City of Fort Lauderdale
RFP# 465-11765 - Water Main/Force Main Las Olas

July 7, 2016

T B Landmark CONSTRUCTION, INC.

T B Landmark Construction Inc.
11220 New Berlin Road
Jacksonville, FL 32226
904.751.1016 | tblandmark.com

gai consultants

GAI Consultants, Inc.
2255 Glades Road, Suite 324A
Boca Raton, FL 33431
561.988.2611 | gaiconsultants.com

CITY OF FORT LAUDERDALE

Fort Lauderdale City Hall
Procurement Services Division
100 N. Andrews Avenue, #619,
Fort Lauderdale, FL 33301

July 7, 2016

Project No. A160446.00

Fort Lauderdale City Hall
Procurement Services Division
100 N. Andrews Avenue, #619,
Fort Lauderdale, FL 33301

City of Fort Lauderdale Water Main and Force Main Intracoastal Waterway Crossings at Las Olas Blvd | RFP # 465-11765

Dear Selection Committee Members:

The city of Ft. Lauderdale is seeking assistance for a Design-Build for the Water Main/Force Main Las Olas Project. TB Landmark Construction, Inc. (TBL) has the proven expertise to deliver quality projects on-time, with cost-effective execution while performing as part of the City's team. TBL will provide a professional team of experts, who will achieve the project requirements and goals, taking into account techniques that provide the least impact to the community. TBL has a proven working history with the City, and has significant experience and knowledge throughout Florida.

We understand the City has an immediate need to design, permit and construct a new water main and force main via Horizontal Directional Drilling. Successful and timely completion of these is critical to maintaining utility service prior to canal dredging. With time as the greatest challenge, a self-performing firm with in-house expertise and consultants who understand the area is best fit to deliver success.

Additionally, TBL would like to introduce GAI Consultants, Inc. (GAI), who will lead the design effort. GAI has the capabilities to provide an array of professional services to successfully design and oversee this type of project. GAI is a 900+ person multi-discipline firm with locations, resources and personnel available to deliver the project in the capacity requested. GAI brings significant pipeline design expertise and has a successful working relationship with municipal clients across the state. This includes Design-Build experience with TBL. GAI will be supported by additional subconsultants for their expertise, including EAC Consulting and Keith and Associates, both of whom have DBE/M/WBE certifications.

Our team offers the following strengths to Ft. Lauderdale City:

Expert Team | The TBL team is adept at providing turn-key services for our clients and maintaining municipal relationships statewide. TBL is able to self-perform all pipe installation by open trench and directional drill; while GAI and subconsultants bring professional design, hands-on field experts for rapid engineering decisions when necessary, and construction oversight for quality control.

Florida Presence | The TBL team brings local knowledge and presence. With locations throughout Florida and local engineering offices, we have actively been involved with local municipalities and public sector clients for more than 50 years of combined Florida experience.

Client Driven | Our team is client focused, with track records of performance for our municipal stakeholders. The majority of our business is with municipalities like Ft. Lauderdale. We understand your expectations.

Communication | Our team will communicate directly and consistently with the City to ensure success, remaining available to serve the city of Ft. Lauderdale and its residents through completion of construction. We are here to assist and listen to your needs.

Our successful approach begins with the designation of the leadership team. Mr. Robin R. Thigpen, Project Director, will be the main point of contact and will receive tasks and directions from the City. Mr. Thigpen has over 25 years experience in construction administration and management. He will also be responsible for quality assurance, financial and contract activities. Mr. Thigpen will closely support the project and will remain committed to providing the highest possible quality of services. Mr. Marty Adams will serve as the Project Manager to lead the Build Team. Mr. Adams has dedicated 25 years of experience in civil & underground construction and will personally be involved in the production and management of all construction activities. Mr. Jay Ameno, PE will serve as the Project Manager to lead the Design Team. Mr. Ameno brings 40 years of water/wastewater experience, successfully completing multiple pipeline projects in Florida. Mr. Ameno will be personally dedicated and will remain accessible and "hands on" from start to finish.

Our team prides itself on our ability to listen and work together as one team with the City. We will connect all project aspects to creatively think and communicate with a holistic approach. We have the available staff workload with various experts to meet scheduling goals, save costs and produce a quality project.

Should any questions arise that may require more elaboration, please do not hesitate to contact Dustin White, Director of Marketing & Business Development for TB Landmark at dwhite@tblandmark.com or 813.714.8757.

Sincerely,

Mr. Robin R. Thigpen

Project Director

TB Landmark Construction, Inc.

T B Landmark
CONSTRUCTION, INC.

Table of Contents

Tab 1 - Proposal Contact Person Information

Proposal Contact Person Information

The City of Ft. Lauderdale has requested the design/build delivery of a new subaqueous 20-inch diameter water main and 16-inch diameter force main to cross the Intracoastal Waterway along a submerged land easement on the south side of the Las Olas Boulevard bridge.

Due to the complexity of the project, including safety concerns for all pedestrian, boat and vehicular traffic along the route, as well as the ability to turn-key this project from design through close-out, the City requires a team of professionals who've successfully performed large subaqueous directional drilling projects.

The beauty of the Las Olas Blvd area extending from downtown to Ft. Lauderdale Beach is not only a tourist destination, but one that conveys a live, work and play atmosphere. In addition, the area serves as a retail hub during the International Boat Show and the Seminole Hard Rock Winterfest Boat Parade, both of which are scheduled to take place during the proposed construction. In selection of a design/build team, it is vital that the City partners with those who have local knowledge of the area, its residents and the ability to get in and out with full restoration, ahead of the proposed schedule.

The TB Landmark Construction, Inc. team, consisting of engineering partners GAI Consultants, Inc. EAC Consulting, Inc., (DBE /MWBE) and Keith and Associates (DBE/MWBE) , is the turn-key solutions provider that Ft. Lauderdale seeks for this project endeavor.

Lead Design-Builder	Lead Engineer	Sub-Consultant	Sub-Consultant
TB Landmark Construction, Inc. 11220 New Berlin Rd Jacksonville, FL 32226 FEIN: 59-3607816 Mr. Martin Adams, General Manager E: madams@tblandmark.com P: 904.751.1016	GAI Consultants, Inc. 2255 Glades Rd, Ste. 324A Boca Raton, FL 33431 FEIN: 25-1260999 Mr. Jay Ameno, PE Senior Project Manager E: jameno@gaiconsultants.com P: 561.465.8001	EAC Consulting, Inc. 5100 NW 33rd. Ave., Ste. 243 Ft. Lauderdale, FL 33309 FEIN: 65-0519739 Mr. Oscar Rubio, PE Project Manager E: orubio@eacconsult.com P: 954.714.2000 (DBE/MWBE)	Keith and Associates, Inc 301 East Atlantic Boulevard, Pompano Beach, FL 33060 FEIN:65-0806421 Ms. Dodie Keith-Lazowick President E: DKeith@keith-associates.com P: 954-788-3400 (DBE/MWBE)

Tab 2 - Qualifications of Firm

Qualifications of Firm

Business Structure

TB Landmark Construction, Inc.
11220 New Berlin Road | Jacksonville, FL 32226

TB Landmark Construction, Inc. (TBL) was founded in 1999 as a corporation in the State of Florida. The company is owned and directly managed by Mr. Robin R. Thigpen and Timothy C. Beasley who serve as President and Vice-President, respectively. Initially, TB Landmark operated only within the state of Florida performing underground utility construction of water and wastewater conveyance systems; primarily utilizing horizontal directional drilling (HDD) construction. Through slow, measured growth, company operations expanded into Georgia, South Carolina and North Carolina where we now operate regionally, though we maintain our headquarters in Jacksonville, FL.

Over the years, our company has built a resume of increasingly complex project types and is uniquely positioned to deliver them through design/build, prime or sub-contractor capacities; whichever adds more value. TBL currently employs a fleet of 10 drill rigs ranging from 20,000 to 500,000 lbs of drilling thrust / pull-back force, including all support equipment such as mud recycling technology, vacuum trucks and locating tools.

Key factors that make TB Landmark Construction, Inc. a trusted contractor and business partner are: fully licensed (General, Underground, Plumbing & Mechanical), insured with a $10M liability umbrella insurance policy, bondable to $40M on a single project and we are classified as a Federal SBE – Cage Code 3W3E0 under NAICS codes 237110 & 237120. TBL carries pollution liability insurance and participates in the E-verify program.

T B Landmark
CONSTRUCTION, Inc.

Our experience spans pipeline projects ranging from 2-48" in diameter spanning up to 30 miles in length. The capabilities of our maxi rigs allow us to install pipe via HDD up to 48" in diameter with up to 8,000 LF spans while utilizing HDPE, FPVC, DIP or Steel pipe materials. We are also adept at auger boring (jack & bore) up to 48" diameter steel casings and installing pipelines underneath water bodies, navigable waterways, rail lines or other natural / manmade obstacles.

TB Landmark Corporation License

State of Florida
Department of State

I certify from the records of this office that T B LANDMARK CONSTRUCTION, INC. is a corporation organized under the laws of the State of Florida, filed on November 10, 1999.

The document number of this corporation is P99000099386.

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 April 1, 2016, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Sixth day of July, 2016

Ken Detzner
Secretary of State

Tracking Number: CU3306183447

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

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

TB Landmark Sunbiz

2016 FLORIDA PROFIT CORPORATION ANNUAL REPORT

FILED
Apr 01, 2016
Secretary of State
CC7200078888

DOCUMENT# P99000099386

Entity Name: T B LANDMARK CONSTRUCTION, INC.

Current Principal Place of Business:
11220 NEW BERLIN RD
JACKSONVILLE, FL 32226

Current Mailing Address:
11220 NEW BERLIN RD
JACKSONVILLE, FL 32226

FEI Number: 59-3607816

Certificate of Status Desired: No

Name and Address of Current Registered Agent:
THIGPEN, ROBIN R
11220 NEW BERLIN RD
JACKSONVILLE, FL 32226 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE: _____ Date
Electronic Signature of Registered Agent

Officer/Director Detail :

Title	PS	Title	VT
Name	THIGPEN, ROBIN	Name	BEASLEY, TIMOTHY C
Address	3101 SUNSET LANDING DR	Address	1421 CRYSTAL SANDS
City-State-Zip:	JACKSONVILLE FL 32226	City-State-Zip:	JACKSONVILLE FL 32218

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.

SIGNATURE: ROBIN R THIGPEN PRESIDENT 04/01/2016
Electronic Signature of Signing Officer/Director Detail Date

TB Landmark General Contractor License

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

LICENSE NUMBER
CGC060694

The GENERAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2016

THIGPEN, ROBIN RODNEY
T B LANDMARK CONSTRUCTION INC
3101 SUNSET LANDING DRIVE
JACKSONVILLE FL 32226

TB Landmark Utility License

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

LICENSE NUMBER
CUC057226

The UNDERGROUND UTILITY & EXCAVATION CO
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2016

THIGPEN, ROBIN RODNEY
T B LANDMARK CONSTRUCTION INC
3101 SUNSET LANDING DRIVE
JACKSONVILLE FL 32226

TB Landmark Professional License

underground SOLUTIONS

Jerry Simmons
of TB Landmark has successfully met all of the requirements of Underground Solutions, Inc.

Class II Fusion
training and is qualified to fuse UGSI Fusible PVC® pipe up to and including 16" DR18. This certificate expires on:
May 28, 2015

Instructor: Scott Bishop

Consolidated Pipe & Supply, Inc.

This is to certify that
Jerry Simmons
On ***February 2, 2005*** *successfully completed certification requirements for the following:*

Fusion of Medium to High Density Poly-ethylene Pipe

Key Personnel and Roles

Lead Design-Builder

TB Landmark Construction, Inc.

Mr. Robin Thigpen, Project Director
E: rthigpen@tblandmark.com
P: 904.751.1016

Mr. Martin Adams, General Manager
E: madams@tblandmark.com
P: 904.751.1016

Lead Design-Engineer

GAI Consultants, Inc.

Mr. Jay Ameno, PE
Senior Project Manager
E: jameno@gaiconsultants.com
P: 561.465.8001

Subconsultants

EAC Consulting, Inc.

