for a parking feasibility study of a 400-space parking structure located in the downtown area to determine garage placement, functionality, massing, and vehicular/pedestrian access points. Design services included zoning code analysis, functional layouts for self-park garage, garage with a retail component, and an automated parking garage. An order of magnitude cost estimate was prepared for each functional layout.

All Aboard Florida – Fort Lauderdale Station — Project engineer on the Kimley-Horn team that was retained to assess the impacts of the new train station in the City of Fort Lauderdale along the Florida East Coast (FEC) Railway as part of the proposed All Aboard Florida passenger rail service connecting Miami, Fort Lauderdale, and West Palm Beach. The initial study completed in November 2014 included examining the impacts the station, an at-grade crossing, and an extension of NW 2nd Avenue. The following update to the study utilizes traffic count data collected after the closure of the at-grade crossing and accounts for the access locations of the surface parking lots, proposed parking garage, and the drop-off/pick-up areas.

All Aboard Florida – Miami Station — Project engineer for the Kimley-Horn team that is providing transportation engineering services for the proposed mixed-use transit oriented development that is generally bounded by NW 8th Street to the north, NW 2nd Street to the south, NW 2nd Avenue to the west, and NW 1st Avenue to the east in the City of Miami. The project consists of the All Aboard Florida train station that will serve as an intermodal hub, interconnecting with Metrorail and Metromover. The project also consists of three overbuilds on top of the station and two additional multi-use towers that will include office, retail, entertainment, and residential components. The project also includes the realignment of NW 1st Avenue.

Brickell Key One Property Structural Assessment and Repair Work, Miami
Project includes assessment of building structural elements including exterior façade, roof, parking garage and interior structures. Includes structural design, construction drawings, and product specifications, and providing construction phase services during that upcoming phase. Subsequent to a prior property condition assessment of exterior façade and concrete elements of the building, Kimley-Horn was engaged to develop repair plans and specifications for deteriorating buildings and facilities at the site. Brickell Key One is a 20-story oceanfront condominium built in the 1970s.

Galleria Mall Garage Condition Assessments and Restoration, Fort Lauderdale
Project manager of the Kimley-Horn team performing the condition assessment and restoration of four parking garages serving the mall. The four parking structures were evaluated and assigned prioritized repairs associated with an order of magnitude cost. The parking structures consist of various construction types including cast-in-place and precast. Restoration scope includes concrete repairs, waterproofing repairs, and perimeter barrier upgrades. In addition, Kimley-Horn is serving as structural engineer for tenant fitout including structural re-framing of existing precast concrete structure to accommodate escalator relocation, closure of floor openings, and supplementary steel beams for increased floor loadings.

SFRTA Operations Center, Pompano Beach — Kimley-Horn is the prime designer and owner's representative responsible for facilitating the design-build package for a three-story 75,000-square-foot operations center building and a four-level 450-space parking garage. The project site is located at the existing SFRTA

Pompano Beach Station, where station platform upgrades are underway. Kimley-Horn has provided project management, civil engineering, parking consultation, structural engineering, and landscape architecture.

Parking Consultant of Record, Clearwater — Project manager. As a qualified parking consultant for the City of Clearwater, Kimley-Horn was retained to review the City's existing parking citation procedures and provide recommendations to improve customer service. To understand the current parking citation operations, Kimley-Horn reviewed standard operating procedures, vendor agreements and customer protocol, processing software capabilities, payment methods, and customer service feedback. The results of the study provided an assessment of the existing parking citation procedures and recommendations for parking citation procedure modifications for both the City and its vendor.

Sawgrass Mills Deck II, Sunrise — Kimley-Horn is providing civil engineering and parking consulting services to produce Design/Build bridging documents and Request for Proposal (RFP) services for Simon Properties for Deck II at Sawgrass Mills Mall in Sunrise, FL. Deck II will provide the additional mall parking supply required associated with the mall expansion including retail stores and restaurants. The project consists of 2,000 spaces on five levels with valet storage parking on the ground level and visitor and employee parking on the upper levels. The project will also include fire department training features to be utilized by the local fire department during mall closure times. The ground floor allows for the continuation of the mall circulation road beneath the garage, along with loading dock access points. A double cascading ramp provides vertical circulation between parking levels, where one 360 degree maneuver allows access between three levels. The ramp is located on the exterior of the 4 bay garage, providing improved internal visibility towards the mall destination points. Construction type will consist of precast, prestressed concrete including double tees, spandrel beams, inverted tee beams, lightwalls, and shearwalls.

CityPlace, Doral — Parking consultant. Kimley-Horn is providing parking consulting services to a local architect for this large, mixed-use development in Doral. The project includes a variety of tenants including retail, grocer, restaurant, cinema, and residential. The project contains three parking structures to serve the development. Kimley-Horn assisted with the functional design of the garages considering ramping systems with potential dedicated access and parking for the grocer tenant, ramp slopes, turning radii, location of expansion joints, placement of shearwalls, and floor drains.

CRA Overtown, Miami — Parking consultant. Kimley-Horn is providing civil engineering and parking consulting services to another firm for this mixed-use project located in the Overtown section of Miami. The project consists of ground level retail, approximately 1200 spaces on eight levels, and four levels of office. In addition to serving the building tenants, the project supports the adjacent All Aboard Florida station development with the government center area in Miami. Parking supply is provided to serve a portion of the rail passengers and the garage will contain a limited rental car facility.

Southwest Downtown Garage, Gainesville — Served as parking consultant and structural engineer providing operational consultation to improve user friendliness of patron access including review of garage payment and access types, hours of operation, and event type parking operations. In addition, provided condition assessment services to determine extent of concrete and waterproofing repairs for the eight-year-old mixed use facility. The ground floor contains occupied space housing the City parking department and the upper levels contain approximately 800 parking spaces.

The Flamingo South Tower Garage, Miami — Serving as project manager and parking/structural engineer. Kimley-Horn is a subconsultant to another firm who was recently selected to provide engineering services for the demolition and design-build of The Flamingo South Tower garage/lanai. Our services will include civil engineering, parking, structural, architecture, geotechnical, and MEP.

Kimley»Horn

Adam B. Kerr, P.E.

Transportation

Special Qualifications

- Has 14 years of experience in transportation planning and traffic engineering gained through a variety of transportation planning projects, including traffic impact analyses, Florida Department of Transportation (FDOT) action plan analysis, developments of regional impact (DRIs), data collection coordination, and computer modeling
- Experience in traffic signal design across multiple jurisdictions in Florida
- Experienced in development of regional impact (DRI) analysis and project management throughout the state
- Proficient in highway capacity software, Synchro, Florida Standard Urban Transportation Model System (FSUTMS) traffic modeling

Education and Training

- Bachelor of Science, Civil Engineering, Clemson University, 2001

Registrations and Certifications

- Professional Engineer in Florida, #64773, July 12, 2006

Professional Affiliations

- Congress for the New Urbanism
- Board Member - Palm Beach Planning Congress

Project Experience

US 1 Corridor Modification Study, Delray Beach — Prepared an analysis of conditions prior to and after a lane reduction on a major corridor through Delray Beach, Florida. Aspects of the study included traffic volumes at intersections and generally along the corridor, speeds, and accident data. The corridor study was part of a larger project which analyzed the qualitative effects of decreased number of travel lanes, increased sidewalk width, and increased landscaping. The project involved extensive public coordination with the City of Delray Beach, the Florida Department of Transportation, and the Delray Beach Community Redevelopment Association.

City of Miramar Continuing Engineering Services — Lead traffic engineer providing on call traffic engineering services. Areas of assistance include review of traffic impact analyses and parking studies specific to development applications. Additional services include involvement as a member of the City of Miramar's land development staff to provide traffic and transportation input to the Planning and Zoning Board and the City Commission for traffic operation issues and proposed development site plans.

Worth Avenue Restoration Project, Town of Palm Beach, Palm Beach
Provided traffic engineering expertise for this roadway beautification project along one of the Town's most prestigious roadways. The project included the construction of a new roadway section, replacement and modification of various underground utilities, replacement of sidewalks with decorative tabby concrete, and the introduction of many landscaping and architectural elements throughout the corridor.

Various Traffic Signal Designs, Palm Beach County — Prepared plan sets and opinions of probable cost for several private sector developers. Coordinated the structural analysis, geotechnical analysis, and the permit and approval processes. Designs were on major thoroughfares and required agency approval from Florida Department of Transportation (FDOT), Palm Beach County, municipalities, and various utility companies. Provided construction phase services for several signals. New signals designed and constructed, or under construction, include:

- SR 7/US 441 and Pioneer Road
- Toney Penna Drive and Pennock Lane
- 10th Avenue North and Rudolph Road
- 10th Avenue North and Palm Springs Walmart
- 2nd Avenue North and Dixie Highway
- 49th Street Fire Station Emergency Signal
- Military Trail and Hypoluxo Walmart
- Executive Center Drive and Palm Beach Lakes Boulevard
- Presidential Way and Congress Avenue
- Palm Beach Mall and Palm Beach Lakes Boulevard
- Northlake Boulevard and Christ Fellowship Church Main Entrance
- Gateway Boulevard and Renaissance Commons Boulevard
- Congress Avenue and Water Tower Road
- Military Trail and Office Depot Headquarters Entrance
- Military Trail and Miner Road
- Westwinds Shopping Center & US 441
- Frenchmen's Crossing and Hood Road
- Franklin School and Hood Road
- 22nd Street and US 1

- University Drive and FAU Football Stadium
- Central Boulevard and Grandiflora Road
- Hood Road and Frenchmen's Crossing Shopping Center

Florida Atlantic University Signal Designs - Florida Atlantic University, Boca Raton — Served as project engineer. Kimley-Horn designed traffic signals at two intersections on the FAU campus including:

- Broward Avenue and Volusia Street
- North University Drive and FAU Stadium Garage Entrance

The signals are trombone-style mast arms. The signals serve busy intersections with a significant amount of pedestrian traffic. Kimley-Horn worked closely with the trombone-style mast arm manufacture to ensure that the design would meet the wind loading requirements for coastal Florida.

Miscellaneous Signal Designs - Throughout South Florida — Served as project engineer. Kimley-Horn designed traffic signals at other intersections throughout south Florida including:

Michigan Street and SR A1A; Hollywood, Florida — Three internal signals at Sawgrass Mills; Sunrise, Florida

Ballpark of the Palm Beaches a/ka West Palm Beach Spring Training Facility for the Houston Astros and Washington Nationals, West Palm Beach — Served as project engineer. Kimley-Horn is currently providing civil engineering services for the development of the Ballpark of The Palm Beaches, a state-of-the-art two-team spring training facility in West Palm Beach, Florida. The 8,500-seat stadium will annually host the Houston Astros and the Washington Nationals during the Spring Training season. In addition to the new stadium, the 154-acre property will also accommodate 12 auxiliary major/minor league fields, five Palm Beach County multipurpose fields, and a 12.2-acre City of West Palm Beach park. The facility will be used year-round by Palm Beach County for sports tournaments and other events. Kimley-Horn's scope of work includes on-site civil engineering, environmental resource work, event traffic management planning, permitting, and construction phase services. Kimley-Horn is also directing subconsultants performing the off-site turn lane design, signal modifications, survey, and utility locations. The Ballpark of The Palm Beaches is expected to open Spring 2017.

Broward Avenue and Volusia Street Signal Design - Florida Atlantic University, Boca Raton — Served as project engineer. Kimley-Horn designed a traffic signal at the intersection of Broward Avenue and Volusia Street on the FAU Boca Raton campus. The signal is a trombone-style mast arm. The signal serves a busy intersection with a significant amount of pedestrian traffic. Kimley-Horn worked closely with the trombone-style mast arm manufacture to ensure that the design would meet the wind loading requirements for coastal Florida.

Florida Atlantic University (FAU) Continuing Minor Civil Engineering (Multiple Projects) — Project engineer for design of traffic signals at two intersections on the FAU campus at Broward Avenue and Volusia Street and North University Drive and FAU Stadium Garage Entrance. The signals are trombone-style mast arms that serve busy intersections with a significant amount of pedestrian traffic. Kimley-Horn worked closely with the mast-arm manufacturer to ensure that the design would meet the wind loading requirements for coastal Florida.

Franklin Academy, Boynton Beach — Project manager. Franklin Academy is a proposed 1,300-student charter school proposed to be located along Military Trail, west of Boynton Beach, Florida. Kimley-Horn provided transportation planning services prior to County Commission approval of the site. Kimley-Horn has also provided signal design services for a new mast-arm traffic signal at Minor Road and Military Trail, as well as turn-lane design for a new turn-lane on Military Trail, and roadway design plans for a rebuild of Old Military Trail adjacent to the site. Kimley-Horn coordinated closely with Palm Beach County through the design process, and provided construction phase services throughout the construction of the project. Design and construction of the improvements were required within an aggressive 10-month schedule.

Roebuck Road, SR 7 to Jog Road, West Palm Beach — Served as signal designer. As a subconsultant to another firm, Kimley-Horn provided drainage analysis and design, signing and pavement marking, and signal plans. We were also responsible for environmental permitting services.

SR 7/Pioneer Road Signal, Royal Palm Beach — Served as project manager. Kimley-Horn designed a traffic signal at the intersection of SR 7 and Pioneer Road in Royal Palm Beach. The mast-arm design included a dual-arm design, with one of the arms spanning a six-lane approach to the intersection. The design required special consideration for drainage and topography. Construction had to be coordinated with the widening of SR 7, as well as the widening of Pioneer Road.

Sean M. Bukovich, E.I.

Transportation

Special Qualifications

- Four years of experience with a specialty focus on municipal roadway design division
- Provides support to senior engineers on projects that involve drainage design
- Responsibilities include preliminary roadway and drainage design, developing roadway profiles, performing calculations, coordinating plan preparation, utilizing FDOT's LRE system, and assisting with project reports

Education and Training

- Bachelor of Science, Civil Engineering, Florida Atlantic University, 2012

Registrations and Certifications

- Engineering Intern in Florida, 1100016830, August 2, 2012

Project Experience

City of Delray Beach CRA Sidewalk Design Services — Serves as project manager for the design of missing sidewalk segments for several areas along SW 3rd Street, NW 7th Avenue, NW 6th Avenue, SW 6th Avenue and SW 5th Avenue. Kimley-Horn's services include coordinating site surveying, attendance at public meetings, review of profiles and edge of pavement elevations, analyzing adjacent landscaping to determine needs for relocation, utility coordination, permit coordination, development of typical cross sections, preparing final design plans for the improvements, and providing opinions of probable costs.

Patch Reef Bike Trail, Boca Raton — Served as design analyst. Helped the City of Boca Raton with permitting and utility coordination for a proposed shared-use path near the Town Center Mall. Contacted all utility companies within the project area, set up utility coordination meetings, and helped resolve any utility conflicts that were discovered. Also, coordinated with Lake Worth Drainage District to get the required permits approved.

Wiles Road Design from Rock Island Road to US 441 (SR 7), Coral Springs Analyst on the Kimley-Horn team selected by the Broward County Engineering Division to prepare complete contract plans for the resurfacing and widening of Wiles Road as a six-lane divided urban arterial from Riverside Drive to Rock Island Road. Broward County and FDOT are sharing in the cost of improvements which include drainage, lighting, landscaping, irrigation, bicycle lanes, signalization, utility coordination, and detailed traffic control plans. Helped design the new alignment and profile, as well as the cross sections and intersection layout. Assisted in the design and layout of the drainage system, which included new drainage structures and exfiltration trench. Also helped with utility coordination, OPC and assisted in developing the contract bid documents.

SR 5/US 1 and SR A1A RRR Design Services, FDOT District Four, Palm Beach Gardens — Served as analyst for this 3R project that includes two roadway segments under one contract. The SR 5 (US 1) segment is a 7.5-mile-long, four-lane divided with urban and suburban sections spanning five municipalities. The SR A1A portion is 1/2 mile of two-lane roadway. Because of the length of the project, an expedited survey schedule was required. The project also includes a public involvement program involving five municipalities and coordination of landscape design for all cities. The project also involves adding missing sidewalk; widening pavement to provide bike lanes along the numerous existing right-turn lanes; evaluating and designing repairs to existing drainage problems; environmental permitting; signing and pavement markings; replacing a curbed section due to widening; and analyzing numerous signalized intersections against current standards. The project also includes preparing several design variations and coordination with more than a dozen utility companies.

Florida's Turnpike Canal Protection Project, Palm Beach County, Palm Beach County — Served as analyst for the Kimley-Horn team that provided analysis and design of a high-tension cable barrier system to shield vehicles from entering canals along Florida's Turnpike in Palm Beach County. Significant project challenges include drainage, permitting, right-of-way, maintenance, and utility concerns, including the presence of FGT gas mains in the right of way along the eastern edge of the project. In addition, the design of the future widening of the Turnpike in Palm Beach County is simultaneously proceeding with the design and construction of the cable barrier system. Special care was taken to minimize unnecessary costs to the Turnpike.

I-75 (SR 93) from Hernando County Line to CR 470, FDOT District Five — Design analyst assisting with various aspects of the roadway plans production, roadway design, summary of quantities, and computation book for this widening project in Sumter County. Kimley-Horn is preparing plans and permits for the widening of 12 miles of I-75 from north of the Hernando County line to south of CR 470. The project includes widening in the median of I-75 and reconstruction of the SR 48 interchange and the northbound off-ramp to SR 476B. In addition, the project includes off-site drainage ponds and right-of-way acquisition.

I-95 Master Plan for 17 Interchanges from Linton Blvd. to Northlake Blvd., FDOT District Four, Palm Beach County Serving as analyst providing preliminary roadway design, critical cross section analysis and preliminary cost estimates using FDOT's LRE system for the 27-mile I-95 Interchange Master Plan for the seventeen existing interchanges from Linton Boulevard to Northlake Boulevard in Palm Beach County, Florida. The primary purpose of the Interchange Master Plan was to identify long-term needs and develop design concepts to address traffic spillback onto I-95, improve interchange operations, reduce congestion, and increase safety at the study interchanges through a 20-year design horizon.

Florida's Turnpike All Electronic Tolling (AET) 5B, Sawgrass Expressway Design-Build, Florida's Turnpike Enterprise Served as design analyst assisting in the preparation of the signing and pavement marking plans. This project involves the AET conversion of 20 miles of the Sawgrass Expressway from I-595 to Florida's Turnpike in Broward County, including two mainline toll plazas and fifteen ramp plazas. The conversion included demolition, grading, paving, maintenance of traffic, signing and pavement markings, lighting modifications, drainage, permitting, ITS, utility coordination, tolling, architecture with MEP, and landscaping. Kimley-Horn's scope also included signing and pavement marking plans, including structural design, lighting plans, ITS plans, and landscaping plans.

Lake Worth Turn Lane at the Florida's Turnpike — Analyst for roadway design of a new westbound right turn lane at the entrance to the Florida's Turnpike northbound entrance at the Florida's Turnpike. Work included roadway design, drainage design, utility coordination, traffic control, signing and pavement markings, signalization and required coordination with FDOT District Four. The project was on a fast-track schedule to be completed December 2013 utilizing a condensed review schedule.

I-95 Master Plan Broward County, FDOT District Four — Serving as analyst on this project providing preliminary roadway design, critical cross section analysis and preliminary cost estimates using FDOT's LRE system that entails the identification of 6 interchange improvements (all in Broward County) that can move into the design phase in FY 2013/14 and beyond. To accomplish this, Kimley-Horn developed a methodology that proposes a two-tier approach to identify and prioritize three interchanges that can advance quickly and have conceptual improvement plans completed by July 2014. The remaining interchange studies were completed later and documented in an Interchange Master Plan (IMP).

Turnpike Widening from Boynton Beach to Lake Worth, Florida's Turnpike Enterprise — Roadway analyst. Assisted with the evaluation an alternative alignment for the proposed widening of Florida's Turnpike from the existing 4-6 lanes to an 8-lane divided limited access freeway from north of Boynton Beach Boulevard to north of Lake Worth Road in Palm Beach County to avoid major utility lines that run under the existing roadside area between the Florida's Turnpike north bound lanes and the Lake Worth Drainage District (LWDD) E-2E Canal. Helped design two alternatives for a new interchange at Hypoluxo Road. The different alternatives had to take into consideration R/W needs, canal rerouting, and pond configurations, among other constraints. Also helped with cost estimates for the two alternatives to help the team decide which of the two alternatives would be the most viable option.

Brady Walker

Environmental/Natural Resources

Special Qualifications

- Has 13 years of experience, including extensive field work throughout Florida in upland, freshwater, and estuarine environments
- Experience designing wetland mitigation and restoration areas, conducting endangered species surveys, delineating wetlands, and permitting projects throughout Florida

Education and Training

- Bachelor of Science, Biology, Denison University, 2004

Registrations and Certifications

- Authorized Gopher Tortoise Agent (Permit No. GTA-11-00004)
- PADI-certified scuba diver

Professional Affiliations

- Society of Wetland Scientists

Project Experience

I-95 Master Plan for 17 Interchanges from Linton Boulevard to Northlake Boulevard, FDOT District Four, Palm Beach County — Environmental scientist for this project that entailed the identification of 17 interchange improvement projects (from south of Linton Boulevard to north of Northlake Boulevard) that could move into the design phase in FY 2013/14 and FY 2014/2015.

Kings Highway (SR 713) from Okeechobee Road (SR 70) to US 1 (SR 5) PD&E Study, St. Lucie County, FDOT District Four — Served as environmental analyst. Kimley-Horn performed a PD&E study to widen an existing two-lane roadway to a four- or six-lane divided roadway. This 10-mile project included all environmental and engineering reports necessary to evaluate alternative corridors and alternative alignments within the selected corridor. The project also included public information meetings and public workshops with local residents and elected officials. Additional services included the preparation of a detailed concept plan, right-of-way maps, and a pond siting report to determine additional right-of-way needs.

SR A1A North Causeway PD&E Study, FDOT District Four, St. Lucie County
Environmental Scientist. Kimley-Horn is conducting the PD&E Study to evaluate bridge replacement alternatives for the SR A1A North Causeway Bridge, a movable bascule bridge that was constructed in 1963. It spans over the Atlantic Intracoastal Waterway (ICWW) connecting the barrier island to the mainland in the City of Fort Pierce. In March 2013 the bridge was inspected and deemed an "operational area of concern." In addition to the WER and ESBA, Kimley-Horn is conducting benthic surveys for the proposed new bridge alignments.

Florida Turnpike Lake Worth to Jupiter PD&E Study, Palm Beach County
Aided in the preparation of the endangered species assessment, wetland assessment, and contamination assessment reports as part of the environmental and engineering services Kimley-Horn is providing to develop a PD&E study for the Turnpike.

Gopher Tortoise Relocation, St. Lucie County — Led permitting of approximately 80 acres of County land in St. Lucie County and the field relocation of approximately 60 gopher tortoises on the same site. Also conducted numerous gopher tortoise surveys throughout Brevard, Indian River, St. Lucie, Palm Beach, and Broward counties.

Midway Road (CR 712) from Glades Cutoff Road (CR 709) to Selvitz Road (CR 615) PD&E Study, St. Lucie — Serving as environmental scientist. Kimley-Horn is a major subconsultant on this 1.6-mile segment of Midway Road. The project includes evaluating the widening of Midway Road from 2 to 4 lanes as well as a concept study for a new interchange with the Florida's Turnpike. Kimley-Horn is responsible for all traffic analyses, structures evaluations, and environmental (socio-cultural, wetland and endangered species—including extensive Audubon's carcara surveys) evaluations. In addition, Kimley-Horn is responsible for preparing the interchange concept report and coordinating the results with Florida's Turnpike Enterprise.

PD&E Study for Florida's Turnpike Spur and the HEFT from NW 57th Avenue to Turnpike Mainline, Broward/Miami-Dade Counties — Environmental scientist providing environmental and public involvement support, including preparation of the WER and ESBA, as well as assisting with roadway design, structural elements, drainage (including preparation of a Location Hydraulics Technical Memorandum and a Pond Siting Report), permitting, and lighting.

Project Experience, cont.

Polk Parkway (SR 570) Milling and Resurfacing and Criteria Upgrade from MP 8.1 to MP 21.7, Polk County, Florida's Turnpike Enterprise — Serving as environmental analyst for the Kimley-Horn providing post design services for this project. Previously, our team prepared plans and specifications for the milling and resurfacing of 13.6 miles of Polk Parkway. In addition, Kimley-Horn also prepared the Existing Roadway Conditions Assessment Report (ERCAR), which included review of vertical and horizontal geometry for the mainline and interchange ramps, review of super-elevation design, cross-slope correction analysis, identification and classification of pavement failures, and cost estimates for recommended roadway improvements. Kimley-Horn provided quality assurance/quality control for the structural assessment of the structural components of the ERCAR, which included a review of existing bridge and sign structures. We also prepared lighting and signing and pavement marking plans and quality review of a roadway quantity computation booklet.

SR 614 (Indrio Road) Design, FDOT District Four — Environmental scientist. Services include value engineering; environmental permitting with the Fort Pierce Farms Water Control District, SFWMD, and USACE; control and design surveys; geotechnical investigations; an access management plan update; community awareness plan; drainage design; utility coordination and SUE; and long-range/cost estimates.

SR 7/US 441 PD&E Study (Sample Road-Glades Road), FDOT District Four, Deerfield Beach — Environmental scientist for this PD&E study for 6.4-mile segment of SR 7 from Sample Road in Broward County to SR 7 in Palm Beach County. Prepared the WER and ESBA for the PD&E study which evaluated a wide range of alternatives, including roadway capacity improvements, multimodal and premium transit alternatives, and bicycle and pedestrian accommodations. Improvements considered included roadway widening, managed lane concepts, High Occupancy Vehicle (HOV) lanes and dedicated premium transit lanes, intersection and operational improvements, and multimodal improvements such as pedestrian ways, bicycle lanes, greenways, and transit stations.

Turnpike (SR 91) All Electronic Tolling (AET) 5A Conversion from I-595 to South of the Lantana Mainline Toll Plaza
Project ecologist and assisting with permitting elements. Kimley-Horn was selected to provide design services for the conversion of the existing tolling scheme along the Turnpike to all electronic tolling (AET). The current system uses a combination of ramp toll plazas and mainline barrier toll plazas. FTE's goal is to incorporate a mainline gantry configuration whereby existing ramp toll plazas are removed and mainline tolling points between each interchange are constructed.

Reconstruction of Krome Avenue from South of SW 296 Street to South of SW 232 Street, FDOT District Six
Served as environmental scientist for the team providing roadway, signing and marking, signalization, lighting, structures and landscape design. This project is part of the Krome Avenue South Corridor and has several environmentally sensitive areas. This segment of Krome Avenue handles part of the main freight activity in south and west Miami-Dade County, with a daily truck percentage of 15%.

US 41 (50th Street) Design (from 27th to 47th and from Acline to Uceta), FDOT District Seven — Serving as environmental analyst. Kimley-Horn is currently designing the milling and resurfacing for US 41 (SR 45/SR 599) from north of 27th Avenue south to North 47th Street (Old Columbus Drive) and US 41/50th Street from East Acline Road to Uceta Road (south of the northern railroad crossing) in Hillsborough County. The design for this corridor includes upgrading two railroad/bridge structures, as well as widening of pavement to accommodate a sidewalk and keyhole bicycle lane in each direction. Other issues that will be addressed for this project include right-of-way deficiencies, upgrading existing sidewalk and transit features to meet ADA standards, correcting areas with limited sight distance, relocation of existing utilities, upgrading four signalized intersections located in the project corridor, and correcting areas of localized flooding. Our team will also prepare specification packages in accordance with FDOT requirements and provide quality assurance/quality control and constructability review.

Apollo Beach Boulevard Extension/Flyover, Hillsborough County — Environmental analyst for the Kimley-Horn team designing the extension of Apollo Beach Boulevard from US 41 to Paseo al Mar Boulevard that will result in a 4-lane facility including the bridge over I-75 to the eastern limits of the conservation easement or approach tie-down. Extending Apollo Beach from US 41 to US 301 will serve as an alternative east/west connection ultimately reducing traffic demands on Big Bend Road. This work effort includes alignment and traffic studies; surveying; geotechnical exploration, testing, and analysis; preparing engineering reports with right-of-way maps and environmental documentation incorporating roadway, stormwater detention, and wetland mitigation requirements; permitting requirements; and determination of right-of-way requirements.

Lynn Kiefer

Environmental/Natural Resources

Special Qualifications

- Has 25 years of experience conducting environmental studies and coordinating environmental permits related to transportation projects
- Extensive experience working with the U.S. Army Corps of Engineers, state permitting agencies, Florida Department of Environmental Protection, and water management districts
- Experience in environmental analysis, including freshwater ecosystems, marine ecosystems, and terrestrial habitats
- Involved in the preparation of natural resource documentation for NEPA documents (EIS, EA, FONSI), documented Categorical Exclusions for FDOT, FAA, and FTA

Education and Training

- Master of Science, Coastal Zone Management/Oceanography, Florida Institute of Technology, 1992
- Bachelor of Science, Marine Biology, Auburn University, 1989

Registrations and Certifications

- U.S. Army Corps of Engineers Wetland Delineator Certification (Jacksonville District)
- Gopher Tortoise Agent (Permit No. GTA-10-00008)
- Certified, Embry-Riddle Aeronautical University: Airport Wildlife Hazard Management Workshop
- Hazardous Materials Health and Safety Certification, Occupational Safety and Health Administration
- FDOT PD&E Manual Training
- FDOT Traffic Noise Analysis Certification, October 2015

Professional Affiliations

- Society of Wetland Scientists

Project Experience

St. Lucie County Mosquito Control and Coastal Management On-Call Services, Port. St. Lucie — Environmental scientist responsible for multiple restoration projects for impoundments and spoil islands in the Indian River Lagoon. Responsible for design, environmental assessments, and permitting. Projects have included:

SL-3 Spoil Island Restoration. Kimley-Horn provided design, permitting, and construction phase services to restore an isolated wetland located on a spoil island (SL-3) within the Indian River Lagoon (IRL), north of the Fort Pierce Inlet. An assessment was conducted to characterize the existing conditions and habitat of the island, wetland, and adjacent seagrass in the nearshore of the island. A swale was designed to tidally connect the wetland to the IRL. The project also included the design of an exotic vegetation removal from the island and the preparation of a re-vegetation plan to restore native habitat. Kimley-Horn prepared an environmental resource permit application for the proposed restoration work and completed the permitting approval process. The design included revegetation with native plants, habitat creation, and protection for an existing wetland. The island also features primitive picnic areas and campsites as well as a trail network.

SL-14C Mangrove Marsh. Kimley-Horn assisted the County in obtaining grant funding through the U.S. Department of Interior. We also provided environmental services to prepare the necessary NEPA and permit documentation; provided design services; and permitted the installation of a pump station, 20 culverts, and shoreline stabilization and observation piers into the 178-acre marsh and Indian River Lagoon Aquatic Preserve. Kimley-Horn also provided construction phase services. The project required permits through the Florida Department of Environmental Protection and U.S. Army Corps of Engineers, as well as coordination with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission.

CR 468/Turnpike Interchange PD&E and Design, The Villages
Environmental Manager responsible for the preparation of the environmental analysis during the PD&E study that evaluated the construction of a new interchange with the Florida's Turnpike in Sumter County. The analysis included the field evaluation and preparation of the Wetland Evaluation Report, Endangered Species Biological Assessment, Contamination Screening Evaluation and Socio-cultural effects Evaluation. Also coordinated with the Turnpike and prepared the State Environmental Impact Report (SEIR). Following completion of the PD&E, was responsible for completion of the Environmental Resource Permit (Mass Grading Permit, and Construction Permit) and coordination with Southwest Florida Water Management District.

FHWA EFLHD, National Key Deer Refuge Transportation Study, Big Pine Key and No Name Key — Serving as environmental scientist. National Key Deer Refuge in the Florida Keys is located on Big Pine Key and No Name Key, as well on many other small islands, and occupies 84,000 acres. Kimley-Horn worked closely with local refuge and regional FWS staff as well as EFLHD to collect data, seek stakeholder input, and develop a transportation study report that evaluated and recommended short- and long-range transportation plans to provide a safer environment for the Key deer and other endangered species, as well as provide safer and more efficient mobility for the motorists, bicyclists, and pedestrians visiting the refuge and the surrounding areas.

Project Experience, cont.

Fort Pierce Utilities Authority North Hutchinson Island Repump #1 Improvements, Fort Pierce — Served as environmental scientist. The Kimley-Horn team provided design services to Fort Pierce Utilities Authority (FPUA) to rehabilitate and demolish their primary remote potable water storage and repump facility, repump #1. The Kimley-Horn team designed and permitted construction of FPUA's repump #1 facility. The pumps employ variable frequency drives (VFDs), which allow the pumps to maintain discharge pressure. Phasing of this project was key to maintaining service while the building skin and structure were demolished.

Indian River County Finish Water Stabilization (Lime Slurry Injection) to Reverse Osmosis Water Treatment Plants Served as environmental scientist. Kimley-Horn evaluated the stabilization methods for Indian River County's consolidated water system. Indian River County required an improvement to their existing corrosion control method which utilized zinc orthophosphate. The Kimley-Horn team evaluated alternative treatment methods, conducted pilot testing using lime slurry and carbon dioxide injection, and designed and permitted chemical stabilization systems for Indian River County's North Hobart reverse osmosis (RO) water treatment plant (WTP) rated at 17.1 MGD, and their South Oslo Road RO WTP, rated at 8.5 MGD. The project included a carbon dioxide and lime slurry feed system which enhances finish water alkalinity and hardness, major contributors to enhancing the Langelier Saturation Index (LSI) of the finish water.

Marion County SW 49th Avenue/SW 40th Avenue, Phases 1 and 2 — Environmental scientist. Kimley-Horn was retained to provide full design and permitting services for SW 49th Avenue/SW 40th Avenue, Phases 2 and 3. Kimley-Horn provided full surveying services, environmental field work, full roadway design, permitting services, and bid administration. The project is a four-lane divided highway with two signalized intersections just west of I-75 that will provide an important north-south collector roadway in this part of Marion County. As part of our services, Kimley-Horn will present the final design plans at a public meeting and to the Board of County Commissioners. Value is being added by Kimley-Horn's suggestion that horizontal and vertical curvature be designed for a higher design speed so that in the future if the County elects to perform a speed study and raise the speed limit, the roadway design will support it.

Midway Road (CR 712) from Glades Cutoff Road (CR 709) to Selvitz Road (CR 615) PD&E Study, FDOT District Four Serving as environmental project manager for Kimley-Horn's services as a major subconsultant on this 1.6-mile segment of Midway Road. The project includes evaluating the widening of Midway Road from 2 to 4 lanes as well as a concept study for a new interchange with the Florida's Turnpike. Kimley-Horn is responsible for all traffic analyses, structures evaluations, and environmental (socio-cultural, wetland and endangered species—including extensive Audubon's carcara surveys) evaluations. In addition, Kimley-Horn is responsible for preparing the interchange concept report and coordinating the results with Florida's Turnpike Enterprise.

Osceola Parkway Extension PD&E Study, Florida's Turnpike Enterprise, Orange/Osceola County Line — Serving as environmental project manager responsible for the preparation of the Wetland Evaluation, Endangered Species Biological Assessment, Contamination Screening Evaluation and Sociocultural Effects Evaluation. Also responsible for coordinating the cultural resources evaluation, detailed cumulative impact assessment, preparation of the State Environmental Impact Report (SEIR) and coordinating with Orange and Osceola Counties, FWC, SFWMD and FCT on potential effects to Split Oak Forest.

PD&E Scoping Reports, FDOT District Six — Environmental task manager responsible for the environmental due diligence on numerous PD&E reports for FDOT District Six's Planning Office throughout the Keys. These reports provided a basis for the development of future resurfacing projects and associated improvements. The reports inventoried existing transportation and environmental conditions, examined existing and future traffic conditions, and reviewed historical crash data. The reports outlined recommendations and expected environmental impacts. Much of the environmental data analysis was conducted utilizing readily available GIS data.

PD&E Study for Florida's Turnpike Spur and the HEFT from NW 57th Avenue to Turnpike Mainline, Florida's Turnpike Enterprise, Broward/Miami-Dade Counties — Environmental task manager for the Kimley-Horn team that is serving as a subconsultant to another firm to provide engineering services for a PD&E study for the widening of the Florida's Turnpike Spur and the HEFT from East of NW 57th Avenue to Mainline in Broward and Miami-Dade counties. Responsible for the all environmental data collection and analysis, preparation of the Wetland Evaluation Report, Sociocultural Effects Report, Endangered Species Biological Assessment Report and the State Environmental Impact Report.

15th Street Streetscape, West Palm Beach — Environmental scientist. Kimley-Horn is currently developing plans for streetscape improvements for 15th Street in West Palm Beach. This streetscape features a full complement of Complete Street elements, such as dedicated bike lanes, on street parking, improved accessibility, street furnishings, and new landscaping. The bike lanes will be emphasized with a green performance asphalt coating. The street also features new bulb-out islands to help better define and organize parking as well as act as percolating bioswales that will take in stormwater from the existing gutter.

Tori O'Malley

Environmental/Natural Resources

Special Qualifications

- Has experience working with state and federal agencies such as the U.S. Army Corps of Engineers (USACE)
- Skilled in identifying wetland plant species
- Ability to identify many estuarine and avian species found in the eastern and central U.S.
- Advanced SCUBA diver with over 100 logged dives and certifications in Cavern Diver, Nitrox, and AAUS pending certification

Education and Training

- Master of Science, Marine and Environmental Biology, Nicholls State University
- Bachelor of Science, Wildlife Ecology and Conservation, University of Florida

Project Experience

Midway Road (CR 712) Design and Reconstruction, FDOT District Four, St. Lucie County — Environmental scientist conducting Crested Caracara (federally threatened bird species) surveying. Kimley-Horn will be responsible for permitting the reconstruction of Midway Road from a two-lane, rural roadway to a four-lane, divided urban roadway from west of South 25th Street to east of SR 5 (US 1), for a length of two miles. The project includes replacement of the existing bridge over the North Fork of the St. Lucie River (Aquatic Preserve and Outstanding Florida Water) and also includes retaining walls, drainage ponds, signing, lighting, signalization, landscaping, irrigation, and wetland mitigation. The corridor is within a historic area, and our design will consider right-of-way impacts, impacts to parks and schools, concerns of White City residents, access management changes, flooding and environmental concerns, 4(f) properties, utilities, and decorative lighting within the historic limits.

Harbor Branch Preserve Wetland Restoration, St. Lucie County Mosquito Control District, St. Lucie County — Environmental scientist responsible for water quality sampling, wildlife surveying, and monitoring report preparation. For this restoration project, the wetlands were impounded and reconnected to the Indian River Lagoon (IRL) via culverts installed through the impoundment dike. The reconnection of the wetlands via culverts installed in the dike, combined with artificial flooding during the low-water, summer season, allows constant or intermittent flooding of the wetland floor, which reduces mosquito habitat availability for the salt marsh mosquito. The project will result in mosquito control and wetland restoration. Kimley-Horn performed a resource survey, including Submerged Aquatic Vegetation, prepared the ERP application, and coordinated with the FDEP and USACE during permitting.

Osceola Parkway Extension PD&E Study, Florida's Turnpike Enterprise, Orange/Osceola County Line — Environmental scientist. Kimley-Horn is conducting a PD&E study for the extension of Osceola Parkway, which begins west of Boggy Creek Road and runs east for approximately seven miles to the proposed Southport Connector. The corridor study area is located adjacent to the Orange/Osceola County line. The study focuses on developing a freeway facility that can be expanded in the future with provisions to accommodate a transit corridor and multiuse pedestrian facilities. The project includes a connection to provide direct access to and from SR 417, with interchanges at both ends of the connector road—one at SR 417 and the other at Osceola Parkway. Multiple alternatives are being considered at these two interchanges. The interchange at SR 417 is being developed so that it not only connects to SR 17, but it will also connect to the new Airport South Access Road currently being constructed by the Orlando/Orange County Express Authority (OOCEA), which will provide access to Orlando International Airport. There are two other interchange locations within the study area—one at Narcoossee Road and a future road at the halfway point between Boggy Creek Road and Narcoossee Road.

Apollo Beach Boulevard Extension/Flyover, Hillsborough County
Environmental scientist for the Kimley-Horn team designing the extension of Apollo Beach Boulevard from US 41 to Paseo al Mar Boulevard that will result in a four-lane facility, including the bridge over I-75 to the eastern limits of the conservation easement or approach tie-down. Extending Apollo Beach from US 41 to US 301 will serve as an alternative east/west connection ultimately reducing traffic demands on Big Bend Road. This work effort includes alignment and traffic studies; surveying; geotechnical exploration, testing, and analysis; preparing engineering reports with

Project Experience, cont.

right-of-way maps and environmental documentation incorporating roadway, stormwater detention, and wetland mitigation requirements; permitting requirements; and determination of right-of-way requirements.

Tallahassee Airport/Capital Circle Joint Use Drainage Planning, Leon County — Environmental scientist assisting with environmental resource permitting, species surveys, and environmental mitigation plans. Kimley-Horn is developing a unified, joint-use stormwater management plan that will address the drainage needs associated with the improvements planned for Capital Circle Southwest, future development on Airport property, and the improvements being considered for Springhill Road. This effort involves coordination with nearly a dozen stakeholders, along with the critical evaluation of drainage needs and opportunities in the area, while balancing the constraints associated with the adjacent properties.

SR A1A North Causeway PD&E Study, FDOT District Four — Environmental scientist. The SR A1A North Causeway Bridge is a movable bascule bridge constructed in 1963. It spans the Atlantic Intracoastal Waterway (ICWW) connecting the barrier island to the City of Fort Pierce. In March 2013 the bridge was inspected and deemed an "operational area of concern." The purpose of this PD&E Study is to evaluate bridge replacement alternatives to resolve the existing bridge's structurally deficient conditions and enhance regional mobility for the adjacent area. Environmental services include conducting boat surveys to identify which vessels require bridge openings and writing Wetlands Evaluation Report, Essential Fish Habitat Assessment, and Endangered Species Biological Assessment as part of the required NEPA documentation.