Mr. Oscar Rubio, PE
Project Manager
E: orubio@eacconsult.com
P: 954.714.2000

Keith and Associates, Inc

Mr. Dodie Keith-Lazowick
Survey -SUE
E: DKeith@keith-associates.com
P: 954-788-3400

TB Landmark Insurance Certificate

TBLANDM-01 JKING1

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/27/2016

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

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

PRODUCER	CONTACT NAME:	
Hub International Southeast 1560 Orange Avenue Suite 750 Winter Park, FL 32789	PHONE (A/C, No, Ext): (407) 894-5431	FAX (A/C, No): (407) 629-6378
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
TB Landmark Construction, Inc. 11220 New Berlin Road Jacksonville, FL 32226	INSURER A : Zurich American Insurance Company	16535
	INSURER B : American Guarantee & Liability Insurance Company	26247
	INSURER C : North River Insurance Company	21105
	INSURER D : Westchester Surplus Lines Insurance Co.	10172
	INSURER E :	
	INSURER F :	

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

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X XCU X Contractual Liab GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:	X	X	GLO6558263-07	11/23/2015	11/23/2016	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 300,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS / SCHEDULED AUTOS HIRED AUTOS / NON-OWNED AUTOS			BAP6558264-07	11/23/2015	11/23/2016	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) PIP Basic	$ 1,000,000 $ $ $ $ 10,000
C	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED RETENTION $			5821043769	11/23/2015	11/23/2016	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: Y (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC0217374-00	11/23/2015	11/23/2016	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Pollution / Environm			G27982669001	05/03/2016	05/03/2017	Aggregate	3,000,000
D	Pollution / Environm			G27982669001	05/03/2016	05/03/2017	Each Occurrence	3,000,000

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

Fort Lauderdale City Hall is reflected as additional insured as respects General Liability, if required by written contract. Waiver of Subrogation applies in favor of certificate holder in regards to General Liability, if required by written contract.

CERTIFICATE HOLDER

Fort Lauderdale City Hall
Attention: Procurement Services Division
100 N. Andrews Avenue, #619
Fort Lauderdale, FL 33301

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) The ACORD name and logo are registered marks of ACORD

TB Landmark Bonding Letter

Knowledge and Wisdom®

CECIL W. POWELL & COMPANY
INSURANCE, INTERNATIONAL FINANCIAL PLANNING AND SURETY BONDS SINCE 1935
219 N. NEWNAN STREET • P.O. DRAWER 41490, JACKSONVILLE, FLORIDA 32203-1490
PHONE (904) 353-3181 • FAX (904) 353-5722 • www. cwpowellins.com

June 27, 2016

Fort Lauderdale City Hall
Attention: Procurement Services Division
100 N. Andrews Avenue, #619
Fort Lauderdale, FL 33301

RE: T B Landmark Construction Inc.

To Whom It May Concern:

Cecil W. Powell & Company is the bonding agent for T B Landmark Construction Inc. Based on normal and standard underwriting criteria at the time of the request, Performance and Payment bonds will be provided on for projects up to $20,000,000.00 single and $40,000,000.00 in the aggregate with the provision that we and Travelers Casualty and Surety Company of America reserve the right to review final contract documents, bond forms, and obtain satisfactory evidence of funding prior to any final commitment to issue bonds, and do not assume liability to any third party, including yourselves, if we do not execute said bonds.

T B Landmark Construction Inc. is bonded through Travelers Casualty and Surety Company of America. Travelers Casualty and Surety Company of America has an A.M. Best rating of "A+ XV" and is listed on the U.S. Treasury Department's Listing of Approved Sureties (Department Circular 570).

T B Landmark Construction Inc. is an excellent contractor and we hold them in the highest regard. We feel extremely confident in our contractor and encourage you to offer them an opportunity to execute any upcoming projects.

If you should have any questions, please do not hesitate to call.

Sincerely,

Robert T. Theus
Senior Surety Account Executive
Surety Department

Independent Insurance Agent

Trusted Choice®

Subconsultant - Lead Engineer

GAI Consultants, Inc. (GAI)
2255 Glades Road, Suite 324A| Boca Raton, FL 33431

GAI is an employee-owned planning, engineering, and environmental consulting firm providing local expertise to worldwide clients in the energy, transportation, development, government, and industrial markets.

Established in 1958 in Pittsburgh, Pennsylvania, we currently serve our clients from 28 office locations throughout the Eastern, Midwestern, and Southern United States. GAI has been serving municipal clients in Florida for the past 33 years. Our tag line is “Transforming Ideas into Reality®”. Our professionals live this motto by providing “Top Notch” services and producing “Quality Designs” that address the needs and vision of a community; and result in enduring environments that add lasting value.

Today, through growth, acquisition, and much success, GAI has approximately 900+ employees, 160+ of which are in Florida. Our specialty is providing professional services as the prime consultant, drawing upon a unique blend of in-house experts and technicians, and utilizing specialty subconsultants as necessary to meet the program’s individual work assignment requirements. From feasibility studies – to concept design – to final design/permitting – and through construction implementation, GAI’s ability to meet your needs is second to none in Florida.

GAI has been serving municipal clients in Florida for the past 33 years. GAI is a corporation organized under the laws of State of Pennsylvania since 1958 and has been licensed to conduct business in the State of Florida since 1982.

GAI will be the lead subconsultants to provide the design effort for this project.GAI has the capabilities to provide an array of professional services to successfully design and oversee this type of project. GAI is a 900+ person multi-discipline firm with locations, resources and personnel available to deliver the project in the capacity the city needs. GAI brings significant pipeline design expertise and has a successful working relationship with municipal clients across the state. This includes Design-Build experience with TBL.

80%
OVER
5 DECADES

REPEAT WORK

WITH LOYAL CLIENTS

" GAI is an excellent firm for us – our top Consultant and “go-to” guys."

Rick Gierok, P.E.
City of Eustis
Director of Public Works/ City Engineer

At GAI, we treat our clients like partners, where mutual success is valued. We stay with projects from concept through construction to deliver complete solutions. We understand that in these economic times, innovative and cost effective solutions designed and executed within budget and on the expected schedule are more critical than ever before.

gai consultants
transforming ideas into reality®

GAI Hourly Rates and Fees

2016 Community Development Florida Rate Schedule

Professionals include Economists, Planners, Urban Designers and Landscape Architects. The use of "Engineer" in the titles in the Hourly Rate Schedule applies to professional engineers and geologists.

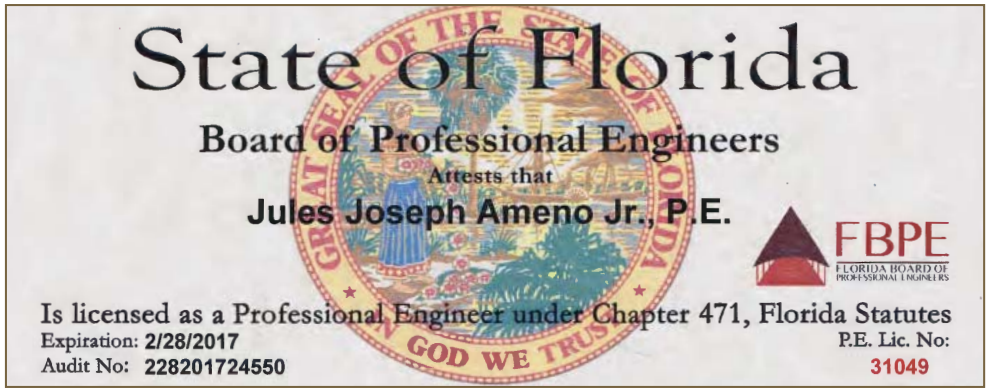
Any changes in hourly rates to reflect increases in cost of living, taxes, benefits, etc. will take effect on January 1, 2017. Rates in the below table are "loaded" hourly rates and include all overhead, costs, and benefits per hourly unit rate.

Labor Classification	Invoice Rate
CSG Expert Witness	$350.00
CSG Senior Director / Principal	$250.00
CSG Senior Director	$235.00
CSG Director	$205.00
CSG Senior Manager / Assistant Director	$170.00
CSG Manager	$150.00
CSG Assistant Manager	$135.00
CSG Senior Project Professional	$120.00
CSG Project Professional	$105.00
CSG Senior Professional	$90.00
CSG Professional	$80.00
CSG Senior Technician	$85.00
CSG Technician 2	$75.00
CSG Technician 1	$50.00
Senior Engineering Director	$305.00
Engineering Director	$260.00
Senior Engineering Manager	$225.00
Senior Project Manager	$170.00
Senior Lead Project Engineer	$165.00
Project Manager	$160.00
CEI Project Administrator, Senior Project Engineer	$145.00
Engineering Manager	$140.00
Senior Project Designer	$125.00
Project Engineer	$120.00
Senior Lead Designer	$105.00
Senior Engineer Intern	$100.00
Lead Designer	$95.00
Senior CAD Operator	$90.00
Senior Project Coordinator	$85.00
Senior Project Controls Associate	$80.00
Engineer Intern	$75.00
CAD Operator	$70.00
Administrative Assistant	$55.00
Environmental Director	$135.00
Senior Environmental Specialist	$125.00
Environmental Project Specialist	$80.00

GAI Professional Engineering License


State of Florida
Board of Professional Engineers
Attests that
GAI Consultants, Inc.
FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS
is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.
Expiration: 2/28/2017
Audit No: 228201702417
CA Lic. No: 9951

GAI - Jules "Jay" Ameno, PE Professional Engineering License


State of Florida
Board of Professional Engineers
Attests that
Jules Joseph Ameno Jr., P.E.
FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2017
Audit No: 228201724550
P.E. Lic. No: 31049

GAI - M. Scott Richards, PE Professional Engineering License


State of Florida
Board of Professional Engineers
Attests that
Matthew Scott Richards , P.E.
FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2017
Audit No: 228201710218
P.E. Lic. No: 71505

GAI - MJ Chen, PE Professional Engineering License


State of Florida
Board of Professional Engineers
Attests that
Manjiang Chen , P.E.
FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS
Is licensed as a Professional Engineer under Chapter 471, Florida Statutes
Expiration: 2/28/2017
Audit No: 228201734384 D
P.E. Lic. No: 67576

GAI - Kristin Caborn, Park Planner

GAI - D J Silverberg, Environmental

GAI References

City of Daytona Beach
Project Manager
Frank Van Pelt
VanPeltF@codb.us
386-490-2453

Tindall Hammock
Utility Director
Bob Salerno
bsalerno@thiscd.org
954-587-8833

Subconsultant - Engineering Support / Construction Oversight

EAC Consulting, Inc.
5100 NW 33rd Avenue, Suite 243
Ft. Lauderdale, Florida 33309

EAC Consulting Inc. will serve as subconsultant. EAC Consulting, Inc. (EAC) is a full service multidiscipline engineering firm founded in Miami-Dade County more than twenty (20) years ago to provide engineering consulting services for infrastructure improvement(s) and development projects. Their experience includes performing water and sewer planning, water transmission/distribution pipeline engineering & design, wastewater sewer collection /transmission engineering & design and sanitary sewage pump station design & rehabilitations. Since their inception, the firm has been involved in professional services for water / wastewater infrastructure replacement, rehabilitation and repair projects for numerous clients including WASD and municipal public utilities agencies.

EAC and their professional staff experience with conventional and large diameter pipeline projects encompass a range of water transmission, wastewater transmission and gravity sanitary sewer interceptors. These experiences have ranged in size from small diameter mains (i.e. 2-inch to 30-inch diameter piping) to larger mains (i.e. 36-inch diameter piping to pipe sizes as large as 72-inches diameter). Their experiences have also allowed them to interact with various types of materials including polyvinyl chloride (PVC), high density polyethylene (HDPE), concrete pressure pipes (PCCP), ductile iron pipe (DIP), spiral welded steel pipe and many others. Their full-service team of engineering professionals are local and are abreast of key developments and issues in South Florida.

EAC's overall commitment to the practice of engineering as well as its objective to maintain excellence in the quality of our services has led to an impressive growth rate. At EAC, they make client service a priority - client relationships are the cornerstone of the firm's existence and will ensure repeat business. This is evident in that more than 75% of the firm workload is repeat business from existing clients. About 15% of the firm's workload is from clients that were referred to them by their existing clients. This characteristic also ensures that on assigned projects EAC's staff seeks innovative solutions that bring value to their clients; while accomplishing two major tenets of successful projects – Early Completion and Under Budget.

EAC Hourly Rates and Fees

EAC Consulting, Inc.

CITY OF FORT LAUDERDALE

RFP# 465-11765

Water Main and Force Main Intracoastal Waterway Crossings at Las Olas Blvd

EAC CONSULTING, INC

BILLING SCHEDULE

1. Multiple of Direct Salary Expense: The "Not to Exceed" fee may be based on multiple of 3.0 times the salary rate, as determined from salaries reported to the Director of Internal Revenue, of the personnel engaged directly on a project, such multiplied rate not to exceed $ 300 dollars per hour by either principals or employees.
2. Fixed Sum (Lump Sum): The fee for a task or Scope of Work may be fixed sum as mutually agreed upon.
3. 2016 Hourly Rate Schedule is provided as follows.