Cell Tower Site, Indian River County — Environmental scientist responsible for conducting Florida scrub-jay surveys and preparing technical memorandum summarizing results of the survey. This approximately 19.55-acre site currently has a cell tower developed on the south end and an access road in the middle of the site leading to the cell tower. Vegetation clearing is needed on the undeveloped parcel in order to facilitate the construction equipment, including a large crane, for construction on the existing cell tower. Based on Indian River County's request, Kimley-Horn is providing gopher tortoise and Florida scrub-jay surveys. These surveys are performed in accordance with Florida Fish and Wildlife Conservation Commission (FWC) guidelines.

Old Lake Wilson Road, Osceola County — Environmental scientist responsible for conducting Natural Resource Assessment (NRA) and sand skink surveys and report preparation summarizing survey results. Kimley-Horn is providing environmental and permitting services for this site in Osceola County. Tasks include preparing a Planned Development Amendment, field exploration, analysis, and report.

SR 5/US 1 Jupiter Bridge PD&E Study, FDOT District Four — Environmental scientist responsible for conducting listed species surveys (Johnson's seagrass), contamination survey, and writing the Wetlands Evaluation Report, Essential Fish Habitat Assessment, and Endangered Species Biological Assessment as part of the required NEPA documentation.

Matt Tebow, P.E.

Water Resources/Stormwater Management

Special Qualifications

- Water resources engineer with 11 years of utility engineering and project management experience
- Engineer Officer in the Army National Guard
- Software experience includes: BioWin, BioWin Controller, Visual Hydraulics SewerGEMS
- Responsible for creating wastewater process and hydraulic models including wastewater characterization, calibration, and analysis for process improvements, expansions, rehabilitation, and new infrastructure at wastewater treatment facilities.
- Experience providing pipeline design, hydraulic modeling, pump station design, directional bore calculations, design implementation of water/wastewater treatment plants, permitting, and construction observation services

Education and Training

- Master of Science, Civil Engineering, University of Florida, 2012
- Bachelor of Science, Civil Engineering, University of Florida, 2011
- Process Instrumentation and Control Certificate Course, University of Kansas, April 2014

Registrations and Certifications

- Professional Engineer in Florida #82414, January 11, 2017

Project Experience

BioWin Modeling of Existing Wastewater Treatment Process, City of Stuart
Created hydraulic and biological process models of the 4.0 MGD wastewater treatment plant. Conducted a detailed evaluation of the hydraulic and biological process performance. The evaluation included collection and analysis of plant operational data, as well as developing a biological process model using BioWin to evaluate the existing facilities. Provided process modeling summary and recommendations.

Wastewater Treatment Plant Process Evaluations, Wildwood — Created hydraulic and biological process models of the 3.55 MGD wastewater treatment plant and conducted a detailed evaluation of the hydraulic and biological process performance. The evaluation included collection and analysis of plant operational data, as well as developing a biological process model using BioWin and a hydraulic model using Visual Hydraulics to evaluate the existing facilities. Provided process modeling summary and recommendations.

Manatee County North County Regional Water Reclamation Facility (NCRWRF) Equalization Tank — Project engineer for an equalization tank project consisting of design, permitting, and construction services for a new 3.0-MG equalization tank and associated appurtenances. Preliminary design includes an evaluation of the various construction methods and equipment selection for the equalization tank, flow control, equalization pumping, odor control, and mixing. This task also includes biological and hydraulic modeling of the pretreatment and biological processes to determine if the addition of the 3.0-MG equalization tank can increase the overall treatment capacity. Major piping modifications are required to incorporate the equalization tank into the treatment scheme. Permitting activities include FDEP, Manatee County site plan, and building permitting. Kimley-Horn will provide part-time construction services to include shop drawing review, pay application review, responding to requests for information, contract closeout, and record drawings.

Biosolids Assessment and Recommendations, Waxahachie, TX — Created hydraulic and biological process models of the 8.0 MGD wastewater treatment plant and conducted a detailed evaluation and assessment of the hydraulic, biological, and biosolids processing performance. The evaluation included collection and analysis of plant operational data, as well as developing biological process models using BioWin to evaluate the capacity of the existing secondary and advanced process using alternative modes of operation. Provided a biosolids processing technology assessment and existing facility evaluations.

Clarifier and Mixed Liquor Transfer Channel Rehabilitation, West Palm Beach — Served as project engineer. Kimley-Horn was selected to prepare construction documents for the rehabilitation of the clarifiers and mixed liquor transfer channels at the 70.0 MGD East Central Regional Water Reclamation Facility (ECRWRF). Each of the clarifiers were emptied and given a complete structural and mechanical inspection, including a review by the original equipment manufacturer (OEM). The results of the inspections and the reports by the OEM were compiled and used to create a set of Construction Plans for the project.

Sterling Forest Wastewater Treatment Plant, New York, NY — Conducted process modeling for a 1.0 MGD 4-stage Bardenpho advanced WWTP process. Responsibilities include analyzing wastewater flow and characteristics, developing alternative aeration basin configurations with BioWin process modeling software, and preparing a preliminary design report for the advanced wastewater treatment system including membrane bioreactors, ultraviolet disinfection, centrifugal dewatering, and Class A fertilizer production using belt dryer technology.

Headworks Rehabilitation, City of Wildwood — Project engineer for the headworks rehabilitation at the City's WRF. Project involves replacing the aging mechanical bar screen with a 9.0 MGD PHF drum screen and structural rehabilitation of the channels, walkways, and stairways. Kimley-Horn evaluated different types of mechanical bar and drum screens. We also provided a structural evaluation of the elevated concrete structure and made recommendations on the repairs and improvements. In addition, Kimley-Horn prepared a preliminary design report, construction plans and specifications, FDEP permitting, and construction observation.

Dade City Wastewater Treatment Facility (WWTF) Phase 1B Rehabilitation, Dade City — Project engineer. The project involved providing professional consulting services for the rehabilitation and process modifications to the City's existing wastewater treatment facility (WWTF). Kimley-Horn's scope of services involved providing construction phase services and certifications, including: site inspections with plant operations staff to gain an understanding of the current plant configuration, and operational issues; review of construction plans and specifications; coordination with the FDEP SRF Department; water monitoring and reporting in compliance with the Davis-Bacon Act compliance monitoring requirements; visits to the site and construction observation; review of record drawings and final documentation; submission of FDEP permits.

Rio Vista Wastewater Treatment Facility (WWTF) Decommissioning, Dunnellon — Project engineer. Prepared plans and specifications to decommission the Rio Vista WWTF and site conversion to a master pumping station. The project included Florida Department of Environmental Protection (FDEP) small communities wastewater grant funding procurement, FDEP right-of-way acquisition, and existing wastewater collection system rehabilitation.

City of Lake Wales Wastewater Treatment Facility Rehabilitation/Expansion (aka Sam P. Robinson Reclaimed Water Treatment Plant0) (includes operations permit renewal), Lake Wales — Served as project engineer. Kimley-Horn was responsible for all design, construction document preparations, permitting, SRF funding assistance, bid administration, and construction administration for the rehabilitation and expansion of an existing 1.9-MGD wastewater treatment facility. Rehabilitation items included new headworks fine screening system, new oxidation ditch rotors with smart biological nutrient reduction system, replacement of clarifier mechanisms, conversion of existing traveling bridge sand filter to disk filter system, rehabilitation of existing aerobic digester, addition of a new aerobic digester, rehabilitation of existing electrical system, and rehabilitation/enhancement of the SCADA system. Work included a permitting treatment capacity expansion to 2.19 MGD. The project construction was completed on time and under

Wildwood General Engineering Services (includes CR 139 Corridor Utility Master Plan, Coleman WTP Repairs, and Water/Wastewater/Reclaimed Water Master Plan, WWTF Headworks Rehabilitation), Wildwood — Serving as engineer for the Kimley-Horn team providing general civil engineering and City Engineer consulting services for the City of Wildwood. Services include design of improvement plans for utility and roadway infrastructure, engineering inspection services, review of engineering plans and applications for development on behalf of the City, attendance at public hearings on behalf of the City, traffic planning services, public workshops, and GIS mapping services.

City of Wildwood CR 209 12-inch Force Main and Lift Station Construction, Wildwood — Project engineer. The City of Wildwood intends to construct a sanitary force main extension from the CR 209 lift station (LS) to the City's wastewater treatment facility (WWTF). The City will also make modifications to the CR 209 LS and redirect some of the flows currently received by the Charlotte LS to the CR 209 LS. The City intends to finance a portion of this project through the FDEP Clean Water State Revolving Fund (SRF) loan program.

Port Orange General Services Contract (Water, Wastewater, and Reclaimed Water Continuing Engineering Consultant) (aka Utilities Engineering Services Contract), Port Orange — Project engineer. Kimley-Horn is providing continuous general engineering consulting services to complete a wide range of projects for the Port Orange Utilities Department. Services include wastewater treatment plant evaluations, water main extensions, financial planning assistance, wastewater treatment plant modeling, and utility master planning.

Dunnellon Rio Vista Utility Acquisition (under Dunnellon Engineering Services contract), Dunnellon — Project engineer. Under the City of Dunnellon's Engineering Services contract, Kimley-Horn provided water and wastewater system evaluations, FDEP Small Disadvantaged Community Wastewater Grant (SDCWG) coordination, USDA grant coordination, utility system billing history reviews, and financial analysis assistance for the acquisition of a neighboring water and wastewater utility system acquisition. The project included decommissioning an existing wastewater treatment facility and installation of a new master lift station, along with water and wastewater system upgrades. The construction portion of this project was partially funded by an FDEP SDCWG grant and USDA rural development grants.

J. Casey Long, P.E.

Structural Design/Coastal/Marine Engineering

Special Qualifications

- Has provided structural and civil design aspects for seaport, industrial, commercial, military and educational facilities worldwide
- Projects include design of container/ cruise ship bulkheads, ship moorings, marina seawalls, paved container yard areas, mobile passenger walkways for cruise ship access, offshore saltwater pump station, and ship's camels
- He has also designed or consulted on additional projects such as complete building systems (such as warehouses, office buildings, public safety facilities, and cruise terminals), warehouse crane rails, retaining walls, dredging projects, port planning
- Extensive experience providing structural inspections, including waterfront/port structures, container yards, utility construction, roads, threshold structures, warehouse buildings, housing facilities, loading docks and wharves and piers

Education and Training

- Bachelor of Science, Civil Engineering, University of Florida, 1995
- Master of Engineering, Structural Engineering, University of Florida, 1996

Registrations and Certifications

- Professional Engineer in Florida, #56083
- NCEES Certification, #23162

Professional Affiliations

- Florida Engineering Society
- National Society of Professional Engineers (NSPE)

Project Experience

Casey worked on the following projects prior to joining Kimley-Horn

West Indian Company, Mooring Dolphin, Mooring Bollards and Pier Expansion and Bulkhead Replacement, St. Thomas, U.S. Virgin Islands — Project manager and structural engineer. Responsible for the coordination, management and overall design (EOR) of the Capital Improvements of the existing WICO docks in St. Thomas. Project improvements are estimated at $16 million. The project team's responsibilities included creation of a new outer mooring dolphin with fender, a 150-foot-long pier extension, two 72-inch mooring bollard monopiles, two new landside bollards, bollard replacements on the existing berths, repairs to the existing pier and 800 linear feet of new bulkhead allowing deepening of the existing inner berth. Project consulting consisted of construction document development, specifications, bidding services, bid evaluation/support and consultant services during construction. In addition to the Project Management role, he served as Structural Engineer of Record on the project for all aspects of the marine package with the responsibility of certifying the structural analysis and design of the structural elements.

Security Lighting Improvements, Port of Palm Beach, Riviera Beach — Project manager and structural engineer. Responsible for the management of this security lighting project developed to upgrade the northwest quadrant of the Port to meet modern lighting requirements. Project consisted of the design of multiple 100-foot high mast poles and foundations, as well as low mast poles by associated power distribution.

High Mast Lighting and Port Road Improvements, Port of Palm Beach, Riviera Beach — Project manager and civil/structural engineer. Responsible for the design of the grading, drainage and utility improvements for this 2.5-acre site in addition to designs of 100-ft. high mast pole foundations. Design included the conversion of this inefficient site into a flat container storage tarmac area with a maximum slope of 1%. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards.

Phase 2 and 3 Paving Improvements, Port of Palm Beach, Riviera Beach
Project manager and civil engineer. Responsible for the design of the grading, drainage and utility improvements to this 7.4-acre site at the Port of Palm Beach. Design required the conversion of the existing inefficient site into a flat container storage tarmac area with a maximum of 1%. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches and a 260-linear-foot trench grate/flume. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards.

Phase 4 Paving Improvements, Port of Palm Beach, Riviera Beach — Project manager and civil engineer. Responsible for the design of the grading, drainage and utility improvements to this 4.0-acre site at the Port of Palm Beach. Design required the conversion of the existing inefficient site into a flat container storage tarmac area with a maximum of 1%, as well as developing a detailed maintenance of traffic plan to maintain the Port's operations in full operation at all times. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards.

Phase 5 and 6 Paving Improvements, Port of Palm Beach, Riviera Beach
Project manager and civil engineer. Responsible for the design of the grading,

drainage and utility improvements to this 8.0-acre site at the Port of Palm Beach. Design required the conversion of this existing unpaved grassland into a container yard with a 1% maximum slope. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards.

Phase 7 and 8 Paving Improvements, Port of Palm Beach, Riviera Beach — Project manager and civil engineer. Responsible for the design of the grading, drainage and utility improvements to this 8.4-acre site at the Port of Palm Beach. Design required the conversion of this existing abandoned road and grassy area below an overpass into a container yard with a 1% maximum slope. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards. Project also involved major environment concerns and coordination to meet the delicate requirements of petroleum clean up.

Phase 10 Paving Improvements, Port of Palm Beach, Riviera Beach — Project manager and civil engineer. Responsible for the design of the grading, drainage and utility improvements to this 5.0-acre site at the Port of Palm Beach. Design required the conversion of this existing unpaved grassland and existing parking area into a container yard with a 1% maximum slope. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards.

North Slip No.1 Site Improvements, Port of Palm Beach, Riviera Beach — Project manager and civil engineer. Responsible for the design of the grading, drainage and utility improvements to this 8.0-acre site at the Port of Palm Beach. Design required the conversion of this existing parking lot into a container yard with a 1% maximum slope. Drainage system utilized existing outfalls into the Intracoastal in addition to new exfiltration trenches. Project was designed to meet the Florida Department of Environmental Protection Stormwater Standards. Project also addresses the relocation of all shore side power infrastructure to a centralized, less obstructive area.

Refrigeration Power Stations – Phase 1, Port of Palm Beach, Riviera Beach — Project manager. Responsible for the coordination of this project to install 108 refrigeration ("reefer") plugs to support the Port's growing refrigeration container market. Project included electrical engineering design, selective demolition of the existing smaller and inefficient reefer line, and site paving and grading. Design responsibilities included site work, paving and demolition.

North Wharf Bollard Addition, Port of Palm Beach, Riviera Beach — Project manager and structural engineer. Responsible for the structural design and detailing of this mooring bollard addition project. Project consisted of the design and detailing of a 30-ton mooring bollard to attach and connect an existing bulkhead wall to help optimize the Port's cruise tenants mooring needs.

Port Executive Plaza Overlay, Port of Palm Beach, Riviera Beach — Project manager and civil engineer. Responsible for the design and management of this 2.0-acre asphalt overlay project to improve an existing 20-year-old parking area. Project consisted of parking lot layout, overlay details, site demolition and striping.

Port of Miami, Cruise Terminal J Bulkhead Repair, Miami — Project manager. Responsible for the project management and coordination for this project which involves the re-construction of a 1500 linear feet bulkhead cap adjacent to Cruise Terminal J. The improvements include concrete cap replacement, new fendering, new upland paving, water box replacement and phasing/maintenance of traffic. Project consulting services consist of initial assessment of the wall condition above and below water, the preparation of the construction documents.

Port of Miami, South Side Bulkhead Assessment, Miami — Project manager. Responsible for the project management, senior technical support and coordination for this project which involved the evaluation of existing conditions on nearly 4500 LF of bulkhead, evaluation of past reports and assessments and the review of as-built drawings. Project consulting services consist of initial assessment of the wall condition and preparation of a summary report and recommendation of repairs needed.

Port of Miami, Bays 165 – 176 Assessment, Miami — Project manager. Responsible for the project management, senior technical support and coordination for this project which involved the evaluation of existing conditions on nearly 1500 LF of bulkhead, evaluation of past reports and assessments and the review of as-built drawings. Project consulting services also consist of underwater inspections, development of specifications for test pits and exploration of structural conditions underground, and preparation of a summary report and recommendation of repairs needed.

Port of Miami, Area 2, Seaboard Marina Bulkhead Expansion, Miami — Project manager. Responsible for the project management and coordination for this project which involved the construction of a 550-foot bulkhead to replace a rip-rap area at the Port of Miami for Seaboard Marine. The improvements include steel sheet pile bulkhead, fendering, paving, grading and drainage improvements; the addition of a water main extension, fire hydrants to support the bulkhead expansion and new fendering systems. Project consulting services consist of the preparation of the construction documents, bid evaluation / support and consultant services during construction.

Edward Grady

Construction Phase Services

Special Qualifications

- Construction services manager with more than 29 years of experience in land development and roadway construction
- Expertise in the fields of transportation, water and sanitary sewer transmission lines, stormwater, concrete construction, roadway and site development
- Proven ability to manage multiple active construction projects
- Performs other engineering tasks such as cost estimates, quantity take-offs, specifications, constructability reviews, and construction administration

Education and Training

- Bachelor of Science, Civil Engineering Technology, Thomas Edison State College, 2012

Project Experience

Federal Highway, Delray Beach — Member of the Kimley-Horn team that is providing post design services on this project for the City of Delray Beach. Responsibilities include shop drawing review, site visits, progress meetings, and coordination with agency responses.

Ballpark of the Palm Beaches, West Palm Beach — Kimley-Horn is currently providing civil engineering services for the development of the Ballpark of The Palm Beaches, a state-of-the-art two-team spring training facility in West Palm Beach, Florida. The 8,500-seat stadium will annually host the Houston Astros and the Washington Nationals during the Spring Training season. In addition to the new stadium, the 154-acre property will also accommodate 12 auxiliary major/minor league fields, five Palm Beach County multipurpose fields, and a 12.2-acre City of West Palm Beach park. The facility will be used year-round by Palm Beach County for sports tournaments and other events. Kimley-Horn's scope of work includes on-site civil engineering, environmental resource work, event traffic management planning, permitting, and construction phase services. Kimley-Horn is also directing subconsultants performing the off-site turn lane design, signal modifications, survey, and utility locations. The Ballpark of The Palm Beaches is expected to open Spring 2017.

Marcus Neuroscience Institute at Boca Raton Regional Hospital — Providing construction administration services. Kimley-Horn is providing engineering design services as a subconsultant to another firm. This 72,895-SF facility will house a 22-bed neuro intensive care and step-down unit.

Boynton Beach Gateway Enhancements - Welcome Signage — Provided construction observation services. Kimley-Horn designed two "Welcome to Boynton Beach" signs. One sign is located at the north city limits along Federal Highway (just west of Ocean Inlet Drive) and another sign at the south city limits in the median of Federal Highway (just north of Gulfstream Blvd). These beautification and general improvements are part of Boynton Beach CRA's overall plan to improve the City's aesthetic and provide enhanced gateways into the community. The signs were installed in January 2016.

Franklin Academy, Boynton Beach — Team member. Franklin Academy is a proposed 1,300-student charter school proposed to be located along Military Trail, west of Boynton Beach. Kimley-Horn provided transportation planning services prior to County Commission approval of the site. Kimley-Horn has also provided signal design services for a new mast-arm traffic signal at Minor Road and Military Trail, as well as turn-lane design for a new turn-lane on Military Trail, and roadway design plans for a rebuild of Old Military Trail adjacent to the site. Our team coordinated closely with Palm Beach County through the design process, and provided construction phase services throughout the construction of the project. Design and construction of the improvements were required within an aggressive 10-month schedule.

Jupiter Medical Center Expansion (includes Bed Tower and Drainage Improvements) — Team member providing construction phase services. The Jupiter Medical Center expansion project consists of a three-story, 99,870-square-foot addition and renovation to the existing facility. New construction includes a lobby, executive offices, and outpatient functions and food services areas; the expansion includes 30 ortho/neuro patient rooms and a rehabilitation gymnasium. As a subconsultant to another firm, Kimley-Horn is providing civil engineering services for a new 47,000-square-foot bed tower and 9,000 square feet of meeting spaces. Our team is responsible for site planning, design, permitting, and construction phase services. The scope of work includes campus landscape modifications, significant drainage improvements, and permitting through the Town of Jupiter.

Mandel Jewish Community Center, Palm Beach Gardens — Team member providing construction administration/inspection services. Kimley-Horn is providing civil engineering services for this proposed facility on a 15-acre site on Hood Road in Palm Beach Gardens. The 56,000-square-foot, state-of-the-art facility will feature an early childhood learning center and summer day camp, a pool and aquatics center, sports fields, reception hall, indoor and outdoor playgrounds, and class space. Completion of construction is anticipated by summer of 2014.

Professional Registration:
State of Florida
PSM License #LS4290

Years of Experience:
39 Years

Education:
Associate of Science
Art Institute of Ft. Lauderdale

Land Surveying Program
Palm Beach Junior College

Memberships Past & Present:
Florida Surveying & Mapping Society - Chapter Member
Broward Chapter Secretary Treasurer, and Vice President

National Society of Professional Surveyors - Member

OVERVIEW

Ms. West has provided land surveying services in the South Florida region for 39 years. As a Professional Surveyor and Mapper project manager, she has extensive experience in public and private projects which include right-of-way, construction, boundary, topographic, ALTA, control, and as-built surveys, subdivision platting, and legal descriptions. She is proficient in survey-related computer technologies and the supervision of a wide range of projects. Her management experience includes client relations, field crew supervision, and project quality control.

PROJECT EXPERIENCE

Atlantic Boulevard Intersections
City of Delray Beach, Florida

This project consisted of surveying the intersections of Atlantic Boulevard at Venetian Street, Gleason Street, and State Road A1A (Ocean Boulevard) for pedestrian access redesign. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways with a focus on the pedestrian walkways and ramps. Ms. West was the managing surveyor and quality control manager for this project.

Swinton Boulevard and SE/SW 1st Street Intersection
City of Delray Beach, Florida

This project consisted of surveying the intersection of Swinton Boulevard at SE/SW 1st Street for signal design services. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways including the overhead utilities and signal wires, signal poles, controllers, and pull boxes. Ms. West was the managing surveyor and quality control manager for this project.

Delray Beach Water Mains
City of Delray Beach, Florida

This project consisted of surveying five streets for water main design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways including sanitary and drainage structures, overhead utilities, signal wires, signal poles, controllers, and pull boxes. Ms. West was the managing surveyor and quality control manager for this project.

Delray Beach CRA Sidewalks FY 16

City of Delray Beach, Florida

This project consisted of surveying four areas of streets totaling more than 7,000 linear feet for walkway design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways. Ms. West was the managing surveyor and quality control manager for this project.

Lyons Road from Clint Moore Road to Atlantic Avenue

Palm Beach County, Florida

This project consisted of surveying nearly four miles within the Lyons Road Right of Way from south of Clint Moore Road to north of Atlantic Avenue for roadway widening design. The survey scope included title search review, right-of-way and plat research, establishment of baselines, horizontal and vertical control, along with field crew supervision and direction for the locations of the existing improvements within the right of way. Ms. West was managing surveyor and quality control manager for this project.

Intersection Improvements Annual Services

Palm Beach County, Florida

This project is for surveying of county-wide intersections for improvements design. The survey at the intersection of Military Trail and SW 18th Avenue, Boca Raton was the first area completed. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways. Surveys of five additional intersections have been completed to date. Ms. West was the managing surveyor and quality control manager for this project.

Flavor Pict Road from U.S. 441 to Lyons Road

Palm Beach County, Florida

This project consisted of surveying over one mile of undeveloped rural land between Lyons Road and U.S. 441 and portions of Lyons Road and U.S. 441 for roadway design. The survey scope included title search review, right of way and plat research, establishment of baselines, horizontal and vertical control sheets, along with field crew supervision and direction for the locations of the existing improvements within the right of ways Ms. West was managing surveyor and quality control manger for this project.

6th Avenue South Over Lake Osbourne Drive Bridge Replacement

City of Lake Worth, Florida

HSQ Group, Inc. provided surveying services for an Alignment and Bridge Alternative Study for a bridge replacement at this location. The survey included 9,900 feet of existing roadway data along 6th Avenue South from just west of Interstate 95 to Congress Avenue, together with canal cross sections and bridge details. The services provided included research of right-of-way records, preparation of a base map, establishment of horizontal and vertical control, obtaining topographic and existing improvements data, detailing 35 existing drainage structures, obtaining cross sections of LWDD canal and the Lake Osbourne channel, and preparation of cad files and DTM's. Ms. West was managing surveyor and quality control manager for this project.

Benoist Farms Road

Palm Beach County, Florida

HSQ Group, Inc. provided surveying services for Benoist Farms Road. The survey included 1.2 miles of existing roadway data along Benoist Farms Road, together with canal cross sections. The services provided included research of right-of-way records, preparation of a base map, establishment of horizontal and vertical control, obtaining topographic and existing improvements data, detailing existing drainage structures, obtaining cross sections of LWDD canal, and preparation of cad files and DTM's. Ms. West was managing surveyor and quality control manager for this project.

Professional Registration:
State of Florida
PSM License #LS5118

Years of Experience:
34 Years

Education:
Associate of Science Land Surveying
Palm Beach Community College

Memberships Past & Present:
Florida Surveying & Mapping Society - Chapter Member
Broward Chapter Member

National Society of Professional Surveyors - Member

OVERVIEW

Mr. Laak has 34 years of experience (24 years as a registered Surveyor and Mapper) in all phases of land surveying including boundary, hydrographic, route surveys, topographic, and as-built surveys, legal descriptions, record plats and, boundary descriptions for annexations for municipalities. Mr. Laak's current position as Project Surveyor within the Surveying and Mapping Department at HSQ Group puts him in the role of the being personally involved with the assigned projects and the client's individual representatives. His personal approach provides for a clear understanding of his client's needs and the most suitable deliverables and proper service.

PROJECT EXPERIENCE

Atlantic Boulevard Intersections
City of Delray Beach, Florida

This project consisted of surveying the intersections of Atlantic Boulevard at Venetian Street, Gleason Street, and State Road A1A (Ocean Boulevard) for pedestrian access redesign. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways with a focus on the pedestrian walkways and ramps. Mr. Laak was the surveyor and project manager for this project.

Delray Beach Water Mains
City of Delray Beach, Florida

This project consisted of surveying five streets for water main design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways including sanitary and drainage structures, overhead utilities, signal wires, signal poles, controllers, and pull boxes. Ms. West was the managing surveyor and quality control manager for this project.

Delray Beach CRA Sidewalks FY 16
City of Delray Beach, Florida

This project consisted of surveying four areas of streets totaling more than 7,000 linear feet for walkway design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways. Mr. Laak was the surveyor and project manager for this project.

Lyons Road from Clint Moore Road to Atlantic Avenue
Palm Beach County, Florida

This project consisted of surveying nearly four miles within the Lyons Road Right of Way from south of Clint Moore Road to north of Atlantic Avenue for roadway widening design. The survey scope included title search review, right-of-way and plat research, establishment of baselines, horizontal and vertical control, along with field crew supervision and direction for the locations of the existing improvements within the right of way. Mr. Laak was the surveyor and project manager for this project.

SW 3rd Street/US 441 & Sandalfoot Blvd/U.S. 441
Palm Beach County, Florida

The surveys at these two locations were prepared for Palm beach County for the realignment of the intersections and reconstruction of the three bridges over the Lake Worth Drainage District Canal including redesign of two signalized intersections. The project consisted of right-of-way research, establish NAD state plane horizontal and vertical control, locations of existing improvements within the right of ways including all existing signal poles, controllers, pull boxes, and signal heads, and LWDD canal cross-sections. Mr. Laak was the Project Surveyor for this project.

Intersection Improvements Annual Services
Palm Beach County, Florida

This project is for surveying of county-wide intersections for improvements design. The survey at the intersection of Military Trail and SW 18th Avenue, Boca Raton was the first area completed, with 3 additional intersections now completed. The survey scope included right-of-way and plat research, establishment of NAD state plane horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways. Mr. Laak is the Project Surveyor for this project.

Flavor Pict Road from U.S. 441 to Lyons Road
Palm Beach County, Florida

This project consisted of surveying over one mile of undeveloped rural land between Lyons Road and U.S. 441 and portions of Lyons Road and U.S. 441 for roadway design. The survey scope included title search review, right of way and plat research, establishment of baselines and NAD state plane horizontal and vertical control sheets, preparation of 3D models, along with field crew supervision and direction for the locations of the existing improvements within the right of ways. Mr. Laak was the Project Surveyor for this project.

Florida Mango Road @ LWDD L-5 and L-6 Canal Bridges
Palm Beach County, Florida

The survey at this location was prepared for Palm Beach County for the reconstruction of the Florida Mango Road Bridge over the Lake Worth Drainage District L-5 and L-6 Canals. The project consisted of right-of-way research, establishing NAD state plane horizontal and vertical control, locations of existing above-ground improvements including utilities, invert data for below-ground structures, locations of trees, preparation of 3D models, and preparation of LWDD canal cross-sections for the original scope area and a subsequent scope area. Mr. Laak was the Project Surveyor for this project.

6th Avenue South Over Lake Osbourne Drive Bridge Replacement
City of Lake Worth, Florida

HSQ Group, Inc. provided surveying services for an Alignment and Bridge Alternative Study for a bridge replacement at this location. The survey included 9,900 feet of existing roadway data along 6th Avenue South from just west of Interstate 95 to Congress Avenue, together with canal cross sections and bridge details. The services provided included research of right-of-way records, preparation of a base map, establishment of horizontal and vertical control, obtaining topographic and existing improvements data, detailing 35 existing drainage structures, obtaining cross sections of LWDD canal and the Lake Osbourne channel, and preparation of cad files and DTM's. Mr. Laak was the Project Surveyor for this project.

PROFESSIONAL EXPERIENCE

Mr. Raj Krishnasamy, P.E., President and Principal Engineer of Tierra South Florida, Inc. (TSF), is a Florida State registered Geotechnical Engineer with over 30 years of experience (including 15 years with TSF). Mr. Krishnasamy oversees the geotechnical engineering, construction materials testing, and inspection services operations. His experience consists of successfully completing over 3,000 public and private projects, highlighted by 100+ roadway projects in Palm Beach County and design-build projects totaling over $2 billion in construction costs. He serves as Project Manager for continuing contracts with over 20 Florida public agencies. He has a history of repeatedly retaining those contracts through successful, cost-effective and prompt execution of each task order. Mr. Krishnasamy's daily involvement with the in-house and field operations of the construction and geotechnical services departments provides him the "hands-on" experience and knowledge of current construction codes and construction practices throughout the State of Florida. Mr. Krishnasamy and his highly experienced team focus on providing the client with a consistently accurate, cost-effective quality product that is delivered on time and within budget.

DELRAY BEACH PROJECT EXPERIENCE

NE 2nd Avenue between NW 8th Street and NE 13th Street, Delray Beach, Florida. Tierra South Florida (TSF), Inc. performed a pavement evaluation for NE 2nd Avenue between NW 8th Street and NE 13th Street in the city of Delray Beach. The project involved a subsurface exploration for pavement roadway improvements on approximately 1,500 feet from NW 8th Street to NW 13th Street. TSF provided a report containing the data collected during our initial site reconnaissance, pavement information from the asphalt cores and recommendation regarding future reconstruction at the referenced roadway.

Mast Arms at Linton Boulevard and South Federal Highway, Delray Beach, Florida. TSF provided geotechnical engineering services for the mast arm installation project at the intersection of Linton Boulevard and South Federal Highway in Palm Beach County, Florida. The study was performed to obtain information on the existing subsurface conditions to assist in the design and preparation of construction plans for the proposed improvements. Field work included Standard Penetration Test (SPT) borings and exfiltration tests. Provided recommendations regarding foundation design and drilled shaft construction.

Mast Arms at West Atlantic Avenue and Sims Road, Delray Beach, Florida. TSF provided geotechnical engineering services for the intersection improvement project and the proposed signalization structures at the intersection of West Atlantic Avenue and Sims Road, Delray Beach. The study was performed to obtain information on the existing subsurface conditions at the proposed project site to assist in the design and preparation of construction plans for the proposed improvements. Field work included Standard Penetration Test (SPT) borings. TSF provided recommendations regarding foundation design and drilled shaft construction.

West Atlantic Avenue and Florida's Turnpike Intersection Improvements, Delray Bach, Florida. TSF performed a geotechnical engineering study for the roadway improvement project which included the replacement of the mast arm signalization structures at the NE and NW corners of Turnpike NB on-ramp and Atlantic Avenue, bridge widening on the north side of an existing bridge, and a right-turn lane addition on the westbound of Atlantic Ave. Provided geotechnical recommendations regarding soil suitability, permanent cut/fill slopes, excavations, soil parameters for mast arm foundation design, drilled shaft construction, bridge foundation design, concrete pile installation, and test pile program. Performed axial pile capacity analysis using FB-DEEP and provided soil parameters to be utilized by the design team for FB-MultiPier (lateral stability) analysis and for back wall design calculations at end bents.

RAJ KRISHNASAMY, P.E.

PRESIDENT, PRINCIPAL ENGINEER
30 Years of Experience

EDUCATION

MS in Geotechnical Engineering, University of Memphis 1995

BS in Civil Engineering, Christian Brothers University 1987

Diploma/1984/Electronic Engineering, Malaysian Air Force Institute

PROFESSIONAL ORGANIZATION AND REGISTRATION

Professional Engineer: Florida, 53567 (Year Received: 1994)

Certified OSHA Supervisor

Certified Environmental Consultant

WORK LOCATION

West Palm Beach, FL

35% Availability

SFWMD Stilling Well Platforms and Control Buildings - S-40 and S-41, Delray Beach, Florida. TSF performed a geotechnical exploration for the proposed Stilling Well Platforms and Control Buildings at SFWMD Control Structures S-40 and S-41 in Delray Beach and Boynton Beach, Florida. The proposed construction includes a new Control Building and two Stilling Well Platforms (one on upstream and one on downstream) at each Control Structure location. The purpose of the study was to explore the subsurface conditions at the Control Structure sites to enable an evaluation of acceptable foundation systems for the proposed construction. Field work included Standard Penetration Test (SPT) borings. Provided geotechnical recommendations for foundation design, general site development, and comments regarding factors that may impact construction and performance of the proposed construction.

Palm Beach County WUD SROC Storage Pavilions, Delray Beach, Florida. Mr. Krishnasamy was the Principal in Charge for the geotechnical engineering, construction materials testing and resident inspection services for the PBC Water Utilities Dept. Southern Region Operations Center (SROC) Storage Pavilions located at 13026 Jog Road in Delray Beach, Florida. The construction includes two (2) pre-engineered buildings, and masonry containment structure with 8' high walls. The pavilion structure has a footprint area of approx. 13,000 square feet, each. Provided geotechnical recommendations for foundation design, general site development and comments regarding factors that may impact construction and performance of the proposed construction. TSF provided construction materials testing and resident inspection services during construction. Minor site improvements were also included.

CR-811/Dixie Highway Fly-Over, Broward & Palm Beach Counties, Florida Performed a geotechnical engineering study for the new overpass. Provided a geotechnical report with analysis and recommendations for bridge foundation, MSE Wall and roadway soil survey. Prepared TSP for surcharge, settlement monitoring and vibration monitoring. Geotechnical recommendations also included a discussion of soil suitability, groundwater, and other site/construction considerations. Prior to construction, performed baseline vibration monitoring for the railroad track with both a loaded train and empty train. During construction monitored the vibration due to the construction activities and found that vibration due to construction did not exceed the baseline. Provided pile driving inspection and foundation certification as well as pile load tests. Also provided Quality Control during construction

ADDITIONAL ABBREVIATED DELRAY BEACH PROJECT EXPERIENCE

- NE 2nd Avenue Pavement Evaluation from George Bush Blvd to NE 13th Street, Delray Beach, Florida
- Acme Dairy Road Turn Lane Extension at Sunset Palms School, Delray Beach, Florida
- Atlantic Commons, Delray Beach, Florida
- Lewis Cove Road Pavement Analysis, Delray Beach, Florida
- The Bridges Pavement Coring, Delray Beach, Florida
- NE 2nd Avenue Seacrest Beautification Project, Delray Beach, Florida
- NE 2nd Ave from NE 13th Street to NW 22nd Street, Delray Beach, Florida
- Delray Beach Marina, Delray Beach, Florida
- Atlantic High School Bleacher Replacement, Delray Beach, Florida
- Abbey Delray – Addition, Delray Beach, Florida
- Federal Highway Beautification, Delray Beach, Florida
- Force Main along Military Trail, Delray Beach, Florida
- Atlantic Avenue Retaining Wall, Delray Beach, Florida

FRANCOIS THOMAS, P.E., S.I.

PRINCIPAL ENGINEER/ SPECIAL INSPECTOR
24 Years of Experience

PROFESSIONAL EXPERIENCE

Mr. Thomas is a Florida-Registered Professional Engineer and Special Inspector with more than 24 years of experience in geotechnical engineering, construction materials testing, and inspection services. He serves as Principal Engineer, supervising the laboratory services, construction materials testing and inspections. He has extensive experience in deep and shallow foundation systems, soil stabilization methods, grouting, and pavement sections evaluation. He has been involved in construction monitoring and supervision for private and government facilities, including construction/foundation installation for port, airport, commercial, municipal, healthcare, retail and school facilities. He has monitored the construction of numerous civil and structural designs involving earthwork, concrete, masonry and asphalt operations. Having completed quality control testing for numerous projects for FDOT, Mr. Thomas is extensively familiar with the FDOT's processes and procedures.

DELRAY BEACH PROJECT EXPERIENCE

Mast Arms at West Atlantic Avenue and Sims Road, Delray Beach, Florida. Mr. Thomas was the Principal Engineer for the geotechnical engineering study for the intersection improvement project and the proposed signalization structures at the intersection of West Atlantic Avenue and Sims Road, Delray Beach. The study was performed to obtain information on the existing subsurface conditions at the proposed project site to assist in the design and preparation of construction plans for the proposed improvements. Field work included Standard Penetration Test (SPT) borings. Provided recommendations regarding foundation design and drilled shaft construction.

NE 2nd Avenue between NW 8th Street and NE 13th Street, Delray Beach, Florida. Performed a pavement evaluation for NE 2nd Avenue between NW 8th Street and NE 13th Street in the city of Delray Beach. The project involved a subsurface exploration for pavement roadway improvements on approximately 1,500 feet from NW 8th Street to NW 13th Street. TSF provided a report containing the data collected during our initial site reconnaissance, pavement information from the asphalt cores and recommendation regarding future reconstruction at the referenced roadway.

Palm Beach County WUD SROC Storage Pavilions, Delray Beach, Florida Mr. Thomas was the Principal Engineer/Special Inspector for the geotechnical engineering, construction materials testing and resident inspection services for the PBC Water Utilities Dept. Southern Region Operations Center (SROC) Storage Pavilions located at 13026 Jog Road in Delray Beach, Florida. The construction includes two (2) pre-engineered buildings, and masonry containment structure with 8' high walls. The pavilion structure has a footprint area of approx. 13,000 square feet, each. Provided geotechnical recommendations for foundation design, general site development and comments regarding factors that may impact construction and performance of the proposed construction. TSF provided construction materials testing and resident inspection services during construction. Minor site improvements were also included. Mr. Thomas provided report review, engineering support, and final compliance letters to building authorities.

Federal Highway Beautification, Delray Beach, Florida. Provided Verification Testing support services during construction.

Force Main along Military Trail, Delray Beach, Florida. Mr. Thomas was the engineer for the geotechnical engineering study for the new force main along Military Trail in Delray Beach, Florida. Provided geotechnical recommendations regarding subsurface/groundwater conditions, excavations, dewatering, trench backfill, and other construction considerations.

EDUCATION

MS in Geotechnical Engineering,
University of Alabama, 1993

BS in Civil Engineering,
University of Alabama, 1991

PROFESSIONAL ORGANIZATION AND REGISTRATION

Professional Engineer: Florida, 56381

Special Inspector 7021399

Certified Masonry Inspector

Certified Troxler Operator

Radiation Safety Officer

CR-811/Dixie Highway Fly-Over, Broward & Palm Beach Counties, Florida Performed a geotechnical engineering study for the new overpass. Provided a geotechnical report with analysis and recommendations for bridge foundation, MSE Wall and roadway soil survey. Prepared TSP for surcharge, settlement monitoring and vibration monitoring. Geotechnical recommendations also included a discussion of soil suitability, groundwater, and other site/construction considerations. Prior to construction, performed baseline vibration monitoring for the railroad track with both a loaded train and empty train. During construction monitored the vibration due to the construction activities and found that vibration due to construction did not exceed the baseline. Provided pile driving inspection and foundation certification as well as pile load tests. Also provided Quality Control during construction.

PBSO W. Atlantic Substation, Delray Beach, Florida. TSF provided Construction Material Testing services for the renovations to the existing PBSO facility located at 7777 W. Atlantic Blvd., in Delray Beach, Florida. Sampling and Laboratory Testing included Modified Proctor, on foundation, and slab soils; and compressive strength concrete cylinders. Field work included In-Place-Density testing on foundation soils and slab; slump and temperature testing on concrete; Mold compressive strength test cylinders and welding inspections on a new metal structure.