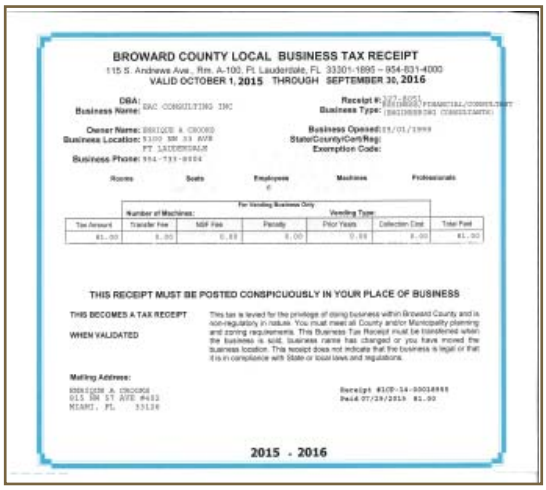
Role / Title / Description	2016 Hourly Rate
Principal	**$275.00**
Project Manager	**$240.00**
Quality Control / Assurance Engineer	**$235.00**
Public Outreach Leader	$240.00
Lead Engineer	$204.00
Senior Engineer	**$195.00**
Chief Structural Engineer	$267.00
Chief Electrical Engineer	$231.00
Project Engineer	$126.46
Designer / E.I.	$81.60
CADD Technician	$86.50
Sr Construction Engineer	$210.00
Construction Administrator	$180.30
Construction Inspector	$105.00
Senior Traffic Engineer	**$205.00**

EAC Minority Certificate

EAC Local Business Reciept

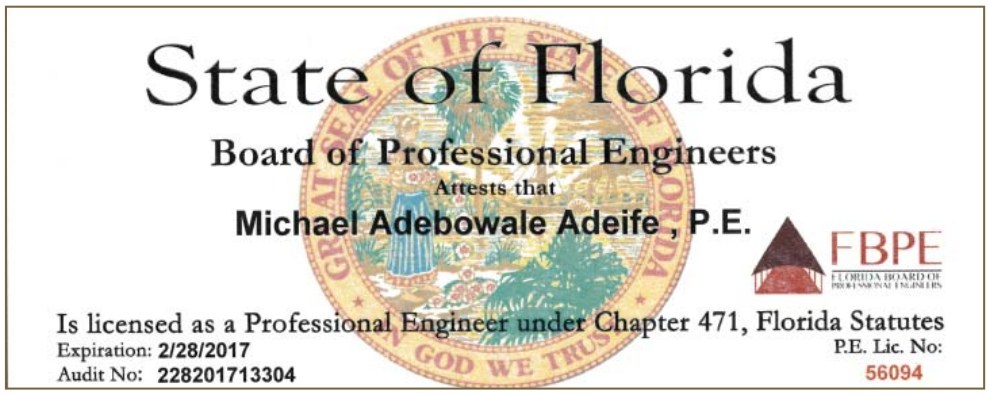
EAC Minority Certificate

EAC Broward County Tax



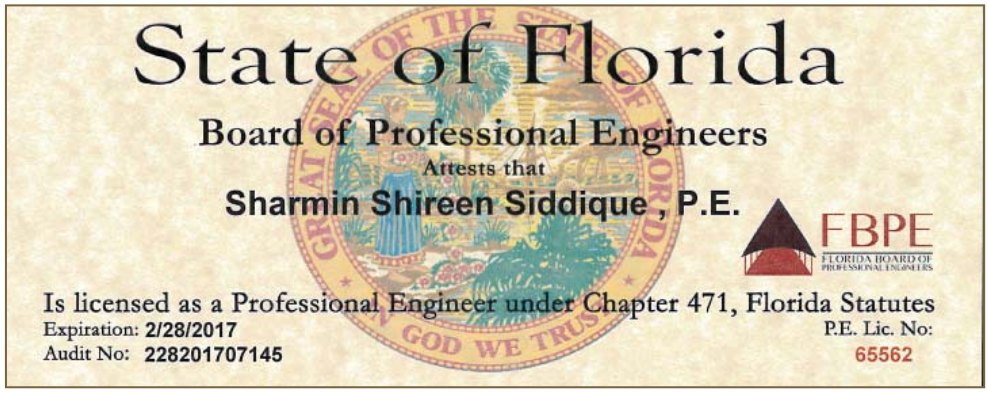
EAC Professional Engineering License

EAC - Michael Adeife, PE Professional Engineering License



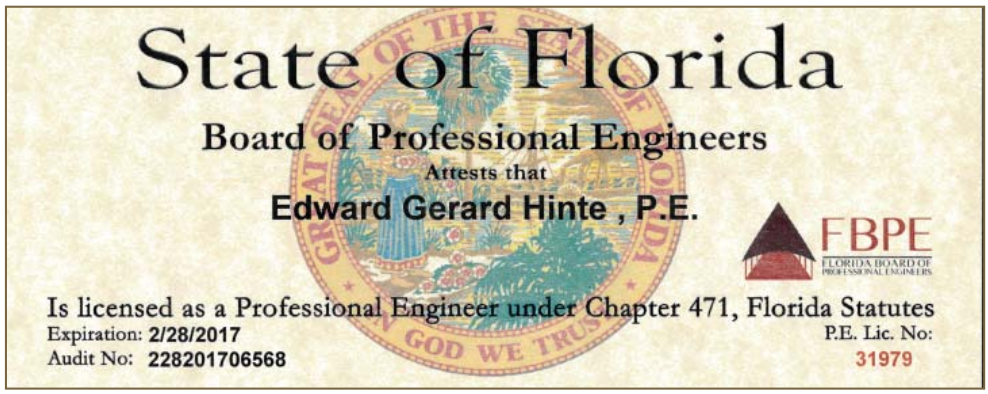
EAC - Oscar Rubio, PE Professional Engineering License

EAC - Sharmin Siddique, PE Professional Engineering License



EAC - Evelyn Rodriguez, PE Professional Engineering License

EAC - Edward Hinte, PE Professional Engineering License



EAC Reference

City of Weston
Director Public Works
Karl Thompson, PE
kthompson@westonfl.org
(954) 385-2600

City of Hallandale Beach
Asst Director of PW/City Engineer
Mariana Patiriciu
mpitiriciu@hallandalebeachfl.gov
(954) 457-3042

Subconsultant - Survey

301 East Atlantic Blvd. | Pompano Beach, FL 33060 | 954.788.3400

KEITH & ASSOCIATES, INC. consulting engineers

Keith and Associates, Inc. was incorporated as a Florida corporation in 1998. As a mid-size closely-knit firm, we provide civil engineering, construction management, comprehensive planning, landscape architecture, surveying and mapping and subsurface utility engineering services. The firm was founded on the principal of achieving success by combining the latest technology with client oriented business practices, and a staff of experienced and talented professionals.

The firm's civil engineering, CEI, surveying, planning, landscape architecture and construction management team of experts has extensive past and ongoing experience with both large-scale private and public sector projects. Our staff combines the technical work experience of over 80 professionals, each with an extensive working knowledge of local and regional projects. This convergence of experience has resulted in the development of a tremendous database of knowledge and information concerning local, past and ongoing projects, which is an invaluable asset to any company.

Keith and Associates, Inc. understands the importance of community involvement and the necessity of working with local, state, and federal agencies in a hands-on cooperative manner to build consensus and receive subsequent approval of highly sensitive projects. This approach represents an underlying philosophy of the firm which results in a quality product, with emphasis on scheduling and cost effectiveness through team oriented management and quality control.

DBE -- M/WBE Certifications
Keith and Associates, Inc. is certified as a Disadvantaged Business Enterprise and a Woman Business Enterprise with various public agencies.

FDOT Work Groups 3, 8, 10, 13, 15:
Keith & Associates, Inc. is certified with the Florida Department of Transportation in 3.1 Minor Highway Design, 3.2 Major Highway Design, 8.1 Control Surveying, 8.2 Design, Right of Way & Construction Surveying, 8.4 Right of Way Mapping, 10.1 Roadway Construction Engineering Inspection, 13.6 Land Planning/Engineering and 15.0 Landscape Architecture.

The professionals of Keith and Associates, Inc. continue to take great pride in the success of their undertakings. We look forward to the opportunity to provide you professional services.

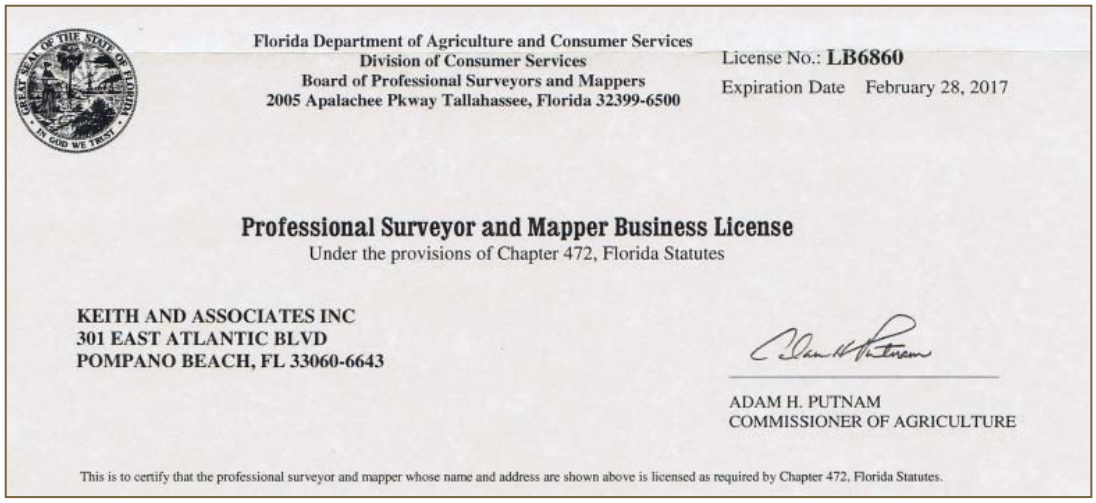
SURVEYING and MAPPING:
The expertise of our Land Surveying staff is evidenced by Ms. Dodie Keith-Lazowick, Mr. Mike Mossey, Mr. Eric Wilhjelm and Mr. Lee Powers' combined South Florida surveying experience of over 100 years. This experience has resulted in a tremendous database of knowledge and information. The ability to offer in-house surveying and mapping capabilities provides for a more comprehensive unified team. Services include boundary, topographic, control, wetland, mitigation, route, aviation, bathymetric, GIS, GPS, as-built, American Land Title and coastal surveys, legal descriptions, right-of-way mapping, design base sheets, title review, DTMs, differential leveling, construction stakeout, platting, expert witness surveying, and mapping services.

The firm maintains ten (10) full-time field crews to provide for our clients on an as-needed basis. Our entire field staff has received Maintenance of Traffic (M.O.T.) Safety Training currently required by the Florida Department of Transportation for work within public roadways. Keith and Associates, Inc. is also in full compliance with the current School Board Security Clearance Policies of finger printing and successful background checks in accordance with the State of Florida Jessica Lunsford Act for school access by workforce personnel. We understand the importance of these security requirements and are in 100% compliance for the safety of our staff and the public.

Keith and Associates, Inc. has placed a strong emphasis on quality surveying and mapping practices and procedures. This focus ensures that our surveying personnel are committed to exceeding your expectations.

SUBSURFACE UTILITY ENGINEERING (SUE): Subsurface Utility Engineering (SUE) provides accurate mapping of existing underground utilities, eliminating the need to "find out the hard way" that plotted utility information was inaccurate. Performed during the project design process, Subsurface Utility Engineering can help utility owners, designers, engineers and contractors avoid conflicts or project delays. To avoid these issues, many clients turn to Keith and Associates, Inc., a recognized leader in Subsurface Utility Engineering. Keith and Associates' staff has the expertise required to deliver accurate utility information needed by clients, engineers, contractors and designers to make informed decisions. Using Keith and Associates' SUE services will result in the enhanced accuracy of project designs and cost estimates by collecting and mapping underground utility data that was primarily unknown.

Keith and Associates Professional Surveying License



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.: **LB6860**
Expiration Date February 28, 2017

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

KEITH AND ASSOCIATES INC
301 EAST ATLANTIC BLVD
POMPANO BEACH, FL 33060-6643

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.

Keith and Associates Reference

City of Parkland - City Engineer 6500 Parkside Dr. Parkland, FL 33067 Sowande Johnson sjohnson@cityofparkland.org (954) 757-4144	City of Pompano Beach CRA 100 West Atlantic Boulevard, Room 276 Pompano Beach, Florida 33060 Horacio Danovich CIP Engineer Horacio.Danovich@copbfl.com (954) 786-7834

Keith and Associates Hourly Rates and Fees

For this project, Keith and Associates will provide survey and SUE. Hourly rates are not typical for this type of work. The fee is determined based on the specifics of the project to be surveyed. The survey fee is included in the *Price Proposal Form*.

Financials

Below is TB Landmark's financial information.

FINANCIAL INFORMATION OF TB LANDMARK CONSTRUCTION INC.

Annual Billings

2015	$21,822,493.91
2014	$17,859,887.14
2013	$19,634,390.05

Current Ratios Assets/ Liabilities

2015	2.52
2014	3.10
2013	2.48
2012	3.03
2011	2.57

Firms Past Experience

TB Landmark (TBL) has been a successful firm operating since 1999 within the state of Florida, performing underground utility construction of natural gas pipelines and water/wastewater conveyance systems; often utilizing horizontal directional drilling (HDD) construction. Through measured growth, our operations expanded into Georgia, South Carolina and North Carolina, we now operate regionally.