ADDITIONAL ABBREVIATED DELRAY BEACH PROJECT EXPERIENCE

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- NE 2nd Avenue Seacrest Beautification Project, Delray Beach, Florida
- NE 2nd Ave from NE 13th Street to NW 22nd Street, Delray Beach, Florida
- Delray Beach Marina, Delray Beach, Florida
- SFWMD Stilling Well Platforms and Control Buildings - S-40 and S-41, Delray Beach, Florida
- Atlantic High School Bleacher Replacement, Delray Beach, Florida
- Abbey Delray – Addition, Delray Beach, Florida
- Federal Highway Beautification, Delray Beach, Florida
- Force Main along Military Trail, Delray Beach, Florida
- Atlantic Avenue Retaining Wall, Delray Beach, Florida
- Noble Point Condominium-Asphalt Lab Testing, Delray Beach, Florida
- Legends Way Roadway Repair, Delray Beach, Florida
- Gleneagles Maintenance Parking Lot, Delray Beach, Florida
- Wawa - W. Atlantic Avenue and US-441, Delray Beach, Florida
- PBC Palm Tran Expansion-Congress Avenue, Delray Beach, Florida
- Seacrest Boulevard Pavement Cores, Delray Beach, Florida
- Proton International, Delray Beach, Florida
- Senaca, Delray Beach, Florida
- Villaggio Reserve-Coring, Delray Beach, Florida

B. Approach to Project Management — For All Requested Disciplines

We are a growing, local multi-disciplined firm with an office in the heart of Delray Beach on Congress Avenue with 26 employees—including several City residents. Our project manager, Marwan Mufleh, P.E., served on the City's Congress Avenue Task Force along with City staff, including the City Manager, and other volunteers.

We continually evaluate our workload against our resources in South Florida, striving to ensure the necessary personnel are available to help us provide you with the level of service you have come to expect from the Kimley-Horn team. Our firm follows a philosophy of working proactively with our clients to successfully complete our projects on time and within budget. **Marwan Mufleh, P.E.,** will manage our team, including our subconsultants, and has the authority to commit the resources needed to successfully complete your projects. He has demonstrated this successful approach during his teams' services to you over the past decade. He will be assisted by **Fannie Howard, P.E.,** who is currently providing the City with utility design/water resources services and completed the City's 2015 Water Supply Update.

Our approach to engaging City staff is based on an understanding that we are one team with the same mission, to deliver a successful project. We will strive to assist City staff succeed in their jobs because their success translates into our success. With that philosophy, we see our role as a trusted advisor to our clients. This means not being satisfied of only fulfilling our scope of services but to draw from our extensive experience to go above and beyond to ensure our clients are fully aware of possible risks, which may arise from different sources. It also means taking the extra step or doing the extra task that will make it easier on our clients to move forward even if the task is not our responsibility. We have stepped up in the past to cover for our clients' project managers who took extended vacations or sick leaves. We have also used our marketing, graphics and English major staff resources to develop documents for our clients' signatures that helped them convey critical messages. For example, we prepared the Federal Highway road diet project brochure to educate City residents on the project and deflect some of the unnecessary inquiries to staff.

We see our role as a trusted advisor to our clients.

We will represent the City as needed with other agencies. With our long-established relationships, we have negotiated with permitting and funding agencies including counties and FDOT on behalf of our clients. We have also managed conflict resolutions with utility agencies to protect the interests of our clients. In summary our approach keeps City staff informed without burdening them.

Communication. Our project manager, **Marwan Mufleh, P.E.,** will be your main point of contact for administrative and technical issues. He is fully responsible for our staff and subconsultants. As deputy project manager, **Fannie Howard, P.E.,** is designated as backup for Marwan if he is not available. The City will always have a way to speak with someone who is knowledgeable about the projects assigned to us. Other task leaders will provide information as requested.

Marwan and Fannie will be accessible via office and mobile phone, mobile e-mail and text. The City will always be able to communicate with us on any matter. We will make sure to respond to all inquiries within the same day and immediately for more urgent matters.

We will tailor the communication style to what is preferred by City staff. We will conduct in person meetings with City / CRA staff for major milestones on as requested by the Client. This includes project kick off, design approach, alternative selection, project phase reviews, prior to major submittals or stakeholder meetings to review draft proposed presentations and graphics.

We will prepare meeting agendas, minutes and action items and provide draft copies to City staff for approval. We will facilitate discussions among City staff and different City departments to move each project forward. We will also attend and prepare presentations for City Commission, CRA Board, or civic associations as needed.

Proactive communication and collaboration. It is part of our management role to proactively communicate advance notice of risk items that could impact project schedule or budget and present you with contingencies and alternatives to keep project on track.

Communication of budget and schedules. We will prepare a project schedule for City approval and an opinion of probable construction cost estimate for each phase of the project. We also will provide regular progress reports and tailor frequency of reporting to the City staff needs to enable them to communicate to upper management. Progress reports will identify past and planned progress as well as pending items and the party responsible for it. Major issues affecting schedule or budget will also be communicated verbally.

Approach to the Planning and Design of All City Projects

Our project management approach addresses project needs, creates phased goals, establishes milestones, creates clear measurable steps and progress, and is geared toward your success. Following is a summary of our Project Management approach, the benefits of our Work Plan approach, the importance of High Level Communication, how Value Engineering is a key factor in project success, a description of the Project Phases, our focus on schedule and budget control, workload and availability, and how Kimley-Horn will implement our Quality Assurance/Quality Control program for the City of Delray Beach. ***Our entire approach to project management is characterized by the following philosophies and policies, which are ingrained in the Kimley-Horn culture:***

- We will conduct a risk assessment of each project with City staff to identify potential factors that can impact budget and schedule and implement contingency plans to mitigate them. These may be permitting issues, easement or right of way issues, private encroachments in the right of way, etc.
- We will not only control and manage the project schedule, we will anticipate problems, creatively develop solutions, and implement a set of actions before problems arise.
- We will follow up on action items to ensure that planned actions are executed by a single responsible person. There will be no misunderstanding as to who was or is responsible.
- Our project management plan will promote efficiency, clarify communication protocols, provide direction, avoid misunderstandings, and govern routine action.
- Our project management plan will clearly identify, budget, and plan for effective quality control and independent reviews, and we will produce a result that exceeds contractual expectations.
- We will execute random inquiries into schedule adherence, work performance, quality performance, and resource allocations to determine compliance with planned project performance. We will identify anomalies and take instant corrective actions as needed.
- Our task managers will be in control of all projects they are assigned. In concert with Marwan and Fannie, they will have the authority to allocate Kimley-Horn's personnel resources and correct problems.
- We will view the project from your perspective, examine issues in a strategic context, and provide you with tactical solutions.
- We will work to resolve conflicts when they arise and provide you with technical and administrative solutions.
- We are responsible for our subconsultants and will manage them to meet project goals.

Kimley-Horn's management approach is team-oriented, no-nonsense, results-oriented, and saturated with top quality people who routinely produce superior results.

Given the realities of complex technology, challenges of creative design, impacts of environmental permitting, and the critical importance of cost management, effective project management is essential to the production of quality work and successful projects completed on schedule and within budget. To serve as an effective project manager, it is necessary to understand the project requirements and develop the best project team to maximize personnel expertise and experience. When the proper team is assembled for any given project, it is easier to anticipate major or minor problems before they occur. In short, Kimley-Horn's management approach is team-oriented, no-nonsense, results-oriented, and saturated with top quality people who routinely produce superior results.

Detailed Work Plan

Kimley-Horn project managers develop very detailed work plans based on the three-legged stool of **quality, schedule and budget.** The plan includes specific task items for the duration of all projects with associated team members' responsibilities and corresponding time. The work plan defines who, what, when, where, and how for all project tasks. This level of detail requires the project manager and the team members to think the project through and develop a plan that they are then responsible for implementing. ***Our work plan process will help ensure the correct team members are selected for the work and minimizes problems through early detection, experience, and expertise.***

High Level of Communication

In addition to assembling the right team, the project manager must communicate with the entire team to be aware of the project status, adjust any work plan issues if they occur, and keep the client informed at all times. This level of communication is key to a successful project and an effective method for identifying any potential problems before they become serious. Early detection followed by immediate action is critical. If a problem does develop, the best approach is to research the issue to determine the severity of the problem, formulate a plan to address the issue with the appropriate team members, and then immediately present the client with the best resolution—one that is supported by clear and concise documentation so that if direction is required by the client, the necessary facts are available for an informed decision.

Value Engineering

Kimley-Horn has a long history of achieving successful project completion through a combination of effective project management and technical expertise. We know that when you select an engineering consultant, you are really choosing people who offer you technical expertise, extensive hands-on experience with similar projects, and a demonstrated record of quality and responsiveness that will make your project a success. We have carefully selected a core team of experienced professionals to provide a high level of responsiveness to the City of Delray Beach, both in terms of exceptional local experience and support, and extensive technical experience in the disciplines you require.

With that expertise in place, the Kimley-Horn team has a philosophy of constant value engineering by focusing on better decisions, better information, better analysis, cost reductions, increased productivity, and accurate deliverables throughout all project steps. Value engineering is a key factor for developing successful projects that transition from study to design, and from design to construction. The challenges associated with each project task are solved creatively and effectively. Each step is reviewed by the most qualified professional to assure the highest level of value to the City of Delray Beach.

Value engineering is a key factor for developing successful projects that transition from study to design, and from design to construction.

Project Phases

The following project sequence demonstrates the key components that will be incorporated into our project approach for the City. We have developed a sample design project sequence that illustrates critical tasks and milestones. In general, there are three phases to successfully complete any project in a timely fashion with a focus on cost control.

- Preliminary Design Phase
- Final Design Phase and Permitting
- Construction Phase (if applicable)

1. Preliminary Design Phase

It is during this phase that the problem is clearly defined, improvement objectives are set, and a feasible solution is developed. Our team will collect the data necessary to analyze the situation presented. A thorough analysis will then be performed and alternatives evaluated. Evaluation will include comparison of the degree to which each alternative meets the objective, cost analysis, permittability, and constructability.

Initial discussions with permitting agencies are critical at this time. If requested by the City, the public can also be informed of the proposed project and the preferred solution. Cost implications and potential funding must also be considered during this phase. Milestones in the Preliminary Design Phase include:

- A kick-off meeting to set project objectives, scope, schedule, and team communication.
- Verification of survey in the field to confirm field conditions, encroachments, conflicts, potential for easements, etc.
- Preparation of a design criteria memorandum for City review and approval.
- A review of analytical results for the existing conditions to ensure clear understanding of the problem and to begin developing alternatives. This may include traffic issues, geometric design, utility impacts, maintenance of traffic during construction, drainage issues and pavement design.
- When appropriate, a public meeting can be scheduled to present the results of the analysis, the alternative solutions, funding opportunities, and to obtain input.

Scheduling milestone reviews with City staff will be one means by which the Kimley-Horn team will track and monitor project progress. Deliverables in the Preliminary Design Phase include plan review and data compilation in a manner acceptable to the City, an analysis in an agreed upon format, preliminary permitting coordination, and a cost analysis and reconfigurations for moving forward.

2. Final Design Phase and Permitting

At this point, the proposed design upgrades or modifications have been selected. The Kimley-Horn team will prepare complete construction documents suitable for competitive bidding. Construction documents can be provided at various levels of design completion such as 30%, 60%, 90%, and final or as requested by the City. Probable construction costs will be updated as the project details are developed. Pre-application meetings will be held with review agencies such as the City of Delray Beach, South Florida Water Management District, and other agencies as necessary, and permit applications will be prepared and submitted. In addition, access plans for adjacent properties and maintenance of traffic issues will be developed. Milestones during the Final Design Phase include:

- A kick-off meeting to authorize the start of final design, confirmation of project scope, objectives, and schedule
- Design reviews at completion of 30%, 60%, and 90% plans
- Update project costs
- Biddability review of the construction plans to avoid plan revisions
- Constructability review of the construction plans from the contractor's view point to avoid change orders
- Permit applications

Deliverables during this phase include complete construction documents, drawings, and specifications suitable for competitive bidding.

3. Build the Project (if applicable)

Projects must be designed with users in mind.

When required, building the selected project in an efficient and timely matter, consistent with public expectations, is the last stage of successful project implementation. We will be ready to take projects to completion at any stage to meet schedule your goals. This includes taking a project that may be designed by others through bidding and construction phase. As such we will work closely with your staff to utilize appropriate front end bid documents to avoid delays and expedite award of projects. Excellent final design, accurate bid documents, constructability and biddability reviews by our professionals and management of construction are important components in the completion stage. Consistent and efficient project performance is based on sustainable design. Projects must be designed with users in mind. Our ability to provide access to your residents and business owners during the construction of a facility is an important consideration to your community as well delivering a product that provides for efficient and easy maintenance after completion.

Schedule and Budget Control

Kimley-Horn recognizes that schedule and budget control are critical to the success of a project. We are well suited to manage and administer the City's projects to ensure the success of your efforts. At Kimley-Horn, meeting your schedule for deliverables is not just a goal to us—it is a mandate. Schedule control is inherently tied to people. Their experiences, vision, management styles, and philosophies all affect significant components of a project approach and its execution. The team's previous experiences and lessons learned from earlier projects and assignments will be invaluable to Kimley-Horn in serving the City. Our approach will include identifying realistic goals, developing a focused action plan that addresses only those items necessary to accomplish the goals, anticipating the implications of decisions made in early phases to future phases, and preparing a mechanism for addressing unexpected challenges. This approach builds the framework for completing successful projects both on schedule and within budget.

Our first step in schedule control is to understand the City's vision and develop a realistic schedule to make that vision a reality; this requires clear communication and is a critical step in the partnering required for a successful project. Kimley-Horn will define the project requirements, understand potential obstacles to success, identify potential opportunities to achieve more within the same project, and create a project work plan that allows us to accomplish the City's goals efficiently.

Prior to beginning work on any project, we will prepare a detailed project schedule and monitor it against actual project milestone completion dates. Project schedules are evaluated at different frequencies depending on the magnitude of the project. For the City's projects, we anticipate monitoring the project schedules on a weekly basis and will take corrective action the instant we become aware of a potential problem. We use several different software packages, including Microsoft Project and the Primavera scheduling programs to schedule our work. We will submit updated schedules on a monthly basis, along with our invoices as deemed necessary by the City.

Paramount to the success of any project is a continued partnering throughout the project to adapt as necessary to unforeseen circumstances. We will include critical decision-making points in our work plans so the project team and the City can agree upon the best course of action to keep projects on track. We know there will always be unexpected challenges unique to any given project, so it is critical to develop and follow an approach that controls what can be controlled while building in mechanisms for dealing with the unexpected.

When required, our team can accelerate work to meet a change in project schedule. This process is used frequently when workloads require extra personnel. It allows our team to be flexible and be able to react to all types of scheduling changes.

Kimley-Horn is confident in its ability to monitor project schedules to meet our client's expectations and we have an exemplary record of performance. We are prepared to commit the necessary resources to ensure that your projects stay on schedule and within budget.

Workload and Availability

Every staff member assigned to this project is available to work on your projects.
Kimley-Horn is very progressive when it comes to understanding our current workload and our capacity to take on additional work without impacting our availability to clients. We know the importance of meeting our clients' deadlines and we take the necessary steps so we can confidently commit to meeting yours. Our proactive management process ensures the availability of firm-wide and Florida-based resources for project staffing requirements through a proprietary program maintained on our computer network called "cast-aheads."Cast-aheads is a very effective tool to balance resources to match client scheduling needs by forecasting workload and identifying work overloads and/or shortfalls for each Kimley-Horn office and discipline. Cast-aheads is accessible by all Kimley-Horn project managers throughout the nation and is the primary means of tracking and evaluating our staffing needs and availability. Updated monthly by Kimley-Horn's project managers, the cast-ahead system is used to define specific staffing needs for the current month and for the next six months.

Every staff member assigned to this project is available to work on your projects.

The combined input from all project managers is compiled and distributed in the form of a report to all project managers and regional management for review and discussion at the monthly cast-aheads meeting. Work overloads and/or shortfalls for specific personnel, individual offices, and disciplines are tabulated and addressed at the meeting. Where possible, these imbalances are resolved through internal shifts of personnel between offices. Because of the level of effort we spend on understanding workload and on what projects our staff are working on, we absolutely can define on very short notice our ability to handle any task assignment and exactly who has the most availability to work on the project.

The objective of our cast-aheads system is to balance the workload in a manner that maximizes the utilization of production staff, while ensuring that all project requirements and client deadlines are met.

Quality Assurance/Quality Control (QA/QC)

Quality control begins with the team assigned to undertake this project. Recognizing the critical importance of careful quality control, we have developed an extensive internal quality control program with a 200-page manual to guide this process, which is routinely implemented on our projects. There will be no learning-curve impact on quality for the Kimley-Horn team. The QC plan will identify the various disciplines the responsible professionals and quality reviewers.

Our approach to frequent communication and to quality assurance/quality control will relieve City staff of any significant project review efforts. A QA/QC review of project solutions and analysis, together with design reviews, will ensure a top quality deliverable for the City. Our team's experience in coordinating and conducting public meetings and information sessions will also relieve staff of a considerable burden. The ultimate goal of each project is to provide a safe and satisfactory outcome for your citizens.

Our formal QA/QC program is based upon assigning experienced senior professionals who are otherwise qualified to manage a particular project, to serve in an independent quality control role. **Steve Orr, CET, IMSA II**, will serve as our QA/QC reviewer. Steve has more than 44 years of engineering experience and has provided QA/QC reviews on a wide range of roadway projects. Our staffing depth allows us to provide such personnel, and their involvement provides the project with fresh perspective and a critical eye.

Our internal QA/QC program will include:

- An internal kick-off meeting held with key team members assigned to the job to clearly define the scope, outline subtask responsibilities, establish schedules, and identify project milestones and goals.
- At the end of each phase, a QA/QC review will be conducted as one of several final checks to ensure that the project deliverable is technically correct and consistent with your objectives.
- Any modifications required to respond to the comments and recommendations of the quality control team will be incorporated during the ongoing analysis prior to submitting our plans to you.

Funding Assistance

We have worked on several grant-funded municipal improvement and utility system projects and have helped numerous counties, municipalities, and agencies develop design and improvement plans and programs that were successful in obtaining funding assistance from a variety of sources, including state and federal dollars. In addition, our staff supplies effective and often innovative methods for helping to ensure public participation and support. If requested, we can explore several options for potential funding sources for civil engineering projects in Delray Beach.

Potential Funding Sources. Federal and state grants are just two types of funding programs that we can identify. The Kimley-Horn team often deals with the complex regulations tied to the local use of federal funding, and has been successful in obtaining grants for a number of public clients. If requested, our team can provide insights into the opportunities available and the procedures required to obtain funding for infrastructure improvements.

Public Involvement Assistance

Kimley-Horn offers the City of Delray Beach a variety of professional services to help educate and engage residents and business owners about upcoming infrastructure improvements and projects in their area.

Stakeholder Briefings. From our experience, Kimley-Horn has learned that stakeholder briefings are very effective when there are groups who have a high level of concern or apprehension about a project. Our staff can attend the normally scheduled meetings to provide information and answer any questions these stakeholders may have. This helps to avoid the spreading of misinformation. These meetings also communicate the message that the City and its leaders are willing to listen to stakeholder's concerns. Whenever possible, we attempt to schedule these meetings in conjunction with other meeting dates to reduce associated costs. In some cases, we schedule multiple meetings on the same day or consecutive days to accomplish this as well. Some examples of the types of groups with whom we have met include various business associations, community organizers, senior citizen groups, and homeowners' associations.

Project Information List (PIL). Our public participation plans include maintaining a project information list of email addresses for those persons from the community who express an interest in your project. This will be helpful in gaining support for the plan and notifying interested parties of upcoming meetings. The email list can be made available to the City's project manager for use at the project's completion. The purpose of this list is to keep the community informed about issues as they occur, allowing citizens to be constantly informed about the status of the project. This helps to minimize last-minute communication of project concerns.

Websites. To convey information about the project, we can provide the City with content for your website. This provides interested parties with information about your projects as they progress and reduces the your costs.

Public Notification Techniques. A public meeting is only good if people come to the meeting—and the more the better we think. To help City staff attract participants to the various meetings, Kimley-Horn can employ a variety of techniques including the following:

- Notification postcards mailed to specific targets
- Meeting flyers distributed and posted in the study area
- Announcements posted on the City's web site
- Email reminders through a database list created for each project
- Press releases for television and radio

Communication Style. One hallmark of our public participation program is to communicate with the public and stakeholders in non-technical, easy-to-understand language. Kimley-Horn has a special team of professionals who are dedicated to effective written communication. We have professional writers with years of experience translating "engineering-ese" into language that anyone can understand. They will be involved in developing any project newsletters, project website content, and any other written materials developed over the course of the project. Our staff will ensure that the planning and engineering lingo is properly translated so that the average citizen easily understands it.

C. Projects for Similar Services

Kimley-Horn provides on-call and continuing engineering services to numerous municipal clients in South Florida. The following projects illustrate our breadth of experience in the types of services you have requested.

Engineering

City of Delray Beach General Civil Engineering Services — Kimley-Horn has provided on-call engineering services to the City of Delray Beach for the past 15 years. During that time, Kimley-Horn has successfully delivered projects that range in size from small studies to large, complex projects, such as the $12 million Federal Highway enhancements. Kimley-Horn's multi-disciplined staff of planners, landscape architects, "complete street" designers, traffic engineers, parking experts, transportation/roadway design engineers, transit planners, and environmental scientists allows us to respond to any need the City may have. Our work under this contract has included numerous traffic studies, especially in the downtown area; parking studies; parking garage analysis; "complete street" design; roadway design; FDOT LAP-funded projects; streetscape design; water supply studies; comprehensive plan traffic analysis; and construction phase support. Our wide variety of work for the City has allowed us to develop relationships with staff from the different City departments and therefore have thorough understanding of important City issues. **Dates of Service:** 9/2006–ongoing **Organization Name:** City of Delray Beach **Status:** Design

Town of Palm Beach Continuing Engineering Services — Kimley-Horn provides on-call and project related services to the Town of Palm Beach in the areas of wastewater collection and transmission, stormwater pumping, stormwater collection, roadway improvements, water main improvement, seawall repair and marine facilities, parks and recreation, and future water supply. These services include project development, preparation of construction document, reports, and studies. Kimley-Horn's attention to detail and high level of professional service has allowed us to maintain a long-term relationship with the Town of Palm Beach as one of their engineering consultants. We continue to function as an extension of their staff, helping the Town achieve a high level of municipal service within the community. **Dates of Service:** December 2003–ongoing **Organization Name:** Town of Palm Beach **Status:** Design, Construction

City of Miramar Continuing Engineering Services — Kimley-Horn provides general civil engineering, traffic engineering, landscape architecture and park design consulting services to the City of Miramar on an ongoing basis. Areas of assistance include review of traffic impact analyses and parking studies specific to development applications, and +park design services for Vizcaya Park. We have also provided reclaimed water line design, water main design, and site civil engineering. Additional services include involvement as a member of the City of Miramar's land development staff to provide traffic and transportation input to the Planning and Zoning Board and the City Commission for traffic operation issues and proposed development site plans. **Dates of Service:** February 2013–ongoing **Organization Name:** City of Miramar **Status:** Design, Construction

Town of Jupiter Continuing Consulting Services — Kimley-Horn has served the Town of Jupiter since the late-1980s on general consulting services contracts. During this period, the firm has completed literally hundreds of improvement projects and provided government leaders with sound, practical, cost-effective advice in numerous areas. Our services to the Town have included roadway and drainage improvements, water system improvements, development plan reviews, coastal engineering, park design, traffic engineering, surveying, bid coordination, construction contract administration, and numerous other services. Jupiter's service area encompasses some 30 square miles, and the population has grown rapidly over the years; continuous planning efforts have been needed to keep abreast of development needs. Among the numerous projects we have provided for the Town of Jupiter are residential roadway paving and drainage improvements, a 12.0-MGD reverse osmosis water treatment plant, a 3.0-MG and a 5.0-MG ground storage water tanks, a salinity barrier on outfall canal, hundreds of developer plan reviews, and a Town-wide master drainage plan. **Dates of Service:** June 2009–ongoing **Organization Name:** Town of Jupiter **Status:** Design, Construction

City of West Palm Beach Continuing Engineering Services — Kimley-Horn provides general civil and traffic engineering consulting services to the City of West Palm Beach on an ongoing basis. Areas of service include water main and force main design and construction phase services; traffic engineering; roadway design; structural design and rehabilitation; seawall design and assessments; permitting assistance, and bid administration. We have four pipeline projects under construction now in the City: Lift Station 23, Lift Station 13, Southern Boulevard Watermain; and Island Road Water Main. Other recent projects include the 15th Avenue Streetscape; 48-inch Force Main Emergency Response Plan; and Tamarind Avenue Infrastructure Improvements. **Dates of Service:** August 2006–ongoing **Organization Name:** City of West Palm Beach **Status:** Design, Construction

Surveying and Mapping (HSQ Surveying & Mapping, Inc.)

Surveying for Delray Beach Water Mains, City of Delray Beach — Scope: This project consisted of surveying five streets for water main design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways including sanitary and drainage structures, overhead utilities, signal wires, signal poles, controllers, and pull boxes. **Organization Name:** City of Delray Beach **Dates of Service:** 6/2016 -3/2017 **Status:** Complete

Delray Beach CRA Sidewalks FY 16, City of Delray Beach — Scope: This project consisted of surveying four areas of streets totaling more than 7,000 linear feet for walkway design. The survey scope included right-of-way and plat research, establishment of horizontal and vertical control, and locations of the existing improvements within and adjacent to the right of ways. **Organization Name:** City of Delray Beach **Dates of Service:** 4/2016–8/2016 **Status:** Complete

Landscaping Architectural Design

MLK Drive Beautification Phases 1 & 2, Delray Beach CRA — Scope: For Phase 1, Kimley-Horn provided landscape architecture, master planning, public involvement, lighting, and hardscape design services for the entire length of Martin Luther King, Jr. (MLK) Drive in Delray Beach. This 1.5-mile corridor incorporates MLK commemorative design elements placed in the right-of-way. The design features the continuation of an existing sidewalk network; decorative lighting; right-of-way plantings with flowering trees, palms, and other landscaping; and two pocket parks. The master plan also addressed prioritization and phasing of the proposed improvements with respect to budget. For Phase 2, Kimley-Horn provided additional enhancements, including curbed landscaped areas, sidewalk, ADA ramp improvements, guardrail, decorative concrete pavers and inlays, and irrigation for newly landscaped areas. For both phases, our team coordinated closely with a committee of community representatives to identify community assets and to solicit their ideas and preferences for incorporation into the design. **Organization Name:** City of Delray Beach **Dates of Service:** 8/2008–6/2017 **Status:** Construction

NE 3rd Avenue Streetscape, City of Delray Beach — Scope: The project included redevelopment of NE 3rd Avenue and the adjacent Artists Alley. In the study phase of the project, Kimley-Horn was tasked with developing the concept for the reconstruction and redevelopment of the street and the alley, which involved several stakeholder meetings and coordination with the arts community to develop a unified vision. Kimley-Horn assessed existing conditions and developed alternative concepts that were presented to the public. Kimley-Horn's planners, landscape architects, and engineers collaborated closely with City and CRA staff to develop presentations for the public meeting and address public comments. **Organization Name:** City of Delray Beach **Dates of Service:** 4/2010-2/2017 **Status:** Complete

OB Johnson Park, City of Hallandale Beach — Scope: This 6.4-acre park was part of a City-wide park master plan that set forth a program to enhance 13 of the City's parks and recreation areas in support of community-wide goals and neighborhood needs. As part of the development, the park included a 42,000-square foot multigenerational facility that included a teen center, indoor basketball courts, after school and senior programming, exercise room, administrative offices, and other accessory uses for computer and dance classes, food distribution, and other programming for all ages. The exterior park amenities included a walking trail, playground, tennis courts, a field house, and a football/soccer field.

Additionally, the park improvements included a centrally located surface parking lot, site infrastructure, and landscaping. Kimley-Horn provided master planning, landscape architecture, engineering design and permitting services, as well as construction observation and administration for the new community center. **Organization Name:** City of Hallandale Beach **Dates of Service:** 7/2014-ongoing **Status:** Phase 1 Complete; Phase 2 ongoing

Lake Worth Beach Redevelopment, City of Lake Worth — Scope: Kimley-Horn provided planning, environmental permitting, civil engineering, and landscape architecture services for the redevelopment of the Lake Worth Beach Park. The City contracted separately for the architecture associated with the Casino renovation and hired a Contract Manager at Risk to construct both projects. Specific upgrades included reconstruction of casino building with tenant space; reconfigured and expanded surface parking area (660 spaces); improved internal vehicular and pedestrian circulation; enhanced landscaping with native and salt tolerant plants; upgraded passive recreation areas: playground, open air pavilions, public lawns, public restrooms, and picnic areas; enhanced pier plaza with shade sails; new "turtle-friendly" site lighting along the beachfront; upgraded public beachfront promenade; and infrastructure for future alternative power generation and rain collection cisterns. **Organization Name:** City of Lake Worth **Dates of Service:** 3/2010-2/2014 **Status:** Complete

Welleby Park Expansion, City of Sunrise — The City of Sunrise retained Kimley-Horn for improvements to Welleby Park. As part of the project the City will incorporate a former FPL-owned property located northwest of the developed park property. The existing building and outdoor storage yard will be demolished and the site will be improved with park amenities as identified by a park masterplan prepared by another consultant. The City has identified a park program comprised of the following: Additional parking, grading and drainage improvements, dog park facilities, a stand-alone restroom building, completing an off-street loop for the park trail system, playground area improvements, relocating a sand volleyball court, a new 'safety town' play feature, an 800 SF addition to the existing park community building as well as a reconfigured patio space, and a boardwalk at the lake edge to replace portions of existing chain link fence. Attendance at one public information meeting will be required of the design team, as well as limited construction phase services. **Organization Name:** City of Sunrise **Dates of Service:** 6/2015-present **Status:** Design

Civil Engineering

Ballpark of the Palm Beaches, West Palm Beach — Scope: Kimley-Horn is currently providing civil engineering services for the development of the Ballpark of The Palm Beaches, a state-of-the-art two-team spring training facility in West Palm Beach, Florida. The 8,500-seat stadium will annually host the Houston Astros and the Washington Nationals during Spring Training season. In addition to the new stadium, the 154-acre property will also accommodate 12 auxiliary major/minor league fields, five Palm Beach County multipurpose fields, and a 12.2-acre City of West Palm Beach park. The facility will be used year-round by Palm Beach County for sports tournaments and other events. Kimley-Horn's scope of work includes on-site civil engineering, environmental resource work, event traffic management planning, permitting, and construction phase services. Kimley-Horn is also directing subconsultants performing the off-site turn lane design, signal modifications, survey, and utility locations, including a directional drill under a canal. The Ballpark of The Palm Beaches opened in March 2017. **Organization Name:** HKS Architects, Inc. **Dates of Service:** 2/2015-ongoing **Status:** Ballpark – completed March 2017; adjacent County Park, construction is ongoing

Town Hall Square Fountain Improvements and Streetscape, Town of Palm Beach — Scope: Kimley-Horn provided design services for the restoration of a historic fountain and roadway beautification project within the heart of the Town's commercial corridor. Phase I of the project included the restoration of the Mizner Memorial Fountain that was originally constructed in 1929. This part of the project was partially funded by the state through a historic preservation grant. Phase II of the project included streetscape improvements consisting of landscaped nodes, decorative pedestrian crossings, updated urban park landscaping that creates a public gathering area in the median of a roadway where the fountain feature resides, modification of various underground utilities, replacement of sidewalks with decorative tabby concrete, and the introduction of many landscaping and architectural elements throughout the area. Phase II of the project was partially funded by the state through a historic preservation grant and through private citizen donations. ***National***

Winner, 2016 Historic Preservation Project of the Year, American Public Works Association **Organization Name:** Town of Palm Beach **Dates of Service:** 3/2014-5/2016 **Status:** complete

Worth Avenue Improvements, Town of Palm Beach — Scope: Kimley-Horn served as site civil and traffic engineer for the reconstruction of Worth Avenue in the Town of Palm Beach. Kimley-Horn's tasks included the design and construction of a new roadway section, replacement and modification of various underground utilities, replacement of sidewalks with decorative tabby concrete, and the introduction of many landscaping and architectural elements throughout the corridor. One of the most significant challenges was grading. None of the existing sidewalks conformed to the current ADA accessibility code. This created the need to change the roadway section to allow accessible routes on both sides of the road while considering the widely varying finished floor elevations and doorway locations. The road grades also needed to remain generally the same to maintain the existing drainage trunk line, which offered a significant construction cost savings, and to minimize impacts to the area's floodplain storage. With creative grading and a new W-shaped roadway section, these objectives were achieved and the pedestrian areas are now ADA compliant. ***Voted One of America's Most Iconic Streets by USA Today*** **Organization Name:** Town of Palm Beach **Dates of Service:** 4/2010-6/2015 **Status:** complete

Underground Palm Beach, Town of Palm Beach — Scope: Subsequent to a state of Florida mandate that FPL "storm harden" all vital infrastructure and utility lines statewide, resulting in the installation of taller, concrete electric poles, the Town of Palm Beach chose instead to convert all aerial electric, communication, and cable lines to an underground location. Kimley-Horn serves as program manager and prime consultant designing and permitting the underground conversion process in close coordination with FPL, AT&T and Comcast. Kimley-Horn first developed a master plan to outline the schedule, sequencing, phasing, management of traffic impacts, project delivery methods, data collection, public outreach, design criteria, and projected costs. At the same time, Kimley-Horn performed the detailed design of Phase 1 of the program, which is now complete. Kimley-Horn and the Town also performed planning to address Town infrastructure needs (stormwater, gas, water and sewer) to determine if any renovation or replacement should occur while the underground utility work is underway. The benefits of undergrounding these utilities include improved neighborhood aesthetics, increased service reliability, and increased levels of safety as the lines are no longer exposed. The entire program, which began in 2016, is expected to take 10 years to complete. **Organization Name:** Town of Palm Beach **Dates of Service:** 5/2016-ongoing **Status:** Design

Abacoa Community Park, Town of Jupiter — Scope: Kimley-Horn served as lead consultant for this park expansion project in the Abacoa area. Our team was responsible for the development of the design and construction criteria package in close coordination with Town staff, that would ultimately be used as the basis for this design-build project. Our team was responsible for design of multi-purpose fields, a restroom/concession building, sand volleyball courts, and new parking lots. Development of project schedule milestones was paramount to ensure that the new parking lot would be open in time to handle overflow traffic from nearby spring training and to ensure that the new sports fields would be open in time for fall sports activities. **Organization Name:** Town of Jupiter **Dates of Service:** 3/2013-11/2016 **Status:** Complete

Mechanical/Electrical/Plumbing

D-10 Stormwater Pump Station, Town of Palm Beach — Scope: This project included the replacement of three existing 26,000-GPM hydraulic pumps with electric submersible pumps, wet well and outfall piping rehabilitation, construction of a new mechanical building, conversion of an existing FPL transformer vault to a new electrical room, installation of two new emergency generators, new ventilation system, upgraded sound attenuation, and other associated improvements. This station is situated between two existing residential properties so noise and aesthetic concerns were paramount in the design. Kimley-Horn was able to secure the necessary approvals and variances required for the project through both the Architectural Review Committee and the Town Council by unanimous votes. **Organization Name:** Town of Palm Beach **Dates of Service:** 7/2014-10/2016 **Status:** Complete

A-7 Inline Booster Pump Station (20-inch and 24-inch force mains), Town of Palm Beach — Scope: When the Town needed to significantly expand the capacity of the A-7 master lift station without expanding the footprint of the

existing facility, they turned to Kimley-Horn to develop an innovative solution. Our design premise was to convert the dry pit portion of the station to a 3.3-MGD inline booster station and modify the existing wet well to continue to serve the existing gravity collection system with much lower flow rates. Infrastructure improvements were made upstream of the station to allow the influent force main to be diverted back into the gravity system in the event of an emergency (such as an upstream influent force main break). The inline booster pumps can divert their suction intakes back to the wet well and the wet well can be expanded back to its original volume should such an emergency occur. The pumps are variable frequency drive (VFD) controlled to maintain a constant influent force main piping pressure, which mimics the pre-existing cascading station conditions. This avoids the need to upgrade the upstream station pumps for new pressure conditions in the force main. The design also included a complete electrical room renovation with all new electrical gear, a new generator, new sound attenuation and ventilation equipment, and various structural modifications. The replacement of the existing compressor system with a new rotary screw compressor system was also designed to continue providing pressurized air to the network of satellite ejector and Expelsor-style lift stations. **Organization Name:** Town of Palm Beach **Dates of Service:** 7/2014-10/2016 **Status:** Complete

A-39, A-41, A-42, A-43 Wastewater Pump Station Generator Replacements and Upgrades, Town of Palm Beach — Scope: Provided design services for generator replacements and service upgrades to four 1960s-era wastewater pump station sites ranging in size from 125 kW to 200kW. Three of the units were outdoor installations requiring sound-rated weather enclosures. The interior unit required custom-designed sound attenuation and ventilation systems. At the A-39 site, we also re-designed the replacement of the 30-year-old air compressor station which serves six air ejector stations. The new air compressor station uses two 40 HP rotary screw compressors, a new 1000-gallon pneumatic tank, and new piping and instrumentation. Additional services included redesign of the air piping systems and electrical service upgrades. All improvements were designed to meet updated hurricane wind load requirements. **Organization Name:** Town of Palm Beach **Dates of Service:** 1/2013-3/2015 **Status:** Complete

Fort Pierce Utilities Authority Lift Station A and Island Water Reclamation Facility (IWRF) Variable Frequency Drive (VFD) and Control System Upgrades — Scope: The Authority's main sewer Lift Station A and their Island Water Reclamation Facility (IWRF) effluent pump electrical gear were antiquated and beginning to fail rapidly. FPUA called upon Kimley-Horn to prepare documents to expedite removal and replacement of the existing variable frequency drives (VFDs) and control panel. The Kimley-Horn team evaluated the existing VFD at both facilities, including the programmable logic controllers (PLCs), which are more than 20 years old and in need of replacement. The Kimley-Horn team identified that both VFD and PLC replacement were critical facilities that needed immediate replacement. We prepared a detailed phasing plan, which allowed both facilities to remain in service while certain components could be replaced and fully tested before removing other equipment from service. Direct purchase of key components which were long-lead items gave the team the opportunity to work on the detailed design while critical equipment was manufactured. Our team also provided SCADA system and PLC programming to give the operations staff more comfort in operating the new equipment and ease the transition to the newer operating system. **Organization Name:** Fort Pierce Utilities Authority **Dates of Service:** 6/2013-10/2016 **Status:** Complete

Mobile Bed Absorber (MBA) Improvements, Town of Jupiter — Scope: The mobile bed absorber (MBA) scrubber units at the Jupiter Water Treatment Plant were originally designed by Kimley-Horn and have been in service since approximately 1990. Jupiter's two MBA units remove hydrogen sulfide from air discharged from the reverse osmosis permeate and occasionally concentrate degasifiers. The MBA units continue to be very effective and efficient in removing very high levels of hydrogen sulfide from air discharged from the degasifiers. After 25 years of service, the Town asked Kimley-Horn provide a condition assessment and recommendations for improvements to assist the Town with reducing maintenance requirements, reducing operating requirements, and improving the reliability of the performance of the units. As a result of our condition assessment, Kimley-Horn is currently providing design and construction phase services to implement the recommended improvements. **Organization Name:** Town of Jupiter **Dates of Service:** 1/2015-ongoing **Status:** In design

Structural Engineering

Parking Deck Design and Feasibility Evaluation, City of Delray Beach — Provided conceptual design services for a parking feasibility study of a 400-space parking structure located in the downtown area to determine garage placement, functionality, massing, and vehicular/pedestrian access points. Design services included zoning code analysis, functional layouts for self-park garage, garage with a retail component, and an automated parking garage. An order of magnitude cost estimate was prepared for each functional layout. **Organization Name:** Delray Beach CRA **Dates of Service:** 9/2015-2/2017 **Status:** complete

Dixie Highway (US 1) Flyover Design-Build, FDOT District Four, Deerfield Beach — Scope: Kimley-Horn served as lead structural design firm for this design-build project for a new roadway and bridge to connect Dixie Highway from north of Hillsboro Road along the west side of Florida East Coast Railroad (FEC RR), over FEC RR and Hillsboro Canal, and into existing Dixie Highway north of Hillsboro Canal and east of the FEC RR tracks. Our team designed three separate structures: the main bridge is a 1400 ft. long steel box curvilinear, with superelevation transition that was a category 2 bridge, over a canal, the FEC railroad, and roadway connecting Dixie Highway from Hillsboro Blvd to Boca Raton. The second bridge was a standard concrete girder bridge for the SB ramp over the Hillsboro Canal into Deerfield Beach. The third bridge was a single span steel box pedestrian bridge connecting Pioneer Park to Boca Raton over the Hillsboro Canal. The multitude of vertical and horizontal clearances and transitions with the main bridge and ramps was a challenge in design. The project was completed ahead of schedule and in the summer of 2012 celebrated a grand opening that was attended by state and local community leaders from Palm Beach County, City of Boca Raton, Broward County and City of Deerfield Beach. ***Winner, 2014 Prize Bridge Award, Medium Span Bridge, National Steel Bridge Alliance; 2013 FICE Engineering Excellence Award Winner*** **Organization Name:** FDOT District Four **Dates of Service:** 10/2009-7/2012 **Status:** Complete

Miscellaneous Structural Design Services for Sugar Cane Grower's Cooperative (SCGC), Belle Glade — Scope: Kimley-Horn has been serving the SCGC for more than 20 years. Structural projects have included concrete and steel structures for a variety of uses: vehicular and truck ramps, utility vaults, cooling towers, equipment enclosures, tank containment systems, building expansions, warehouses, conveyor systems, and many other facilities in support of the mill's operations. We recently provided conceptual phase, final design, and construction phase services for their new Turbo Generator #6 building. **Organization Name:** Sugar Cane Growers Cooperative **Dates of Service:** 6/2001-ongoing **Status:** Ongoing design services