Over the years, our company has built a resume of increasingly complex project types and is uniquely positioned within the industry. TBL currently employs a fleet of 10 drill rigs ranging from 20,000 to 500,000 lbs of drilling thrust / pull-back force, including all support equipment such as mud recycling technology, vacuum trucks and locating tools. Our experience spans from installations of 8” to 36” diameter pipe to distances of 3700 LF in a single pull. Our drillers are adept at performing bores where we pull multiple pipe bundles through a single hole, like on the Pendola Point project at the Port of Tampa where we drilled under the Port Sutton Channel or Flemington Water Transmission & Force Main under the Cape Fear River in Wilmington, NC. We also just completed the installation of a new 30” diameter, 3000 LF reclaim water main under the Broward River in Jacksonville, FL; where GAI Consultants, Inc. was our Design/Build partner. Currently, TBL has been awarded contracts in Hillsborough County, FL to install the projects known as Madeira Beach 24” Force Main Subaqueous Crossing and the Long Bayou 14” Water Main Subaqueous Crossing. Because of the projects we’ve undertaken, not only does our Maintenance of Traffic (MOT) experience include roads, bridges and pedestrian walkways, but also shipping and naval channels and live aviation and port facilities.

Although TB Landmark is known for our specialty directional drilling expertise, we also have in house expert teams for all methods of pipeline installation, including open-cut and jack-and-bore methods. We are pipeline experts first and foremost, and have full time teams who specialize in various methods of pipeline installations. From large diameter directional drills under rivers to community water pipeline installation, we know and understand what it takes. You can feel assured that the experience our team brings, will yield outstanding results and the least impact to the community and all stakeholders.

The following pages are examples of some of our teams more recent similar projects:

District II Broward River Crossing Design/Build - Jacksonville, FL

TB Landmark Construction and GAI Consultants designed and constructed a reclaimed water main crossing under the Broward River for JEA. As a design-build team project, the team designed, permitted, and installed the reclaimed main via directional drill. An existing line, previously installed by others, had failed and could not be repaired. The new crossing was designed and constructed, consisting of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via a single directional drill within a defined and limited working easement.

The drill path crossed the river and two sets of CSX railroad tracks, with the path going more than 100 ft below the surface. Permitting included FDEP, Army Corps, SJRWMD, CSX Railroad and a City of Jacksonville noise variance. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River.

Contract Amount:	$ 3,165,000.00
Location:	Jacksonville, FL
Job Start/End:	April 2016 / June 2016
Owner Contact:	Jacksonville Electric Authority (JEA) 21 W. Church St. T-4 Jacksonville, FL 32202 Elizabeth DiMeo, PE (904) 665-8139 dimeea@jea.com

Sanford Reclaimed Water Interconnect With Volusia Co.

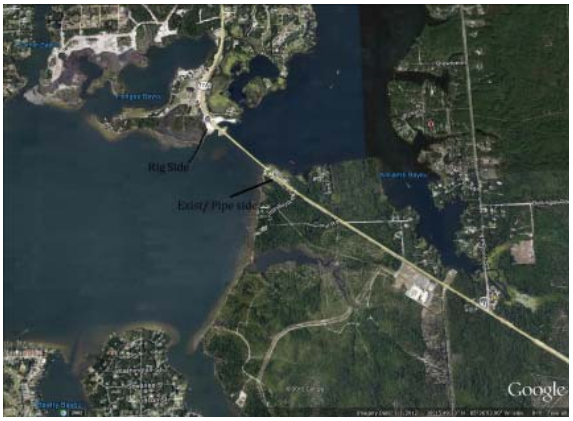
T B Landmark completed construction of a new reclaimed water main starting at Wayside Park in Seminole Co. and ending near the Lake Monroe Park entrance in Volusia Co. The reclaimed water main was 20" D.I. open cut construction along a 1400-ft (+/-) portion of the route, plus approximately 1350-ft of new 24" HDPE subaqueous directional bore construction, the majority of which crosses under the St. Johns River. The project also included a new above grade valve and antenna in Wayside Park and a new above grade interconnect (included a meter, control panels, and antenna) in Volusia Co.

Contract Amount:	$ 994,739.00
Location:	Sanford, FL
Job Start/End:	June 2014 / October 2014
Owner Contact:	City of Sanford 300 N. Park Avenue Sanford, FL 32772 Paul Moore (407) 688-5106 moorep@sanfordfl.gov

Hodges Bayou 30” Emergency Bore

Completed an emergency subaqueous bore consisting of 2,450LF 30” FPVC via HDD

Contract Amount:	$ 839,500.00
Location:	Lynn Haven, FL
Job Start/End:	January 2016
Owner Contact:	Preble-Rish, Inc. (Engineer) 203 Aberdeen Parkway Panama City, FL 32405 Cliff Lee (850) 252-5070 wilsonc@preble-rish.com



Flemington Water Transmission Main & Force Main, - Wilmington, NC

As a subcontractor to Hall Contracting, TB Landmark provided labor and equipment for two (2) subaqueous drill shots under the Cape Fear River. The first shot was performed to install 1,224 LF of 12” HDPE water main and the second shot included pull-back of 1,510 LF of twin 8” HDPE force main pipes through the same bore hole.

Contract Amount:	$ 682,245.61
Location:	Wilmington, NC
Job Start/End:	July 2015 / August 2015
Owner Contact:	Hall Contracting 6415 Lakeview Road Charlotte, NC 28269 K. Michael Hall (704) 598-0818 kmhall@hallcontracting.com

Pendola Point Reclaim Water & Force Main, Tampa Port Authority

TB Landmark installed 12,830LF of 12” reclaimed water line and 13,782LF of 8” wastewater force main from the City of Tampa’s Howard F. Current WWTP to the NexLube facility on Pendola Point. The job included a wire lined 2,770LF 30” subaqueous drill under the Port Sutton Channel.

Contract Amount:	$ 2,779,744.19
Location:	Tampa, FL
Job Start/End:	February 2013 / December 2013
Owner Contact:	Tampa Port Authority 1101 Channelside Drive Tampa, FL 33602 Dan Abbitt (813) 905-5013 dabbitt@tampaport.com

Tab 3 - Qualifications of Team

Build Project Manager - Martin E. Adams

Martin "Marty" Adams has been in the underground construction industry for 25 years and been with TB Landmark Construction since 2011.

He has overseen a plethora of projects ranging from utility work on military installations to active air & seaports and on municipal pipelines to investor-owned utilities. During his tenure, the company has undertaken a heavier role in large scale horizontal directional drilling; having set a new record for the longest single shot / pull (1780 LF) of 36" ductile iron pipe (DIP) in Pasco County in 2015. Recently, Marty was the project manager on the successful subaqueous installation of 2800 LF of 30" reclaim water main under the Broward River in Jacksonville, FL. This project was delivered by Design-Build contract in association with GAI Consultants, Inc.

Over the last two years, Marty has managed no less than 10 subaqueous directional drill shots in Florida, Georgia, South & North Carolina. His experience with various geological and geotechnical conditions across the southeastern United States make him an ideal candidate for consideration by the City of Fort Lauderdale in this project endeavor.

Major water bodies drilled include: Cape Fear River, Ashley River, Saluda River, Edisto River, Atlantic Intracoastal Waterway, St. Johns River, Broward River and many other bayou, creek and wetland crossings.

Subaqueous Project Experience

- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Subaqueous installation of approximately 2800 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River.
- Flemington Water Transmission Main & Force Mains - TB Landmark acted as the HDD contractor for Hall Contracting of Charlotte, NC. Our SOW included subaqueous installation a 1500 LF 12" water transmission main and twin 1225 LF 8" force mains by HDD beneath the Cape Fear River in Wilmington, NC.
- Bay County Alternate Water Main – Bay County, FL - Fusion of 36" PVC pipe material and 1500 LF subaqueous drill shot under Cedar Creek and the Gulf Power transmission line easement. TBL was a subcontractor of Phoenix Construction Services, Inc.
- Ashley River Subaqueous Crossing – West Ashley, Charleston, SC - 3,400 LF of 8" steel gas main installed under the Ashley River
- Mayport Naval Station – Jacksonville, FL - Installation of 1750 LF of 26" HDPE carrier conduit by HDD utilizing a reverse beach approach methodology in the St. Johns River. Carrier pipe contained 19 each of 3" internal HDPE conduits for underwater electro-magnetic measurement by the US Navy
- Pendola Point Reclaim Water Main & Force Main - Project included the installation of 12,830 LF of 16" reclaimed water line and 13,782 LF of 10" force main. The project required both lines to cross below the Port Sutton Channel where the HDD portion included a subaqueous crossing of approximately 2800 LF and both pipes were pulled back simultaneously through the same borehole

T B Landmark CONSTRUCTION, Inc.

Design Project Manager - Jules J. (Jay) Ameno, PE

Mr. Ameno specializes in designing water treatment and distribution systems, water distribution analyses and system evaluations, storm water utility development for public and private utilities, and wastewater collection, treatment, re-use, and disposal. As a project director, he has 40 years of experience in project and engineering group management.

Mr. Ameno also prepares grant documents, permit applications, reports, and construction contract documents. Mr. Ameno manages services for value engineering, plant evaluation, design, construction, project start up and alternate deliveries with design/build and progressive design/build. He also provides expert testimony and often provides QA/QC for internal project and directly for clients as a 3rd party reviewer

Project Experience

- Regional Reclaimed Water System Expansion Feasibility Study and Conceptual Design, City of Miramar, Florida. Managed the activities including large users identification, conceptual planning of Wastewater Reclaimed Facility expansion and budgetary level cost estimate and CIP for the reclaim system. The 30% conceptual design included expansion of the Dynasand filters from 4 MGD to 6 MGD and in the next phases to 12 MGD, specifying new pumps for the transfer pumps and distribution pumping facility, a new above ground storage tank, site piping, new reclaimed water mains including 2 – 2,700-foot HDD crossing of I-75 to connect to the western segments of the system.

- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Engineer of Record responsible for management, design and construction oversight for the installation of a reclaimed water main crossing underneath the Broward River. The crossing consists of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River.

- Polk City Water, Wastewater, and Reuse Water System Improvements, Polk City, FL. Managed the design and construction services for this project. This project included improvements to the City's Cardinal Hill Wastewater treatment Facility, wastewater collection system modifications including lift station rerouting and rehabilitations, decommission and demolition of the Mount Olive Wastewater Treatment Facility, installation of 6,580 linear feet of 8 inch reuse water main, and installation of 1,500 linear feet of 10 inch potable water main with an interconnect with the City of Lakeland.

- Halifax Subaqueous Water Main Crossing, City of Daytona Beach, FL. Project Manager for the preliminary alignment studies, design, permitting, and construction services. This project included installation of 4,500 LF of 30-inch replacement water main. This included a subaqueous crossing of the Halifax River, then continuing along Halifax Avenue to the International Speedway Boulevard. The subaqueous crossing pipe installed by horizontally directional drilling (HDD) across the Halifax River. And additional1,400-linear feet of 30-inch HDPE pipe was also installed using HDD along Halifax Avenue to avoid other buried utilities such as sewer, force mains, communication, and gas as well as minimize the impacts of the construction to the residents and local businesses.

District II Broward River Crossing Design/Build - Jacksonville, FL

TB Landmark Construction and GAI Consultants designed and constructed a reclaimed water main crossing under the Broward River for JEA. As a design-build team project, the team designed, permitted, and installed the reclaimed main via directional drill. An existing line, previously installed by others, had failed and could not be repaired. The new crossing was designed and constructed, consisting of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via a single directional drill within a defined and limited working easement.

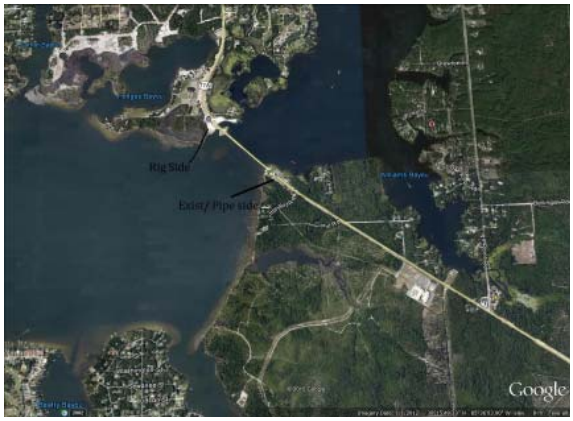
The drill path crossed the river and two sets of CSX railroad tracks, with the path going more than 100 ft below the surface. Permitting included FDEP, Army Corps, SJRWMD, CSX Railroad and a City of Jacksonville noise variance. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River.