Galleria Mall Garage Condition Assessments and Restoration, Fort Lauderdale — Beginning in 2012, Kimley-Horn served as parking consultant and structural engineer for the condition assessment and restoration of four parking garages serving the mall. The four parking structures were evaluated and assigned prioritized repairs associated with an order of magnitude cost. The parking structures consist of various construction types including cast-in-place and precast. Restoration scope includes concrete repairs, waterproofing repairs, and perimeter barrier upgrades. In addition, Kimley-Horn is serving as structural engineer for tenant fit-out including structural re-framing of existing precast concrete structure to accommodate escalator relocation, closure of floor openings, and supplementary steel beams for increased floor loadings. **Organization Name:** Keystone Florida Property Holding Corp. **Dates of Service:** 10/2012-ongoing **Status:** Design and construction

Transportation

Federal Highway (US 1) Enhancements, Delray Beach CRA — This award winning project was the City/CRA's largest roadway improvement project. This multi-phased project demonstrated Kimley-Horn's extensive in-house multi-disciplined expertise that through successful collaboration of all the disciplines provided innovative solutions that set the bar for future road diet projects. The project included obtaining approvals from multiple FDOT departments of a traffic study, conceptual design, temporary implementation of the design for a trial period, final design of the permanent improvements, and construction phase services. The progressive design included Complete Streets design principles

even before that term was known. Many Florida municipalities and FDOT reference it as one of the first successful examples of designing a context based road diet project. The City and its CRA adopted the Downtown Delray Beach Master Plan, and one of its key elements is a reconfiguration of the two one-way segments of US 1 from three lanes to two. Kimley-Horn evaluated potential changes to the lane configuration along southbound and northbound segments of US 1. We developed alternatives, forecasted future traffic volumes for review with the City,the CRA and FDOT, and led several public involvement workshops. Temporary improvements were installed to study the real-world effects of fewer and narrower lanes. The CRA asked Kimley-Horn to move forward with designs for permanent improvements. City residents and visitors now enjoy the benefits of on-street, buffered parking; slower speeds and a safer, more pedestrian-friendly environment; landscaping beautification and decorative, environmentally sensitive street lighting; bicycle lanes; and a new sense of continuity with the Downtown area with pavers and decorative crosswalks. Kimley-Horn provided construction phase services. ***Winner, 2017 FICE Honor Award*** **Organization Name:** City of Delray Beach/Delray Beach CRA **Dates of Service:** September 2006–June 2016 **Status:** Complete

Las Olas Boulevard Corridor Safety Improvements & Colee Hammock Neighborhood Traffic Calming, City of Fort Lauderdale — The City of Fort Lauderdale looked at Kimley-Horn's successful design of the Federal Highway road diet project for Delray Beach and asked us to help them with a road diet for a segment of Las Olas Blvd. Under a continuing services contract we started the data collection and public involvement phase and it became apparent the need for providing a traffic calming study for the adjacent neighborhood to prevent cut through traffic and to direct traffic to a designated local street. Our traffic engineers collaborated with our Complete Streets design experts, our roadway design engineers and City staff to investigate several alternatives including one-way pair street configuration. The project involved an extensive public outreach program and many meetings to develop consensus between home owner association representatives. It resulted in design of traffic calming measures throughout the neighborhood including raised intersections, textured pavement, enhanced unsignalized pedestrian crosswalks with LED edge lighted crosswalk signs, special intersection colored pavement, sidewalk connectivity, coordination and permitting through the County Engineering and Traffic Divisions, drainage improvements, utility relocation and lighting upgrades. **Organization Name:** City of Fort Lauderdale **Dates of Service:** March 2015–Present **Status:** Design

SW 3rd Street, SW 5th Avenue, SW 6th Avenue, NW 8th Street, Sidewalk and Roadside Improvements, Delray Beach — Kimley-Horn is providing local street design services for a number of streets under the General Consulting Services Contract for the City of Delray Beach. The design includes sidewalk connectivity, road side swale improvements, ADA ramp upgrades, utility coordination and adjustments, landscape impact assessments, addressing private property encroachments in street right of way and coordination with both City and CRA staff throughout the entire project. **Organization Name:** City of Delray Beach **Dates of Service:** 2016–Present **Status:** Design

NE 3rd Avenue and Artists Alley Improvements, Delray Beach — The project included planning for the redevelopment of NE 3rd Avenue and the adjacent Artists Alley. In the study phase of the project, Kimley-Horn was tasked with developing the concept for the reconstruction and redevelopment of the street and the alley, which involved a number of stakeholder meetings and coordination with the arts community to develop a unified vision. Kimley-Horn assessed existing conditions and developed alternative concepts that were presented to the public. Kimley-Horn's planners, landscape architects, and engineers collaborated closely with City and CRA staff to develop presentations for the public meetings and address public comments. **Organization Name:** City of Delray Beach **Dates of Service:** May 2012–2013 **Status:** Complete

Wiles Road Design Phases I and II, Broward County — Scope: Kimley-Horn was selected by the Broward County Engineering Division to prepare complete contract plans for the reconstruction and widening of Wiles Road to a 6-lane divided urban arterial from Rock Island Road to US 441 (SR 7) and from Riverside Drive to Rock Island Road. The firm incorporated the Broward Complete Streets guidelines (also prepared by Kimley-Horn) that were endorsed by the Broward MPO. Complete streets, which are designed to balance all modes of transport, ensure safe access for all users, including pedestrians, bicyclists, motorists and transit riders. Key elements of both projects include a successful public involvement program that included input from area HOA's, public schools, and the City of Coral Springs regarding

decorative streetlamps and design of a City entrance monument. Utility impacts were minimized with innovative drainage design techniques that involved filling in an existing ditch/canal that encroached into existing R/W. Kimley-Horn's engineers designed a dry detention area for stormwater attenuation and coordinated with the U.S. Army Corps of Engineers, Pine Tree Water Control District, and SFWMD to develop drainage solutions that avoided the need to acquire additional R/W. Our team also provided utility relocation design services for the City of Coral Springs regarding the repositioning of their water and sewer lines and coordinated the relocation of FPL Transmission poles. We also provided design coordination for landscaping and new decorative streetlamp lighting between the County and City of Coral Springs for a new entrance monument and lighting for the City. **Organization Name:** Broward County **Dates of Service:** 5/2013-present **Status:** Design and construction

Environmental/Natural Resources

Boynton Beach CRA Mangrove Mitigation Monitoring — Kimley-Horn was involved with the permitting for the expansion of Boynton Beach Boulevard and the Promenade, as well as providing environmental services for the related impacts to natural resources associated with the project and the creation of tidal wetland mitigation area. As the environmental scientists for the project, the firm obtained the required regulatory approvals for the multi-phased community redevelopment project by coordinating with SFWMD and USACE regarding wetland delineation and endangered and threatened species, seagrass surveys, WRAP analysis, and mitigation requirements. Kimley-Horn assisted the Boynton Beach CRA with environmental services related to a mitigation area created at the Boynton Beach Boulevard Extension and Promenade area and Jaycee Park. The firm assisted with information leading to the creation of the mitigation area and the monitoring requirements throughout the project's history. Kimley-Horn's environmental staff documented and obtained enough information on the project to complete the phase zero monitoring report and to keep in compliance with the current monitoring schedule. The project had its share of difficulties, including numerous agency reviewers and the 2004 hurricane season. The 2004 hurricane season resulted in disturbing the mitigation site at Jaycee Park and thus the planting requirements in the permit were not consistent with the permit requirements. Kimley-Horn coordinated with SFWMD and USACE. **Organization Name:** Boynton Beach CRA **Dates of Service:** 7/2006-7/2011 **Status:** Complete

Lake Worth Beach Redevelopment Environmental Services, City of Lake Worth — Kimley-Horn assisted the City of Lake Worth with planning, permitting, civil, and landscape architecture services for the redevelopment of the Lake Worth Beach and Casino. Environmental services included the preparation of Coastal Construction Control Line (CCCL) permitting and other environmental permitting approvals for the redevelopment of the public beach access and coordination with Florida Fish and Wildlife Commission (FWC) and Florida Department of Environmental Protection (FDEP) to ensure lighting throughout the site was compatible with sea turtles nesting on the beach, as well as human health and safety standards. **Organization Name:** City of Lake Worth **Dates of Service:** 4/2010-2/2014 **Status:** Complete

Wetland Mitigation Parcel Review, Okeechobee County — Kimley-Horn is reviewing various parcels to assess their suitability for offsetting mitigation requirements at the Okeechobee County Airport. Currently Okeechobee County Airport has several on-site conservation areas associated with the development of the Airport Industrial Park. The Federal Aviation Authority has stated that on-site conservation areas are not consistent with a federally-supported airport and the County must remove these conservation areas within the airport's boundary in order to receive federal funding for airport maintenance. Kimley-Horn is helping the County evaluate the potential purchase of a large tract of land that will meet current conservation area functions so the mitigation activities can be transferred off airport property. **Organization Name:** Okeechobee County **Dates of Service:** 4/2016-ongoing **Status:** Design

Environmental Assessment (EA) for Miami River-Miami Intermodal Center Capacity Improvement (MR-MICCI), South Florida Regional Transportation Authority — Kimley-Horn is providing environmental services for this project to provide additional mainline track(s) within the South Florida Rail Corridor from just north of the Tri-Rail Hialeah Market Station to the Tri-Rail Miami Airport Station within the Miami Intermodal Center (MIC). Kimley-Horn is preparing an Environmental Assessment (EA) to address the National Environmental Policy Act (NEPA) requirements of a potential bascule bridge replacement. The Federal Transit Administration (FTA) is serving as the lead federal agency and the

project also involves extensive coordination with the United States Coast Guard (USCG) and the United States Army Corps of Engineers (USACE), as well as state agencies and local stakeholders. **Organization Name:** SFRTA **Dates of Service:** 4/2016-ongoing **Status:** Design

Wave Streetcar Alternatives Analysis/Environmental Assessment and Small Starts Application, South Florida Regional Transportation Authority — Kimley-Horn provided engineering, planning, and environmental services for an Alternatives Analysis (AA) and Environmental Assessment (EA) toward advancing the Downtown Transit Circulator (DTC) Project (Wave Streetcar) into the Project Development (PD) phase as a Small Starts project. The Wave Streetcar involves constructing a new fixed guideway streetcar transit service within Downtown Fort Lauderdale in Broward County. Overall, adverse environmental impacts associated with the DTC Project are expected to be minimal or temporary, such as temporary detours and access restrictions during construction. The project integrated National Environmental Policy Act (NEPA) requirements into the AA process and is following the FTA process for advancement into Project Development under the Small Starts program. **Organization Name:** SFRTA **Dates of Service:** 12/2011-2/2016 **Status:** Complete

Water Resources/Stormwater Management

10-Year Water Supply Master Plan, City of Delray Beach — Kimley-Horn assisted the City of Delray Beach with the development of a new 10-year water treatment master plan and amendments to the City's Comprehensive Plan. We developed a 20-year linear population projection model using assembled data to meet the needs of the plan update and identify projects for the City and its service area during this growth period. Kimley-Horn prepared the water treatment master plan update by assembling information on relevant areas, meeting with the City staff to discuss project details, and preparing a draft based on research results and further collaboration with City staff. Updating the Comprehensive Plan involved a review of the existing Comprehensive Plan and the provision of proposed amendments to each of the elements that were subject to change based on the comments and revisions of the Planning and Zoning Board, City Commission, and Florida Department of Economic Opportunity. **Organization Name:** City of Delray Beach **Dates of Service:** 7/2014-6/2016 **Status:** Complete

Lift Station 23 Rehabilitation, Town of Palm Beach — Kimley-Horn was originally retained in early 2009 to evaluate the need for rehabilitation of Lift Station 23 (LS 23), which is a triplex (three-pump) lift station and one of eight master lift stations in an overall wastewater and collection system containing a total of 127 lift stations. LS 23 is located on the east side of Flagler Drive near 26th Street in Currie Park and serves the southeast area of the City. The rehabilitation of LS 23 was needed due to the age of the facility and redevelopment in the nearby commercial districts and residential neighborhoods. This project includes replacement of three existing 2,000 GPM pumps with VFD driven electric submersible pumps in a dry pit installation, wetwell rehabilitation, expansion of the existing electrical building, upgrading the existing FPL service from 240V to 480V service, installation of an electric pump hoist, new ventilation system, and other associated improvements. Also included in the project are landscaping and irrigation improvements. **Organization Name:** Town of Palm Beach **Dates of Service:** 11/2010-10/2016 **Status:** Complete

Jupiter 15.0-MGD Nanofiltration Water Treatment Plant (WTP) Construction Phase Services — Kimley-Horn was retained by the Town of Jupiter to serve as owner's representative and contract administrator during construction of their $37-million, 15-MGD nanofiltration water treatment plant (WTP). (This project was designed by another consultant.) Kimley-Horn assembled a team of Kimley-Horn personnel combined with Town personnel to staff a full-time inspection and site presence operation. This nanofiltration plant will replace the Town's existing lime softening treatment facilities. A unique feature of this WTP was that it was the first in the U.S. to utilize center feed membrane vessels. Kimley-Horn was chosen to represent the Town on this project based on our familiarity with the site, preferences of the Town of Jupiter, and a demonstrated ability to keep construction moving while implementing field changes that individually make incremental improvements in the facility. This plant also included more than $10 million in owner-purchased equipment, which saved the Town more than $600,000. Kimley-Horn developed a unique teaming approach with the Town during construction that allowed Town staff to be very involved throughout the process, which significantly reduced their costs. Town employees

were assigned to perform certain administrative and construction observation roles that would normally be offered by the engineering consultant on a project of this magnitude. Kimley-Horn's professional staff were available on-site to focus on time critical engineering efforts and field changes. This collaborative approach proved to be highly successful from both the Town's and contractor's standpoint. **Organization Name:** Town of Jupiter **Dates of Service:** 11/2010-1/2013 **Status:** Complete

Water Treatment Plant #11 Clearwell and Post-Treatment Evaluation (WUD) 14-073, Palm Beach County— This project consisted of an overall evaluation of the post-treatment system to the reverse osmosis water treatment plant. The report provided recommendations to help improve the water quality produced at Lake Region Water Treatment Plant Kimley-Horn was retained to conduct an evaluation of the clearwell, chemical addition, degasification and off-gas system. Our team developed finish water quality goals, conducted a clearwell evaluation, evaluated 2nd state scrubber and lift station issues, and prepared a summary report. Recommendations included within the report were immediately incorporated into a series of design-build contracts. **Organization Name:** Palm Beach County **Dates of Service:** 7/2015-ongoing **Status:** Construction

Water Treatment Plant #3 Membrane Replacement Pilot Study, Palm Beach County — Kimley-Horn was retained by Palm Beach County Water Utilities Department to conduct a pilot study comparing three different membranes for Water Treatment Plant No. 3. The membrane comparison is for pressure, flux, fouling characteristics, and the ability to clean the membrane elements. The pilot study will also consider post permeate mineralization and use of Floridan Aquifer water to supplement the plants raw water supply. Two phases of pilot testing were conducted and reports with recommendations were submitted. **Organization Name:** Palm Beach County **Dates of Service:** 7/2015-ongoing **Status:** Construction

Water Treatment Plant #11 Production Well (PW) 11, Wellhead and I&C Design and Bidding Phase Services (WUD 15-058), Palm Beach County — As a follow-up to Kimley-Horn's preliminary design services for a proposed Floridan well PW-11 at Water Treatment Plant 11, the team was retained to provide well, wellhead, and EI&C design and bidding services. This includes preparation of 60%, 90%, and final drawings and specifications plus permitting and assistance. **Organization Name:** Palm Beach County **Dates of Service:** 7/2016-ongoing **Status:** Construction

Coastal/Marine Engineering Services

North Ocean Boulevard Seawall Design Phase, Town of Palm Beach — Kimley-Horn provided design and permitting services to the Town of Palm Beach to replace this 1,700-foot-long section of ocean front seawall at the north end of the island. The wall was originally constructed in the 1950s and had reached the end of its useful life. The design consists of a sheetpile and tie-back system installed immediately landward of the existing wall. A beach access tunnel owned by the Palm Beach Country Club exists within the project limits. Close coordination with the Palm Beach Country Club, the Beach Club, and a private residence to the north was performed during the design phase to ensure that all stakeholder concerns were properly addressed. The project required both CCCL and ERP permits from the FDEP. The project will eliminate more than 50 small stormwater outfalls that discharge directly to the beach, allowing the Town to achieve a significant portion of the goals outlined in the Beach Management Agreement in place with the state. **Organization Name:** Town of Palm Beach **Dates of Service:** 9/2011-9/2016 **Status:** Complete

Sand Transfer Station Damage Assessment and Repair Design, Town of Palm Beach — Kimley-Horn performed a condition assessment of the Sand Transfer Station after it sustained damage during the passing of Hurricane Sandy. We determined the damaged elements, recommended repairs, and established a budget for the repairs that the Town could use in seeking FEMA and insurance assistance to fund the repair project. Kimley-Horn also developed design plans for the repairs that involved impact rated duct banks and wiring vaults along with mechanical, structural and electrical improvements to the station. We also obtained an emergency CCCL permit from the FDEP to perform the repairs during the sea turtle nesting season. **Organization Name:** Town of Palm Beach **Dates of Service:** 2/2013-10/2014 **Status:** Complete

Reach 3 Seawall Repair Project, Town of Palm Beach — Kimley-Horn was selected by the Town of Palm Beach to prepare repair documents to address deteriorated sections of the seawall that protects North Ocean Boulevard between Sunrise and Wells Road. The damage was discovered after a strong winter storm season had eroded the dune that had buried the wall for nearly 30 years. The wall in this area was made up of five unique sections that were all of differing construction styles and age. A unique aspect of this project was that the wall sections were privately owned. However, they provided protection to North Ocean Boulevard which the Town was responsible to protect. **Organization Name:** Town of Palm Beach **Dates of Service:** 4/2014-5/2016 **Status:** Complete

Palm Beach Country Club Tunnel Assessment, Palm Beach — Kimley-Horn was selected by the Palm Beach Country Club to perform an assessment of the existing beach access tunnel that connects the Club to the beach under North Ocean Boulevard in the Town of Palm Beach. The Club has not used the tunnel in many years due to the lack of beach sand and the destruction of the staircase to the beach. They wanted an assessment of the tunnel condition to determine if they should rehabilitate the tunnel so it could be used by members or if it should be abandoned permanently. Kimley-Horn reviewed the field conditions and provided an analysis report along with anticipated rehabilitation costs to repair the observed deterioration. **Organization Name:** Palm Beach Country Club, Inc. **Dates of Service:** 5/2013-1/2014 **Status:** Complete

Australian, Brazilian, and Peruvian Town Dock Condition Assessment and Repairs, Town of Palm Beach — The Town retained Kimley-Horn to evaluate the condition of the concrete bents, pile caps, and pilings both above and below the water line at the three above-referenced marina facilities. We prepared a letter report that provided repair recommendations to address the deterioration that is observed. Our team also prepared repair plans to address deterioration included a jacking plan of the existing building support beams and the construction of new support beams for one of the dock houses. **Organization Name:** Town of Palm Beach **Dates of Service:** 4/2013-6/2014 **Status:** Complete

Representative Photos of Municipal Design & Construction Projects

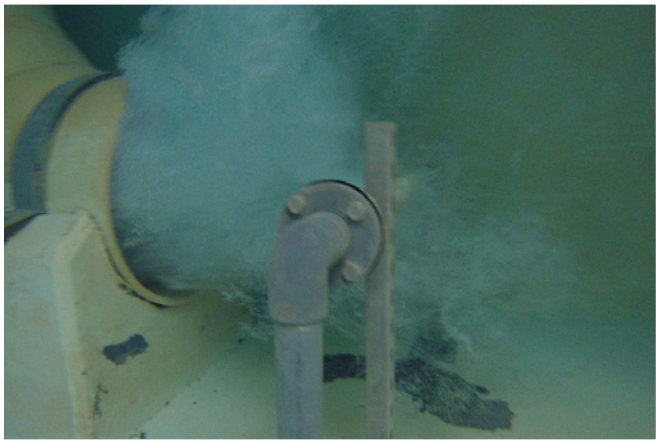
Federal Highway (US 1) Improvements, City of Delray Beach

Signalization for SR 5 (US 1)/Atlantic Boulevard Intersection, City of Delray Beach

Lake Worth Beach Redevelopment

MLK Drive Beautification,City of Delray Beach

North Ocean Blvd. Seawall Replacement, Palm Beach



Water Treatment Plant #11 Clear Well, Palm Beach Co.

Representative Photos of Municipal Design & Construction Projects (cont.)

North Flagler Water Main Installation, West Palm Beach

Abacoa Community Park, Town of Jupiter

Civil Engineering Services for Ballpark of the Palm Beaches, West Palm Beach

6- and 8-inch Water Main Replacements, City of Delray Beach

Water Treatment Plant #3 Membrane Replacement Pilot Study, Palm Beach County

Florida Atlantic Blvd. Four-Lane Design, Boca Raton

Representative Photos of Municipal Design & Construction Projects (cont.)