Contract Amount:	$ 3,165,000.00
Location:	Jacksonville, FL
Job Start/End:	April 2016 / June 2016
Team:	Mike Unsworth – driller Martin Adams – PM Robin Thigpen - Principal Design Engineers: Jay Ameno, Scott Richards, Manjiang (MJ) Chen, Bingjie Zhao
Owner Contact:	Jacksonville Electric Authority (JEA) 21 W. Church St. T-4 Jacksonville, FL 32202 Elizabeth DiMeo, PE (904) 665-8139 dimeea@jea.com

Hodges Bayou 30” Emergency Bore

Completed an emergency subaqueous bore consisting of 2,450LF 30” FPVC via HDD

Contract Amount:	$ 839,500.00
Location:	Lynn Haven, FL
Job Start/End:	January 2016
Team:	Mike Unsworth – driller Martin Adams – PM RobinThigpen - Principal
Owner Contact:	Preble-Rish, Inc. (Engineer) 203 Aberdeen Parkway Panama City, FL 32405 Cliff Lee (850) 252-5070 wilsonc@preble-rish.com



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Contract Amount:	$ 994,739.00
Location:	Sanford, FL
Job Start/End:	June 2014 / October 2014
Team:	Martin Adams – PM Robin Thigpen – Principal PJ Peaden - driller
Owner Contact:	City of Sanford 300 N. Park Avenue Sanford, FL 32772 Paul Moore (407) 688-5106 moorep@sanfordfl.gov

Pendola Point Reclaim Water & Force Main, Tampa Port Authority

TB Landmark installed 12,830LF of 12" reclaimed water line and 13,782LF of 8" wastewater force main from the City of Tampa's Howard F. Current WWTP to the NexLube facility on Pendola Point. The job included a wire lined 2,770LF 30" subaqueous drill under the Port Sutton Channel.

Contract Amount:	$ 2,779,744.19
Location:	Tampa, FL
Job Start/End:	February 2013 / December 2013
Team:	Orlando Torres – driller Martin Adams – PM Robin Thigpen - Principal
Owner Contact:	Tampa Port Authority 1101 Channelside Drive Tampa, FL 33602 Dan Abbitt (813) 905-5013 dabbitt@tampaport.com

Flemington Water Transmission Main & Force Main, - Wilmington, NC

As a subcontractor to Hall Contracting, TB Landmark provided labor and equipment for two (2) subaqueous drill shots under the Cape Fear River. The first shot was performed to install 1,224 LF of 12" HDPE water main and the second shot included pull-back of 1,510 LF of twin 8" HDPE force main pipes through the same bore hole.

Contract Amount:	$ 682,245.61
Location:	Wilmington, NC
Job Start/End:	July 2015 / August 2015
Team:	Mike Unsworth – driller Martin Adams – PM Robin Thigpen - Principal
Owner Contact:	Hall Contracting 6415 Lakeview Road Charlotte, NC 28269 K. Michael Hall (704) 598-0818 kmhall@hallcontracting.com

Halifax River Subaqueous Water Main Crossing | Daytona Beach, Florida

GAI provided professional engineering services for preliminary design, final design, permitting, bid support, construction administration services for a 30-inch Halifax River Subaqueous Water Main Crossing project. An existing cast iron 70-year old line had failed, was temporarily replaced and needed in the near term to be replaced to ensure reliable potable water supply services. GAI prepared a preliminary design report with included recommended replacement alternatives, the consideration of horizontal directional drilling, water main sizing for future development needs and fire flows as well as the existing demands, material selection to guarantee long-term use of the line, site and routing selection to minimize the impact on existing utilities, and community impact considerations.

GAI attained a St. Johns River Water Management District Environmental Resource Permit, Florida Department of Environmental Protection construction permit, and a Florida Department of Transportation Right-of-Way Permit. For design GAI's survey department performed water-based land survey services as well as land survey services.

The subaqueous portion of pipeline was installed by horizontal directional drilling approximately 2,700-linear feet to eliminate impacts to wetlands and disturbance to the river bottom and to protect the pipe from underwater hazards such as anchor dragging. Approximately 400-linear feet of pipe was installed by open trench to connect to an existing cast iron pipeline on Beach Street. As a result of existing pipeline congestion, urban density, the presence of many existing businesses and residential areas, approximately 1,400-linear feet was installed by horizontal directional drilling along Halifax Avenue in-lieu of open trench construction and connecting to an existing pipe on International Speedway Boulevard.

Project Information

Highlights:

- Land Surveying
- Preliminary design
- Permitting
- Detailed design and construction bid document preparation
- Bid phase services
- Construction phase services

Contract Term: 2008- 2010

Client: City of Daytona Beach, Florida
Frank Van Pelt
386-671-8010

Design: $240,000

Construction: $1.6 million

Team Members Involved:
Jay Ameno, Steven Holmes, Manjiang (MJ) Chen, and John Murphy

gai consultants
transforming ideas into reality®

FLL Westside Transmission Main Improvements

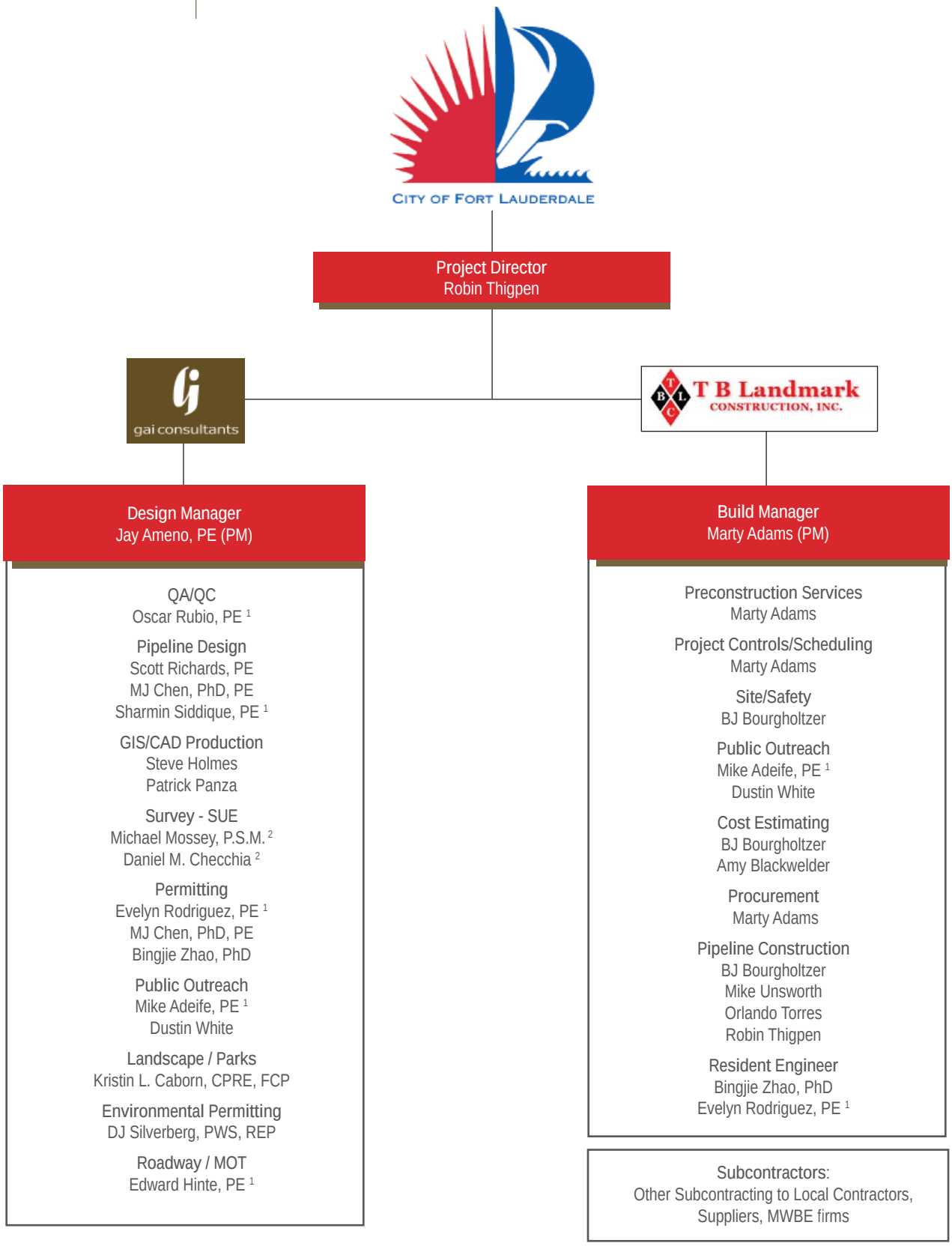
EAC was responsible for providing professional engineering design services for water transmission and distribution improvements within the airport service area and satisfying fire flow and potable demand needs. The new west side alignment includes a total of ultimately requires the design of a new segment of approximately 4,300 LF of 30-inch, 24- inch and 16-inch Ductile Iron and High Density Polyethylene Transmission water main pipeline. Included in this project is a 650 feet segment of 30-inch Pipeline Horizontal Directional Drilling (HDD) trenchless pipe construction required to traverse the pipeline across Lee Wagener Boulevard (SW 41st Court) a major heavy traffic roadway/thoroughfare corridor within the airport congested with major utilities and airport operational infrastructure.

Client:
Broward County WWS / Broward County AD

REPRESENTATIVE/CONTACT NAME & TITLE:
Carlos Hernandez, PE, Project Manager 3

ADDRESS/TEL/FAX/EMAIL:
2200 SW 45th Street, Suite #101
Dania Beach, FL 33312
(954) 359-2255
cahernandez@broward.org

TOTAL CONSTRUCTION BUDGET:
$1.8 Million



Subconsultants: 1 - EAC Consulting, 2 - Keith & Associates

Robin R. Thigpen

Program Director

TB Landmark owner, manager and qualifier with 25 years of experience in construction administration, financial oversight and quality control. Responsible as owner/qualifying agent for over $200 million dollars of completed construction projects. His primary focus has been on the trenchless technology market. Mr. Thigpen is responsible for the following:

- All Business Management activities – Financial, QC and Contracts
- Business Development Activities / Trade Shows / Networking
- Provide Vision & Direction for Natural Gas & Water Infrastructure divisions
- Qualify TB Landmark in FL as General, Utility & Excavation, Mechanical and Plumbing Contractor. Also qualify the company as General / Utility Contractor in Georgia, South Carolina and North Carolina

Project Experience

- Naval Air Station Jacksonville, FL Installed 11,684' of 10" DR 21 reuse main by open trench.
- Old Kings Road – Palm Coast, FL Installed 9,900' of 16" PVC by open cut, also completed 30" jack & bore casing and 2,667 LF of 18" by HDD
- Silverstar Road, Orlando, FL Installed approximately 7,500 LF of 18" PVC pipe for a force main along Silver Star Road from Regency Avenue to Mercy Drive. 6,800 LF was open cut, with additional pipe installed by jack and bore and HDD.
- Greenland Energy Center Lateral – Jacksonville, FL - 28.1 miles of 16" steel gas transmission main with test pressures of 2250 psig, installed by HDD and open lay methods.
- Jax to Fernandina Phase 2 & 3 – Fernandina Beach, FL - 31.8 miles of 12" steel gas transmission main to supply Rock Tenn Pulp & Paper facility. 19 miles of the total were installed via HDD. Test pressure 825 psig.
- Highway 170 – Bluffton, SC - Installation of 27,500 LF of new 10" steel gas main and retiring of 29,600 LF of same. Project also includes install of 4" and 6" pipe as well as tie-in of 3 regulator stations. Construction methodology includes both open cut and HDD under wetlands and to avoid grand trees.
- Mayport Naval Station – Jacksonville, FL - Installation of 1750 LF of 26" HDPE carrier conduit by HDD utilizing a reverse beach approach methodology. Carrier pipe contained 19 each of 3" internal HDPE conduits for underwater electro-magnetic measurement by the US Navy.
- Moon Lake – Pasco County, FL - SET NEW RECORD for the longest single pull (1780 LF) by HDD of 36" ductile iron pipe (DIP) force main – per American Ductile.
- Bay County Alternate Water Main – Bay County, FL - Fusion of 36" PVC pipe material and 1500 LF HDD shot under Cedar Creek and the Gulf Power transmission line easement. TBL was a subcontractor of Phoenix Construction Services, Inc.
- Flemington Water Transmission Main & Force Mains - TB Landmark acted as the HDD contractor for Hall Contracting of Charlotte, NC. Our SOW included installing a 1500 LF 12" water transmission main and twin 1225 LF 8" force mains by HDD beneath the Cape Fear River in Wilmington, NC.
- Pendola Point Reclaim Water Main & Force Main - Project included the installation of 12,830 LF of 16" reclaimed water line and 13,782 LF of 10" force main. The project required both lines to cross below the Port Sutton Channel where the HDD portion included a subaqueous crossing of approximately 2800 LF and both pipes were pulled back simultaneously through the same bore hole.

Registrations | Certifications

Florida General Contractor CGC 060694

Florida Underground Utility Contractor CUC 057226

Florida Mechanical Contractor CMC 1249354

Florida Plumbing Contractor CFC 1425930

Georgia Utility Contractor UC 301093

Georgia Utility Manager UM 001485

South Carolina Unlimited General Contractor G115615

North Carolina Contractor (Utilities) 74098

T B Landmark CONSTRUCTION, Inc.

Martin E. Adams

Build - Project Manager

TB Landmark dedicated manager with 25 years of experience in Civil & Underground construction; holding positions from operator to general manager

Project Experience

- Naval Air Station Jacksonville, FL Installed 11,684' of 10" DR 21 reuse main by open trench.
- Old Kings Road – Palm Coast, FL Installed 9,900' of 16" PVC by open cut, also completed 30" jack & bore casing and 2,667 LF of 18" by HDD
- Silverstar Road, Orlando, FL Installed approximately 7,500 LF of 18" PVC pipe for a force main along Silver Star Road from Regency Avenue to Mercy Drive. 6,800 LF was open cut, with additional pipe installed by jack and bore and HDD.
- Greenland Energy Center Lateral – Jacksonville, FL - 28.1 miles of 16" steel gas transmission main with test pressures of 2250 psig, installed by HDD and open lay methods
- Jax to Fernandina Phase 2 & 3 – Fernandina Beach, FL - 31.8 miles of 12" steel gas transmission main to supply Rock Tenn Pulp & Paper facility. 19 miles of the total were installed via HDD. Test pressure 825 psig
- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Installed approximately 3000 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River.
- Ashley River Subaqueous Crossing – West Ashley, Charleston, SC - 3,400 LF of 8" steel gas main installed under the Ashley River
- Highway 170 – Bluffton, SC - Installation of 27,500 LF of new 10" steel gas main and retiring of 29,600 LF of same. Project also includes install of 4" and 6" pipe as well as tie-in of 3 regulator stations. Construction methodology includes both open cut and HDD under wetlands and to avoid grand trees
- Mayport Naval Station – Jacksonville, FL - Installation of 1750 LF of 26" HDPE carrier conduit by HDD utilizing a reverse beach approach methodology. Carrier pipe contained 19 each of 3" internal HDPE conduits for underwater electro-magnetic measurement by the US Navy
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- Pendola Point Reclaim Water Main & Force Main - Project included the installation of 12,830 LF of 16" reclaimed water line and 13,782 LF of 10" force main. The project required both lines to cross below the Port Sutton Channel where the HDD portion included a subaqueous crossing of approximately 2800 LF and both pipes were pulled back simultaneously through the same bore hole.

Education | Affiliations

Hutchinson Community College, Hutchinson, KS

Florida Community College, Jacksonville, FL – Advanced Underground Construction

Estimating / Bid Strategy Course – ABC Association

Dale Carnegie Training Course

Agtek Training Course

Accident Reduction Training – Utility Contractor Association

One Minute Manager Training – Utility Contractor Association

NUCA Leadership for Crew Leaders

NUCA Board Member

T B Landmark CONSTRUCTION, Inc.

Dustin White

Public Outreach

TB Landmark dedicated business development director with over 15 years of strong outside sales, marketing and business development experience. Mr. White is proficient at multi-tasking and managing multiple responsibilities. He has excellent interpersonal relationships with internal / external customers and is adept in troubleshooting.

Experience

- Website development, redesign and maintenance
- Design marketing collateral and re-write copy for all publications, tangible or electronic
- Development of brand identity
- Member: FNGA – Florida Natural Gas Association
  - ◇ Board Member
  - ◇ Chair – Supplier Sub-committee
- Member: FEPA – Florida Energy Pipeline Association
- Member: Jacksonville Chamber of Commerce
  - ◇ Trustee Representative
  - ◇ Energy Committee
- Trade show attendance and representation
- Represent the company to private industry, investor-owned utilities as well as municipalities, engineering firms and other contractors
- Public outreach
- Lead generation, qualification and follow-up
- Implementation of internal QC “Client Report Card” for process improvement
- Perform market research, track opportunities and meet with potential clients or referral sources
- Compilation and oversight of company and other professional information in the design and submission of RFQ packages or teaming agreements
- Meet and collaborate with pipeline operators for proposed FERC regulated projects and unregulated distribution pipelines as well as operators of CNG and LNG facilities
- Obtained SBE qualification for TBL through the US Small Business Administration, relating to the System for Award Management utilized for government procurement
- Competent Person Certified – Trench Excavation & Shoring Safety
- DoD & TWIC Security Clearance

Education | Affiliations

Bachelor of Science: Business Administration – Management / Total Quality Management

Missouri Southern State University, Joplin, MO

Florida Natural Gas Association (FNGA) – Board Member and Supplier Chair

Florida Energy Pipeline Association (FEPA) – Member

Jacksonville Chamber of Commerce - Trustee Member and Energy Committee

T B Landmark CONSTRUCTION, Inc.

BJ Bourgholtzer

Site/Safety / Cost Estimating / Pipeline Construction

Mr. Bourgholtzer has a 20 year tenure in the construction industry, where he currently holds the position of Project Manager. Seeking to continue his personal growth in the business, his career has led from residential construction and customer service to high profile concrete restoration & MRO at power plants, to underground facilities construction, including horizontal directional drill (HDD) operational oversight. Patience, organization, teambuilding and communication are the management skills that have ensured Mr. Bourgholtzer's success.

Mr. Bourgholtzer is knowledgeable in both open cut trench and horizontal directional drill construction methods. Project sites under management have included Air Force & Coast Guard bases, City, County & FDOT right-of-ways, power plants and intra-coastal waterway (ICW) subaqueous crossings. He is familiar with the various geotechnical stratigraphy found in the southeastern US and is able to pre-plan tooling requirements and mitigation techniques accordingly. BJ is the team leader, accountable for safety and quality.

Project Experience

- Wet Weather Monitoring Project – Largo, FL Completion Anticipated July 2016
  As a sub-contractor, this project includes the installation of approximately 29,000 LF of 12" - 30" PVC force main by directional drill.

- Countryway Blvd Force Main, Hillsborough County, FL Completed May 2016
  This project included the installation of 5400 LF of new 16" diameter PVC sewer main by directional drill in the right-of-way of Countryway Blvd. The project will connect the 16" main at the West Waters Pump Station #1 into the manhole at Woodbay Drive. The project also included jack & bore construction and open cut for tie-ins.

- Fort Island Trail Force Main Replacement – Citrus County, FLCompleted December 2015
  Including the selected drill alternates, TB Landmark installed approximately 40,000 LF of PVC 4" and 8" force main by conventional trench and HDD construction. The project also included demolishing an old lift station and constructing a new one. Due to the high water table, this project required extensive dewatering activities for successful completion.

- Cape Canaveral Air Station Water Distribution Repair – Canaveral AFB, FL Completed May 2015
  Installation of 1,450 LF of fire main by directional drill. This project required precision at installation to avoid abandoned-in-place utility lines, live services and confidential communication and other lines buried on site by the government.

Education | Affiliations

Florida State College of Jacksonville -- General Education Coursework -- 1996-1999

Firefighter Training – January 2002-October 2002

Emergency Medical Care Training – April 2004 – July 2004

NUCA - North Florida

Mike Unsworth

Pipeline Construction - Directional Drilling

TB Landmark dedicated maxi-rig superintendent with 19 years of extensive experience with Horizontal Directional Drilling (HDD) operations for subsurface infrastructure. Vast knowledge of geotechnical conditions across the country and associated drill-mud technology, for rapid decision-making and quality production. Able to safely and efficiently operate drill rigs by the following manufacturers: Vermeer, American Augers, Ditch Witch & Universal.

Project Experience

- 5860 LF bore of 12" steel pipe – South Texas
- 4700 LF bore of 24" steel pipe – Indiantown, FL
- 3000 LF bore of 42" HDPE carrier pipe stuffed with 24" steel – Pullman, WV
- 1200 LF bore of 36" HDPE with compound radius – New Jersey
- 2600 LF bore of 30" fPVC – Edison, NJ
- 3000 LF bore of 30" HDPE – Blue Flame Pipeline – Parkersburg, WV
- 3200 LF bore of 24" HDPE across the San Antonio River, San Antonio, TX
- 1700 LF bore of 42" HDPE – Tampa Water – Odessa, FL
- 2700 LF bore of 24" steel under the Tuscawarez River, OH – Markwest Pipeline
- Numerous bores between 2000-4000 LF of various diameter pipe materials

Skills

- Operation and oversight of all technically significant Maxi Rig work utilizing Vermeer 330x500 and HRE 500 drill rigs
- Equipment experience ranging from 20,000 –1.1 million pounds of pull-back force
- Responsible for project assessment and layout
- Use of Vermeer Atlas Bore Planner
- Selection of which drilling & tracking technologies will handle project requirements
- Dispatching of all necessary equipment & tooling to support the drill
- Completed hundreds of large diameter bores utilizing Steel, DIP, HDPE & PVC materials
- Pulling multiple pipes (up to 4) through the same borehole simultaneously

Project Publications

- Fusing Pipe In Florida – A 2014 supplement to Trenchless Technology Magazine
  - ◇ 5,218 LF HDD pulled 60 feet under the ocean floor – Summerland Key, FL
  - ◇ 18" HDPE DR7 pipe material
- Pipe Considerations – December 2014 Trenchless Technology Magazine
  - ◇ 11,000 LF HDD broken into 3 shots of 30" fPVC casing pipe carrying four (4) bundled 8" conduits to house 230 kV power cables. All conduits and annular space encased with thermal grout

Recent Accomplishments

- Set a new single pull record of 1780 LF (per American Ductile) of 36" diameter ductile iron pipe through karst, very poor subsurface conditions in Pasco County, FL.

Training | Certifications

First Aid / CPR

AED Certification

Florida Class A CDL Driver License with Tanker & Hazmat endorsements

Hydrogen Sulfide Training for Oil/ Gas workers

OSHA 40 Certification

Confined space and other safety certifications

T B Landmark CONSTRUCTION, Inc.

Amy Blackwelder

Cost Estimating

Ms. Blackwelder is a multi-faceted Project Manager with extensive experience managing underground utility & heavy civil construction projects. Her talents have been applied in roadway construction and site development, from water & wastewater conveyance systems to natural gas vessels, production skids, processing plants and distribution pipelines. Ms. Blackwelder thrives in working with project analytics and execution, while remaining a critical link to her clients and simultaneously directing field activities. Ms. Blackwelder prefers an engaged relationship with all project stakeholders and thorough communication to ensure quality, safety and project milestones are met. Through action or oversight, she manages the submittal process and permitting as needed, executes contracts, issues purchase orders and coordinates superintendence of the jobsite. Her eye for detail and proactive nature are key to establishing objectives and problem solving.

Project Experience

- International Golf Pkwy Reclaimed Water & Force Main, St. Augustine, FL Completed May 2016 Acting as prime contractor, TBL undertook the installation of 13,700 LF of 24", 20" and 16" reclaimed water main and 7,900 LF of 20" & 16" force main. The pipeline was installed underneath Interstate 95 running east/west and along the on/off ramps at Exit 323 on I-95. Means and methods include both open trench and multiple drill shots, all pipe fusion and implementing extensive MOT for vehicular travel in the affected area.
- Deerfield Island Park Water & Fire Main, Deerfield Beach, FL Substantial Completion May 2016 Sitting just off busy Hillsborough Blvd on the west side of the intracoastal bridge, TBL set up a drill rig and made an 800 LF subaqueous shot to tie in an 8" fire and 3" force main to the island. Ancillary to the project, mobilization included barging tooling and equipment from land-side to island and coordination with other construction projects in the immediate vicinity.
- South Old Kinds Road Force Main, Palm Coast, FL Completed April 2016 As prime contractor, this project included the installation of 11,000 LF of 16" force main by open trench and 3,300 LF of 18" directionally drilled pipe. Also installed was a new master pump station, tie-ins, pigging and final system turn-over.
- Big Hill Rd Water Main Extension, Garden City / Savannah, GA Completed April 2016 As prime contractor, this project included the installation of 3,776 LF of 12" water main by directional drill to avoid wetlands, field changes and separate drill to avoid an unmarked gas line in the wetlands and one bore & jack of 24" steel casing for a road crossing.
- Lift Station 2030, Brunswick, St. Simons Island, GA Completed March 2016 As a directional drill subcontractor, TBL made multiple 3200 LF shots to install both 14" and 18" HDPE force main segments under a local creek and inside a tight right-of-way, replacing & upsizing the sole force main feeding the island.
- Doyle Road Reuse Main, Deltona, FL Completed July 2015 As a prime contractor, TBL installed 26,800 LF of 20" HDPE and 5,500 LF of 20" PVC reuse main winding through various neighborhoods and ROWs by directional drill with minimal open trenching. Construction included coordination with the local school to ensure installation occurred during holiday break, thus mitigating ingress/egress and MOT related matters.
- Silver Star Road Force Main, Orlando, FL Completed May 2014 As prime contractor, TBL installed approximately 7,500 LF of 18" & 20" PVC force main from Regency Ave to Mercy Drive along Silver Star Road in Orlando, FL utilizing horizontal directional drill (HDD), bore & jack with steel casing and open trench construction. The project also included extensive dewatering activities, contamination testing and full restoration.