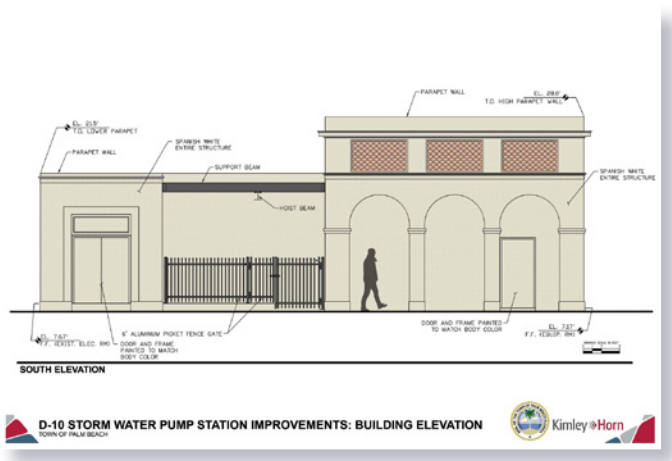
15th Street Streetscape & Utility Improvements, City of West Palm Beach

Dixie Highway Flyover Design-Build, FDOT District Four, Boca Raton/Deerfield Beach

OB Johnson Park Design and Civil Engineering Services, City of Hallandale Beach

Town Hall Square Restoration, Town of Palm Beach

Underground Palm Beach Design (Electric, Cable, Communications Facilities), Town of Palm Beach



D-10 Pump Station Design, Town of Palm Beach

Representative Photos of Municipal Design & Construction Projects (cont.)

Palmetto Park Road and Pedestrian Promenade Design, Boca Raton CRA

Wetland Mitigation Parcel Reviews, Okeechobee County

Town of Jupiter Nanofiltration Water Treatment Facility

Sand Transfer Station Damage Assessment and Emergency Repairs, Town of Palm Beach

Seacrest Soccer Complex, City of Delray Beach

Lake Region Water Treatment Plant Upgrades, Palm Beach County

Representative Photos of Municipal Design & Construction Projects (cont.)

Miscellaneous Structural Design Services for Sugar Cane Grower's

24-inch Water Main and 24-inch Force Main Subaqueous Pipeline Installations, City of West Palm Beach

SR A1A RRR Design, FDOT District Four, Fort Lauderdale

S-2 Master Sanitary Inline Pump Station, Town of Palm Beach

City of St. Petersburg Parking Demand Study

Celery Fields Regional Stormwater Facility, Sarasota County

D. Organizational Structure

i. Submit details of Proposer's staffing resources, at the location that will provide services to the City as well as corporately; by discipline and the number of personnel within each discipline.

Total Number of Kimley-Horn Personnel By Office

Delray Beach

Discipline	Number of Personnel
Administration	1
Environmental	3
Human Resources	1
Water/Wastewater/Civil Engineering	15
Land Planning	2
Roadway Design	4
Total	**26**

West Palm Beach

Discipline	Number of Personnel
Administration	33
Aviation	4
Forensics	9
Information Systems	5
Landscape Architecture	4
Roadway Design	21
Structural Design	12
Telecom	5
Transportation/TPTO	6
Water/Wastewater/Civil Engineering	25
Total	**124**

Miami

Discipline	Number of Personnel
Administration	4
Information Systems	1
Landscape Architecture	7
Roadway Design	10
Structural Design	2
Telecom	1
Land Development	10
Transportation/TPTO	7
Water/Wastewater/Civil Engineering	13
Total	**55**

Fort Lauderdale	
Discipline	**Number of Personnel**
Administration	4
Aviation	3
Environmental	2
Forensics	1
Information Systems	1
ITS	4
Parking	2
Transit	1
Transportation/TPTO	17
Water/Wastewater/Civil Engineering	17
Total	**53**

Grand Total for Listed Offices	**258**

Total Number of Kimley-Horn Personnel Firmwide	
Discipline	**Number of Personnel**
Administration	416
Aviation	115
Communications	11
Electrical	16
Environmental	65
Forensics	12
Human Resources	39
Hydrology/Hydraulics	60
Information Systems	57
ITS	57
Land Planning	24
Landscape Architecture	124
Parking	19
Roadway Design	327
Software Design	15
Structural Design	100
Survey/Mapping	22
Telecom	26
Transit	57
Transportation/TPTO	343
Water/Wastewater/Civil Engineering	932
Grand Total	**2837**

ii. If Proposer's staffing resources includes sub-consultants, submit the name of the firm(s) who will perform each discipline. If more than one firm is listed for a discipline, then label which firm is the primary firm for that discipline. Firms may perform more than one discipline.

HSQ Group – Surveying

HSQ Group, Inc. will provide surveying services on an as-needed basis. HSQ is a Palm Beach County certified SBE that was established in 2004. HSQ is a civil engineering and surveying firm, providing the highest quality service to both private developers and governmental agencies throughout South Florida. HSQ has provided engineering services to several municipalities which include the City of Homestead, City of Ft. Lauderdale, City of Tamarac, City of Lauderhill, Palm Beach County, Broward County, Miami-Dade County Transit, and the Florida Department of Transportation.

Tierra South Florida – Geotechnical

TSF will provide geotechnical engineering services on an as-needed basis. They are a full service State/FDOT certified (SBE/DBE) geotechnical engineering company based in Fort Lauderdale. TSF's project experience ranges from parking lots to high-rise buildings, interstate highways and bridges including bascule bridges over ICWW, encompassing industrial facilities, shopping malls, hotels and motels, residence and office buildings, educational and religious facilities, fast food and restaurant facilities, drainage systems, pipelines, recreation facilities, and communication towers.

iii. Submit an organizational diagram clearly identifying key personnel as well as other staffing resources who will provide services to the City. For each individual in the organization diagram, include each individual's name, title, firm and their functional relationship to each other.

The organization chart on the following page illustrates our team structure and defines relationships among disciplines and tasks.

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services RFQ No. 2017-048

iv. Provide a narrative detailing Proposer's recent, current, and projected workloads at the time of submission and provide a statement of Proposer's commitment of personnel and other resources for the City project by providing a signed letter of commitment.

Our history with clients in Florida has demonstrated our ability to assemble a diverse team of in-house professionals from our local offices throughout the state. We have local and regional experience with team members who have extensive knowledge of the area's roadway issues. Our size, diversity, and depth of staff allows us to pull together the right talent and experience to serve our clients effectively on all phases of projects, from planning and community involvement to coordination with the city of Delray Beach, FDOT, and other agencies, as well as design and construction.

To provide the City of Delray Beach with the highest level of service, we have enhanced our project team with the expertise of two subconsultant partners, **HSQ Consultants** for surveying support and **Tierra South Florida** for geotechnical support, as needed. We have worked with both of these firms and know they have the combination of skills and professionalism to provide superior technical skills. We are confident regarding their high quality of work and professionalism. These firms will serve as a seamless extension of our staff and share Kimley-Horn's common values, including accountability, leadership, teamwork, flexibility, and creativity.

Team Organization Table

Name	Role	Responsibilities	Office Location
John Potts, P.E.	Principal-in-Charge/ Civil Engineering/Water Resources/ Stormwater Management	Corporate commitment to the City of Delray Beach, engineering and water resources design support	West Palm Beach
Marwan Mufleh, P.E.	Project Manager/Transportation Design	Overall project management, point of contact, engineering design, construction phase services	West Palm Beach
Steve Orr, CET	Quality Assurance/Quality Control	Quality assurance/quality control reviews	West Palm Beach
Fannie Howard, P.E.	Deputy Project Manager/Civil Engineering/Water Resources/ Stormwater Management	Secondary point of contact, civil engineering/water resources/ stormwater management engineering design, construction phase services	West Palm Beach
Kevin Schanen, P.E.	Civil Engineering/Coastal/Marine Engineering	Civil engineering/coastal/marine engineering design	West Palm Beach
Jason Lee, P.E.	Civil Engineering	Mechanical/electrical/plumbing design, construction phase services	West Palm Beach
Anjuli Panse, P.E.	Civil Engineering	Civil engineering design, construction phase services	West Palm Beach
Jonathan Haigh, PLA	Landscape Architectural Design	Landscape architecture design	West Palm Beach
Tricia Richter, PLA	Landscape Architectural Design	Landscape architecture design, construction phase services	West Palm Beach
Stephen Feccia, PLA	Landscape Architectural Design	Landscape architecture design	West Palm Beach
Peter Syntax, P.E., LEED AP	Mechanical/Electrical/Plumbing	Mechanical/electrical/plumbing	Phoenix
Angelina Fairchild, P.E.	Structural Design	Structural design, construction phase services	West Palm Beach
Casey Long, P.E.	Structural Design/Costal/Marine Engineering	Structural design and coastal/marine engineering	West Palm Beach
Mark Santos, P.E.	Structural Design	Structural design	Fort Lauderdale
Adam Kerr, P.E.	Transportation Design	Transportation engineering	West Palm Beach
Sean Bukovich, E.I.	Transportation Design	Transportation engineering, construction phase services	West Palm Beach
Brady Walker	Environmental/Natural Resources	Environmental/natural resources	Delray Beach
Lynn Kiefer	Environmental/Natural Resources	Environmental/natural resources	Vero Beach
Tori O'Malley	Environmental/Natural Resources	Environmental/natural resources	Vero Beach
Matt Tebow, P.E.	Water Resources/Stormwater Management	Water resources/stormwater management	Delray Beach
Ed Grady	Construction Phase Services	Construction phase services	Delray Beach

These support staff will be dedicated as additional specialty resources for any City project. Kimley-Horn has more than enough staff statewide to successfully undertake any task we are assigned on this contract.

Additional In-House Support Staff			
Chris Niforatos, P.E.	Sea Level Rise/Resiliency Plans	Sea level rise/resiliency plans	Tampa
Ken Dierks, REM	Sea Level Rise/Resiliency Plans	Sea level rise/resiliency plans	Ashville, NC
Erin Emmons, GISP	GIS Services	GIS services	Fort Lauderdale
Michael Spruce	Engineering	Engineering support	Delray Beach

continued

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services RFQ No. 2017-048

Name	Role	Responsibilities	Office Location
Jason Webber, P.E.	Engineering	Engineering support	Delray Beach
Stefano Viola, P.E.	Engineering	Engineering support	Fort Lauderdale
Stewart Robertson, P.E.	Transportation	Transportation support	Fort Lauderdale
Chris Heggen, P.E.	Transportation	Transportation support	West Palm Beach
Ali Hanes, P.E.	Transportation	Transportation support	Fort Lauderdale
Gin Ng, P.E.	Transportation	Transportation support	West Palm Beach
George Puig, PLA	Landscape Architectural Design	Landscape architecture support	Miami
James Pankonin, PLA	Landscape Architectural Design	Landscape architecture support	Sarasota
Kim Misek, ASLA	Landscape Architectural Design	Landscape architecture support	Miami
Bill Reese, P.E.	Civil Engineering	Civil engineering support	West Palm Beach
Samantha Graybill, P.E.	Civil Engineering	Civil engineering support	West Palm Beach
Alan Garri, P.E.	Mechanical/Electrical	Mechanical/electrical support	Orlando
Matt Shoesmith, P.E.	Mechanical/Electrical	Mechanical/electrical support	Charlotte, NC
Arnoldo Artiles, P.E.	Structural Design	Structural design support	West Palm Beach
Jamea Long, P.E.	Structural Design	Structural design support	West Palm Beach
Rosemay Alcid, E.I.	Structural Design	Structural design support	West Palm Beach
Mike Kiefer	Environmental/Natural Resources	Environmental support	Vero Beach
Oliver Basse	Environmental/Natural Resources	Environmental support	Vero Beach
Mark Miller, P.E.	Water Resources/Stormwater Management	Water resources/stormwater support	West Palm Beach
Lance Littrell, P.E.	Water Resources/Stormwater Management	Water resources/stormwater support	Orlando
Toral Hertzberg, E.I.	Water Resources/Stormwater Management	Water resources/stormwater support	West Palm Beach
David Stewart, P.E.	Coastal/Marine Engineering	Coastal/marine engineering support	West Palm Beach
Wayne White, P.E.	Coastal/Marine Engineering	Coastal/marine engineering support	Tampa
Lisa Stone, P.E.	Public Involvement	Public involvement support	West Palm Beach
Matt Fursetzer, P.E.	Public Involvement	Public involvement support	West Palm Beach
Sara Lopez, E.I.	Public Involvement	Public involvement support	West Palm Beach
Donna West, PSM	Surveying	As-needed surveying	Boca Raton
Daniel Laak, PSM	Surveying	As-needed surveying	Boca Raton
Raj Krishnasamy, P.E.	Geotechnical Services	As-needed geotechnical services	West Palm Beach
Francois Thomas, P.E.	Geotechnical Services	As-needed geotechnical services	West Palm Beach

Letter of Commitment

May 30, 2017

Kimley»Horn

Mr. Jose Hidalgo
City of Delray Beach
100 NW 1st Avenue
Delray Beach, FL 33444

Re: Continuing Engineering, Surveying, and Landscaping Architectural Consulting Services; RFQ No. 2017-048

Dear Mr. Hidalgo and Members of the Selection Committee:

Kimley-Horn team members assigned to the **City of Delray Beach Continuing Engineering, Surveying, and Landscaping Architectural Consulting Services** have the qualifications, resources, time, willingness and are committed to meet the budgets and schedules as required for any task assigned through this contract.

Our subconsultant team members **HSQ Group,** and **Tierra South Florida,** have also informed us that their assigned team members are fully available to provide services to the City of Delray Beach as required by this contract.

Kimley-Horn is no stranger to working for the City of Delray Beach. Over the past several years you have selected us to execute several large and complicated roadway design and utility design projects and engineering studies. In every case, we have allocated proper staff resources to your projects. This project will be no different.

The members of our project team were selected using two criteria: **(1)** their experience with similar projects and **(2)** their availability to assume major technical responsibilities within your project schedule. As your prime consultant, Kimley-Horn will ensure that all team members and subconsultants allocate the necessary resources to meet the project schedule.

Based on a review of our cast-aheads, we can assure you that the staff members selected for this team are available immediately to serve you and are in an excellent position to handle the workload of any assignment you wish to give us. Additionally, all of our team members and subconsultants have committed that the staff members assigned to this contract are fully available to serve you. Specific availability for individual team members can be provided upon your request.

Very truly yours,
KIMLEY-HORN

Marwan Mufleh, P.E.
Project Manager

Note: *As a senior vice president with Kimley-Horn, Marwan Mufleh, P.E. is authorized to bind the firm.*

v. Provide a narrative detailing all key personnel's recent, current and projected workloads at the time of submission and provide a statement of the availability of each for the City's project.

The Kimley-Horn team presented herein will be completely available for any task you assign us during this contract. Due to the task-order nature of this contract, it is not possible to predict the future availability of any individual team member to work on an undefinded project.

Be assured, however, that our local staff is backed by more than 550 employees in 14 offices in Florida, and more than 2,800+ employees nationwide. We are confident that we can meet all the technical and staffing needs anticipated for the projects anticipated in your CIP

Continuing Engineering, Surveying, and Landscape Architectural Consulting Services

RFQ No. 2017-048

REQUIRED FORMS

Kimley»Horn

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
☒	Corporation	President, Vice President, or Chief Executive Officer	None
☐	Corporation	Director, Manager, or other title	Corporate resolution
☐	Limited Liability Company (LLC) – Member-Managed	Member	Articles of Organization or Operating Agreement
☐	Limited Liability Company (LLC) – Manager-Managed	Manager	Articles of Organization or Operating Agreement
☐	Limited Partnership	General Partner	Document demonstrating the legal authority to bind the Limited Partnership
☐	Partnership	Partner	None
		CEO, Director, Manager or other title	Authorizing documentation
☐	Individual	Individual	None

☒ **Documentation is not required.**

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

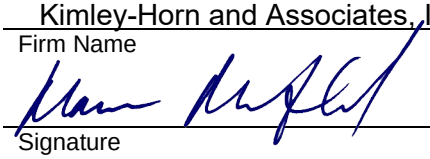
Form B - Public Entity Crimes

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:

Kimley-Horn and Associates, Inc.
Firm Name



Signature

May 15, 2017
Date

Marwan Mufleh, P.E., Senior 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 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:

Kimley-Horn and Associates, Inc.
Firm Name

Signature

May 15, 2017
Date

Marwan Mufleh, P.E., Senior 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:

Kimley-Horn and Associates, Inc.
Firm Name

Signature

May 15, 2017
Date

Marwan Mufleh, P.E., Senior Vice President
Printed Name and Title

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	4-24-17
2	4-27-17
3	5-4-17
4	5-10-17
5	5-10-17
6	5-18-17
7	5-19-17

Signature of Proposer's Agent

Senior Vice President
Title

Marwan Mufleh, P.E.
Printed Name

May 19, 2017
Date

6. Proof of Insurance

Client#: 25320 KIMLHORN

ACORD **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY): 3/30/2017

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 Greyling Ins. Brokerage/EPIC 3780 Mansell Road, Suite 370 Alpharetta, GA 30022	CONTACT NAME: Jerry Noyola PHONE (A/C, No, Ext): 770-552-4225 FAX (A/C, No): 866-550-4082 E-MAIL ADDRESS: jerry.noyola@greyling.com
INSURED Kimley-Horn and Associates, Inc. 421 Fayetteville Street, Suite 600 Raleigh, NC 27601	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : National Union Fire Ins. Co. — 19445 INSURER B : Aspen American Insurance Compan — 43460 INSURER C : New Hampshire Ins. Co. — 23841 INSURER D : Lloyds of London — 085202 INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: 17-18 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 INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			5268169	04/01/2017	04/01/2018	EACH OCCURRENCE	$1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$500,000
	X Contractual Liab.						MED EXP (Any one person)	$25,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	POLICY X PRO-JECT X LOC						PRODUCTS - COMP/OP AGG	$2,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY			4489663	04/01/2017	04/01/2018	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
B	X UMBRELLA LIAB X OCCUR			CX005FT17	04/01/2017	04/01/2018	EACH OCCURRENCE	$5,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$5,000,000
	DED X RETENTION $0							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N			015893685 (AOS)	04/01/2017	04/01/2018	X PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N	N/A					E.L. EACH ACCIDENT	$1,000,000
A	(Mandatory in NH)			015893686 (CA)	04/01/2017	04/01/2018	E.L. DISEASE - EA EMPLOYEE	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	$1,000,000
D	Professional Liab			P070831700	04/01/2017	04/01/2018	Per Claim $2,000,000 Aggregate $2,000,000	

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

CERTIFICATE HOLDER

Sample Certificate

CANCELLATION

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

ACORD 25 (2014/01) 1 of 1 #S699621/M695961

The ACORD name and logo are registered marks of ACORD

KKRE1

Exhibit B

Category: Engineering	Hourly Raw Salary Rate	Hourly Salary Rate with 3x Multiplier Option
Principal Engineer	$ 53.42	$160.26
Project Manager	$ 33.06	$99.18
Senior Engineer	$ 34.61	$103.83
Engineer I	$ 20.00	$60.00
Engineer II	$ 24.52	$73.56
Senior Engineering Tech	$ 25.21	$75.63
Senior CADD Designer	$ 21.75	$65.25
CADD Designer	$ 20.00	$60.00
Construction Manager	$ 30.00	$90.00
Senior Inspector	$ 22.00	$66.00
Office Support	$ 18.68	$56.04

PRICE ADJUSTMENTS BASED ON GOVERNMENTAL PRICE INDEX

Prior to the completion of the first year of the Contract term, and every 12-month anniversary thereafter, the City may consider an adjustment to prices based on the most recent 12 month change in the following pricing index: Bureau of Labor Statistics, Employment Cost Index, Private Industry Workers, Total Compensation, Management business and financial occupations, Not Seasonally Adjusted, CIU2010000110000A.

It is Consultant's responsibility to request any pricing adjustment under this provision. For any adjustment to be considered, the Consultant's request for adjustment should be submitted at least sixty (60) days prior to the anniversary date. The adjustment requested shall not be in excess of the relevant pricing index change. If a timely adjustment request is not received from the Consultant, the City may exercise its Option to Renew the Contract for another Term without any pricing adjustment.

Exhibit B

Category: Landscaping Architecture	Hourly Raw Salary Rate	Hourly Salary Rate with 3x Multiplier Option
Principal Landscaping Architecture	$ 51.44	$154.32
Project Manager	$ 40.38	$121.14
Landscape Architect	$ 36.67	$110.01
CADD Designer	$ 24.56	$73.68
Construction Manager	$ 30.45	$91.35
Office Support	$ 21.22	$63.66

PRICE ADJUSTMENTS BASED ON GOVERNMENTAL PRICE INDEX

Prior to the completion of the first year of the Contract term, and every 12-month anniversary thereafter, the City may consider an adjustment to prices based on the most recent 12 month change in the following pricing index: Bureau of Labor Statistics, Employment Cost Index, Private Industry Workers, Total Compensation, Management business and financial occupations, Not Seasonally Adjusted, CIU2010000110000A.

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