T B Landmark CONSTRUCTION, Inc.

Orlando Torres

Pipeline Construction

Mr. Torres has a 16 year tenure with TB Landmark Construction where he holds the position of Drilling Supervisor. Throughout his career progression, he learned the intricacies of performing directional drilling in both the water conveyance and natural gas markets, installing hundreds of miles of pipe. Implementation of best practices are incorporated to mitigate impacts to surrounding utility assets, the natural environment and of equal importance, the safety of his crews and the general public. Mr. Torres has spent the majority of the last 12 months drilling for municipalities along the west coast of Florida and is very familiar with the differing geological & geotechnical conditions that could reasonably be encountered. In addition to overall horizontal directional drilling (HDD) supervision and/or operation, Mr. Torres is familiar with rig mechanics, wire-line and walk-over locating systems, drilling fluids, drill pipe & tooling, pipe fusion & welding, mud recycling systems and the use of mud motors, pumps and vacuum trucks/tankers all in support of drill rigs capable of up to 500,000 lbs of drilling thrust / pull-back force.

Project Experience

- Countryway Blvd Force Main, Hillsborough County, FL. Substantial completion May 2016 This project included the installation of 5400 LF of new 16" diameter PVC sewer main by directional drill in the right-of-way of Countryway Blvd. The project will connect the 16" main at the West Waters Pump Station #1 into the manhole at Woodbay Drive. The project also included jack & bore construction and open cut for tie-ins.
- Wet Weather Monitoring project, Largo, FL. Substantial completion expected July 2016 As a directional drill subcontractor, TB Landmark continues to install new force main ranging in diameter from 12" to 30". Once complete, the HDD installation will total approximately 28,000 LF and be comprised of 28 shots in karst soil conditions.
- Doyle Road Reuse Main, Deltona, FL. Completed July 2015 As a prime contractor, TBL installed 26,800 LF of 20" HDPE and 5,500 LF of 20" PVC reuse main winding through various neighborhoods and ROWs by directional drill with minimal open trenching. Construction included coordination with the local school to ensure installation occurred during holiday break, thus mitigating ingress/ egress and MOT related matters.
- Heathrow Wellfield Redirect, Greater Orlando MSA, FL. Completed July 2014 TB Landmark constructed a new raw water main between 3 Heathrow wells and the Markham Regional WTP. This project included approximately 17,000LF of 24", 30" and 36" raw water main along International Parkway from AAA Drive to the Markham Regional WTP. The 24" raw water main ties in to the existing 12" ductile iron water main located at Well 6. This job was installed by open cut, HDD and bore & jack. The HDD consisted of 5,400LF of 30" HDPE performed in 5 shots: 480LF, 700LF, 1,200LF 1,600LF and 1,640LF. TB Landmark performed the restoration of the area to original or better condition.
- Silver Star Road Force Main, Orlando, FL. Completed May 2014 As prime contractor, TBL installed approximately 7,500 LF of 18" & 20" PVC force main from Regency Ave to Mercy Drive along Silver Star Road in Orlando, FL utilizing horizontal directional drill (HDD), bore & jack with steel casing and open trench construction. The project also included extensive dewatering activities, contamination testing and full restoration.

Training | Certifications

First Aid / CPR

Florida Class A CDL Driver License with Tanker & Hazmat endorsements

Confined space and other safety certifications

T B Landmark CONSTRUCTION, Inc.

Orlando Torres

Project Experience (continued)

- Mayport Naval Station – Jacksonville, FL. Completed February 2014 As a specialty subcontractor TBL worked with both the US Navy and their prime contractor to install approximately 1700 LF of 24" HDPE casing pipe and pulled 19 individual 3" conduits inside for a strategic defense test system. This install was performed as a "reverse beach approach" utilizing HDD methods and our progress required strict adherence to river channel management, to never interfere with Naval vessel movement.
- Pendola Point Reclaim Water & Force Main – Port of Tampa, Tampa, FL. Completed December 2013 TB Landmark installed 12,830LF of 16" reclaimed water line and 13,782LF of 10" wastewater force main from the City of Tampa's Howard F. Current WWTP to the NexLube facility on Pendola Point. The job included a wire-line guided 2,800 LF 30" subaqueous drill under the Port Sutton Channel where both pipes were pulled simultaneously through the same hole.
- Collins Ave Sanitary Force Main Improvements - Village of Bal Harbour, FL. Completed October 2011TB Landmark provided all labor, materials and equipment necessary for constructing a new sanitary sewer force main for Bal Harbour Village. This job included extensive MOT and dewatering throughout the project limits which stretched over three municipalities, Bal Harbour, Surfside and Miami Beach. 11,000 LF of 16" HDPE and 450 LF of 12" HDPE sanitary force main were installed via directional drill. 750 LF of 16" DIP sanitary force main was installed by open lay methods. The new sanitary force main was connected to an existing lift station and to an existing 36" CIP force main. Most of this job was installed down the middle of Collins Avenue in a high-traffic, pedestrian and tourist area.

Jules J. (Jay) Ameno, PE

Design - Project Manager

Mr. Ameno specializes in designing water treatment and distribution systems, water distribution analyses and system evaluations, storm water utility development for public and private utilities, and wastewater collection, treatment, re-use, and disposal. As a project director, he has 40 years of experience in project and engineering group management.

Mr. Ameno also prepares grant documents, permit applications, reports, and construction contract documents. Mr. Ameno manages services for value engineering, plant evaluation, design, construction, project start up and alternate deliveries with design/build and progressive design/build. He also provides expert testimony and often provides QA/QC for internal project and directly for clients as a 3rd party reviewer

Project Experience

- Regional Reclaimed Water System Expansion Feasibility Study and Conceptual Design, City of Miramar, Florida. Managed the activities including large users identification, conceptual planning of Wastewater Reclaimed Facility expansion and budgetary level cost estimate and CIP for the reclaim system. The 30% conceptual design included expansion of the Dynasand filters from 4 MGD to 6 MGD and in the next phases to 12 MGD, specifying new pumps for the transfer pumps and distribution pumping facility, a new above ground storage tank, site piping, new reclaimed water mains including 2 – 2,700-foot HDD crossing of I-75 to connect to the western segments of the system.
- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Engineer of Record responsible for management, design and construction oversight for the installation of a reclaimed water main crossing underneath the Broward River. The crossing consists of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River.
- Polk City Water, Wastewater, and Reuse Water System Improvements, Polk City, FL. Managed the design and construction services for this project. This project included improvements to the City's Cardinal Hill Wastewater treatment Facility, wastewater collection system modifications including lift station rerouting and rehabilitations, decommission and demolition of the Mount Olive Wastewater Treatment Facility, installation of 6,580 linear feet of 8 inch reuse water main, and installation of 1,500 linear feet of 10 inch potable water main with an interconnect with the City of Lakeland.
- Halifax Subaqueous Water Main Crossing, City of Daytona Beach, FL. Project Manager for the preliminary alignment studies, design, permitting, and construction services. This project included installation of 4,500 LF of 30-inch replacement water main. This included a subaqueous crossing of the Halifax River, then continuing along Halifax Avenue to the International Speedway Boulevard. The subaqueous crossing pipe installed by horizontally directional drilling (HDD) across the Halifax River. And additional1,400-linear feet of 30-inch HDPE pipe was also installed using HDD along Halifax Avenue to avoid other buried utilities such as sewer, force mains, communication, and gas as well as minimize the impacts of the construction to the residents and local businesses.

Education

M.S. Civil Engineering 1977, University of New Hampshire

B.A. Environmental Engineering 1975, New England College

Registrations/Certifications

Professional Engineer, FL No. 31049

Skills

Water Treatment and Distribution Systems

Storm Water Utilities

Wastewater Collection, Treatment, and Disposal

Utility Master Planning

Utility Rate and Cost of Service Studies

Utility System Studies and Assessment

Affiliations

American Water Works Associations (AWWA),

Water Environment Federation, Florida Section

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Project Experience (continued)

- Downtown Water Main Improvements, Phases I, II & IIA, City of Lake Wales, FL. Managed the design, permitting and construction services for this project. This project extended trunk potable water mains from the City's downtown water treatment plant to provide adequate fire service to the downtown area, and to provide enhanced potable water and fire service to the western side of the City. GAI attained funding for this project from the Florida Small Cities CDBG grant for this project. Preliminary design involved routing alternative, size and material selection. Project included two horizontal directional drills under the CSX railroad tracks and Florida Department of Transportation (FDOT) Scenic Hwy. 27. GAI attained Florida Department of Environmental Protection construction permits, Central Rail Road crossing permit(CSX), and Florida Department of Transportation Right-of-Way for crossing an historic highway. The final design involve survey from GAI's survey department, utility conflict resolution around aging water and gas lines, open trench installation, and Fusible PVC horizontal direction drilling installation. The project was completed in three phases.

- Town of Palm Beach Water Main Replacement Program, City of West Palm Beach, FL. Provided technical review during the design phase and managed services during construction including certifying the city's infrastructure replacement. The project included two intra-coastal crossings(2,700'-horizontal directional drill of 24" HDPE), re-pumping facilities, and 85,000 feet of water main.

- Westward Annexation Transmission Mains, City of West Palm Beach, FL. Managed design and construction of 12 miles of 24-inch water and force mains, which cross four canals, 3 - bore and jacks under the Florida Turnpike and provides an inter-connect with the City of Royal Palm Beach.

- Facility Plan for Water, Wastewater, and Reuse Water Utilities, City of Miramar, FL. Managed a consolidated facility plan for water, wastewater, and reuse water utilities, conducted hydraulic model analyses to evaluate the existing infrastructures, provided physical evaluations of facilities, prepared a proposed Capital Improvement Plan for a 20-year planning period.

- C-12 Canal Force Main and Re-pump Facility, City of Plantation, FL. Managed design and construction of a 16-inch 1.5 mile force main and modification of an abandoned treatment plant structure to a pumping facility. This project provided a needed interconnect between the City of Plantation and the Broward County system.

- Water Master Plan and Hydraulic Model, City of West Palm Beach, FL. Managed the effort to hydraulically model the distribution system, physically verify the results, and perform a surge analysis on the system. The client was trained on the operation of the model to enable them to incorporate new developments into the system and also model new scenarios.

- Regional Wastewater Treatment Plant, City of Plantation, FL. Managed the Phase I and II wastewater treatment plant design and construction program that included five submersible pump stations, three miles of 30-inch force main, a 16.4 mgd master pump station, two deep injection wells, and 15 mgd wastewater treatment plant.

- Seminole County Water Supply Planning, St. Johns River Water Management District, FL. Performed Quality Control (QC) review for the study and prepared the treatment cost estimates. The estimates included various new technologies for treatment of surface water.

- Vero Beach Highlands Water Transmission Mains, General Development Utilities, Indian River County, FL. Managed design and construction of four miles of 12- to 24-inch water main which included three canal crossings.

- Miramar Eastern Water Treatment Plant Improvements, Miramar, FL. Project Manager responsible for facility design improvements. As a design-build project, this project includes renovation of the East Water Treatment Plant which upgrades the facility to a 6 MGD nano-filtration membrane treatment plant, replacing the existing lime softening system built in 1955. Additionally, the project includes building upgrades, pre-treatment, high service pumping, chemical feed systems, a new ground storage tank, new raw water wells with transmission pipeline and an off-site deep injection well for concentrate disposal. This includes raw water and concentrate disposal transmission pipeline, totaling 8,000 LF in 12-24" pipeline.

- Glades Wastewater Treatment Facility, City of Port St. Lucie, FL. Performed Quality Control (QC) reviews, and assisted in start-up of the 6 mgd phase. Performed QC reviews, specification of equipment and permitting of the 12 mgd phase of the project. Wrote the operations plans for the re-use facilities and permitted the first customers.

M. Scott Richards, PE

Pipeline Design

Mr. Richards specializes in water and wastewater utility engineering. He is a senior project manager/design engineer with 13 years of experience in water and wastewater utilities. His design experience includes potable/reclaimed water booster/high-service pump stations and well head design; water filtration systems; design of ground storage tanks and storage reservoirs; design and permitting of potable/reclaimed water transmission/distribution systems; and design and permitting of waste collection systems, submersible pump stations, and force mains. Mr. Richards has a significant amount of pipeline design projects, including three water distribution projects more than 40,000 LF each in the past three years.

Project Experience

- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Project Engineer responsible for management, design and construction oversight for the installation of a reclaimed water main crossing underneath the Broward River. The crossing consists of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River.

- Pembroke Road Area Water Improvements, City of Hollywood, FL. Project engineer responsible for design, permitting, and construction services for a new water line in the City of Hollywood between Pembroke Road to Hollywood Blvd and between South 21st Ave and US1. This includes engineering services for survey, design and preparation of construction documents, regulatory assistance, bid and award assistance, and construction phase services for the installation of approximately 58,000 LF of 4-inch, 6-inch, 8-inch water, and 12-inch mains. This primarily residential area previously consisted of "back-of-lot" water services with small galvanized and AC water mains. The new design replaces the existing water distribution system with new "curb-side" pipeline, which includes new service stub-outs and fire hydrants. Customer services/meters will be transferred/relocated to the new curb-side pipeline. As part of the pipeline replacement, all neighborhood roads and impacted major intersections will be repaved. This project was completed as part of a Citywide Water Main Replacement Program, identified by the City of Hollywood Department of Public Utilities in their Capital Improvement Program.

- Taft/Sheridan Street Area Water Improvements, City of Hollywood, FL. Project engineer responsible for design, permitting, and construction services for a new water line in the City of Hollywood between Taft and Sheridan Street and between State Road 7 and N. 66th Avenue. This includes engineering services for survey, design, and preparation of construction documents, regulatory assistance, bid and award assistance, and construction phase services for the installation of approximately 44,200 LF of 4-inch, 6-inch, 8-inch water, and 12-inch mains. This primarily residential area previously consisted of "back-of-lot" water services with small galvanized and AC water mains. The new design replaces the existing water distribution system with new "street-side" pipeline, which includes new service stub-outs and fire hydrants. Customer services/meters will be transferred/relocated to the new pipeline. As part of the pipeline replacement, all neighborhood roads and impacted major intersections will be repaved. This project was completed as part of a Citywide Water Main Replacement Program,

Education

B.S. Mechanical Engineering, 2002, University of Florida

Registrations/Certifications

Professional Engineer, FL No. 71505

Skills

Water Treatment and Distribution Systems

Wastewater Collection and Pump Stations

Utility Master Planning

Hydraulic Modeling

SCADA/Control Systems

Utility Rate and Cost of Service Studies

Utility System Studies and Assessment

Asset Management

Affiliations

American Water Works Associations (AWWA), Florida Section, Public Affairs Council (PAC), Chair

Water Environment Federation, Florida Section

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Project Experience (continued)

identified by the City of Hollywood Department of Public Utilities in their Capital Improvement Program.

- MCO South Automated People Mover Utilities, Greater Orlando Aviation Authority, Orlando, FL. Project engineer responsible for utilities design, permitting, and construction services for the South Automated People Mover (APM) at the Orlando International Airport (MCO). This project includes the beginning phases of the South Terminal for the airports expansion, which will include a rail terminal facility, hotel, parking garage and 64 additional airline gates. The Civil work (roadway/drainage/utilities) includes planning and design for the expansion, with utilities consisting of approximately 17,500 linear feet (LF) of 16-inch water main, 3,300 LF of 6-inch force main, 2,000 LF of 10-inch reclaim main and 2 wastewater pump stations. Utility master planning/ hydraulic modeling was conducted using facility flow data based projected passenger data.

- Market Street Distribution Upgrades, City of Lake Wales, Lake Wales, FL. Engineer responsible for support of utilities design, permitting, and construction services for water main upgrades. This project included the replacement/upgrade of approximately 5,000 ft of water pipeline along 1st Street, Bullard Avenue, Lime Avenue and Oak Avenue within the City's system. The new pipeline primarily consisted of a 12 inch water main to improve system hydraulics while replacing aging infrastructure. The project consisted of open cut and jack and bore for installation, along with reconnection of existing utility services.

- Mims Water System Pipeline Improvements, Brevard County Utilities, Brevard County, FL. Project manager responsible for design, permitting, and construction services for a water line upgrades for Brevard County Utilities within the North Brevard (Mims) utility service area. This includes engineering services for survey, design, and preparation of construction documents, regulatory assistance, bid and award assistance, and construction phase services for the installation of approximately 51,000 LF of 4-inch, 6-inch, 8-inch water, and 12-inch mains. This service area consists of primarily residential area which includes a variety of pipelines installed in different eras, including PVC, Ductile Iron, and Asbestos Cement (AC). The service area mainly consists of AC water mains, which are in need of replacement. The new design replaces the existing water distribution system with new pipeline, which includes new services and fire hydrants. The design simplifies the pipeline layout, with improved connectivity, looping and flow capacity. This project will be completed in Phases as part of the County's Capital Improvement Program.

- US 17-92 Interchange at SR 436, City of Casselberry, FL. Project manager responsible for design and permitting services of the utilities as part of the design of a new single-point urban interchange (flyover interchange) which will be solicited as a design-build project. Multiple existing utilities are impacted by the new interchange design. Provided additional design/update to a previously completed utility relocation design services for the City of Casselberry water and wastewater utility system. This includes final construction plans for approximately 6,500 feet of new water and wastewater pipeline. The new design includes multiple jack and bore crossings, with additional casings for future reclaimed and wastewater connections. The utility design was closely coordinated with the roadway design team to minimize conflicts, utilizing survey data, right of way maps, and subsurface utility engineering to determine the most feasible route and avoid multiple conflicts. In addition, the project design was expanded to include additional water main connection for improved system performance and reliability.

- Druid Hills Water Main Upgrades, Seminole County Environmental Services Department (SCESD), Seminole County, FL. Project Engineer responsible for hydraulic modeling and support of the design, permitting, and construction services for water main replacement/upgrades in the Druid Hills sub-division. This includes engineering services for survey, design and preparation of construction documents, regulatory assistance, bid and award assistance, and construction phase services for the installation of approximately 18,000 LF of 6-inch, 8-inch water, and 12-inch mains. This primarily residential area previously consisted of approximately 18,000 lineal feet of 1.5, 2, 3, and 4 inch galvanized, AC, and PVC water main pipe that needs replacing. The upgrade will replace the existing pipe with 8-inch piping, primarily installed by horizontal directional drilling (HDD). In preliminary design, a hydraulic model was developed for the system to improve the hydraulics and provide a fire flow backbone to the system. The team also coordinated hydraulic model results for a new water supply inter-connection point with SCESD's interconnect design consultant.

Manjiang Chen, PE, Ph.D.

Pipeline Design / Permitting

Dr. Chen specializes in water and wastewater system evaluation and design. She provides design of process and transmission systems, including permitting, report development, master planning planning and hydraulic modeling. She is adept in a variety of pipeline construction methods, and has led in design and calculations for large diameter pipeline projects including horizontal directional drill for subaqueous crossings.

Project Experience

- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL. Project Engineer responsible for design and permitting for the installation of a reclaimed water main crossing underneath the Broward River. The crossing consists of approximately 3000 linear feet of 30-inch HDPE pipeline, installed via directional drill underneath the River. This pipeline will allow for reclaimed water to be transferred from JEA's District II WWTP to commercial customers on the east side of the Broward River. Duration: 2015-2016.
- Halifax Subaqueous Water Main Crossing, City of Daytona Beach, FL. Project Manager for the preliminary alignment studies, design, permitting, and construction services. This project included installation of 4,500 LF of 30-inch replacement water main. This included a subaqueous crossing of the Halifax River, then continuing along Halifax Avenue to the International Speedway Boulevard. The subaqueous crossing pipe installed by horizontally directional drilling (HDD) across the Halifax River. And additional1,400-linear feet of 30-inch HDPE pipe was also installed using HDD along Halifax Avenue to avoid other buried utilities such as sewer, force mains, communication, and gas as well as minimize the impacts of the construction to the residents and local businesses.
- Downtown Water Main Replacement Program Phase I & II, City of Lake Wales, Florida. Project included two 8" FPVC horizontal directional drills under CSX railroad tracks and Florida Department of Transportation (FDOT) Scenic Highway 27. Drills were approximately 300 feet long and 20 foot deep. Responsible for design, permitting, project specifications, and construction services.
- Miscellaneous Improvements at Water Treatment Plant and Wastewater Treatment Plant in the Tindall Hammock Soil and Irrigation Conservation District, Davie, Florida. Prepared a preliminary design report and bidding specifications for improvements and modifications at the WTP and WWTP. After the construction of these improvements, these facilities will comply with the FDEP's rules and regulations.
- Preliminary Design Report for Miscellaneous Improvements in Water, Wastewater, and Reuse Water System, Polk City, Florida. Prepared a PDR and permitting application documents for necessary improvements and modifications in water, wastewater, and reuse water system in the City. Prepared bidding documents for the construction of these improvements.
- Design and Bidding Services for Water Main Improvements Funded by CDBG, Polk City, Florida. Assisted Project Manager on preparation of design and bidding documents for the CDBG water main project in the downtown of Polk City.

Education

Ph.D. Civil Engineering (Environmental Engineering emphasis) 2004, Clarkson University

M.S. Environmental Engineering 2000, Tongji University, China

B.S. Environmental Engineering 1997, Tongji University, China

Registrations/Certifications

Professional Engineer,
FL No. 67576, NC No. 039025,
SC No. 29890

Skills

Water and Wastewater System Design

Stormwater Management

Utility Valuation

Affiliations

American Water Works Associations (AWWA)

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Kristin L. Caborn, CPRE, FCP

Parks Planning

Kristin Caborn has 16 years of extensive parks and recreation management and planning experience involving managing several multimillion-dollar parks and recreation projects, and providing master plan implementation and phasing plans services for public sector clients. Ms. Caborn thoroughly understands the municipal park planning process through her experience as a previous Parks and Recreation Director, where she was actively involved in all aspects of park planning, including extensive public involvement and facilitation. She is a Certified Park and Recreation Executive, Florida Crime Prevention Through Environmental Design (CPTED) Practitioner, and was named to Engineering New Record Southeast Top 20 under 40 in 2015.

Project Experience

- City of North Miami Beach Parks and Recreation Master Plan in North Miami Beach Florida. Provide the first-ever parks and recreation master plan for the City of North Miami Beach, including inventory collected utilizing GIS, level of service and walkability analysis using GIS, extensive public input, recommendations and CIP planning. The master plan will be used to fulfill the Commission on Accreditation of Parks and Recreation Agencies (CAPRA) planning requirement. Ms. Caborn is the project manager for this project.
- South Lake County Regional Park in Lake County, Florida. GAI's Community Solutions Group is responsible for a multi-phase 141+ acre Regional Park project. Phase 1: Park Master Plan, Phase 2: Design and Construction Bid Documents, and Phase 3: Construction Administration Support. South Lake Regional Park Master Plan includes multi-purpose fields, baseball, softball, and little league fields, cricket fields, playground area, dog park, pavilions, path system and trailhead, exercise stations, canoe/kayak launch, sports and path lighting, maintenance storage building, restroom/concession buildings, and signage.
- Jacksonville Aquatic Center Study in Jacksonville, Florida. The city of Jacksonville is considering building a new aquatic center that would offer recreation, therapy, instructional, fitness and competitive programs in the community. The new aquatic center would provide an outlet for all age groups, including senior fitness, teaching children to swim, fostering the development of healthy lifestyles, and strengthening the fabric of the community. This project's goal was to identify aquatic needs for the First Coast High School market area and present potential facility spaces that can meet those needs. To accomplish this goal, extensive research was conducted through community outreach, evaluation of existing area providers, research area demographics and identification of potential user groups. The final study included options for programming, cost estimates, potential partnerships, opinion of revenue, opinion of operating expenses and determination of cash flow.
- City of West Palm Beach Parks and Recreation Master Plan in West Palm Beach, Florida. Ms. Caborn assisted with the public input and recommendations, including anticipated CPTED review and education for parks and recreation staff.
- Martin County Parks and Recreation Master Plan in Martin County, Florida. Ms. Caborn lead the inventory team in collecting data at over 200 County parks, assisted in public input, and launched the project's MindMixer (now MySidewalk) site.

Education

M.S. Recreational Studies, University of Florida, 2000

B.S., Recreation (Honors), University of Florida 1997

Registrations/Certifications

Certified Park and Recreation Executive (CPRE), National Recreation and Park Association, Florida (11160)

Crime Prevention Through Environmental Design (CPTED) Practitioner (FCP)

Affiliations

Certified Park and Recreation Executive (CPRE), National Recreation and Park Association, Florida (11160)

Crime Prevention Through Environmental Design (CPTED) Practitioner (FCP)

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Bingjie Zhao, Ph.D., EIT

Permitting / Resident Engineer

Dr. Zhao specializes in water treatment processes, treatment facility layout, capacity calculations, pump station design, pipeline layout, hydraulic analyses, planning, and documentation for facility operations and maintenance. She is experienced in utility planning, hydraulic modeling and system operations. Additionally, she implements permitting with Water Management Districts and local permitting agencies.

Project Experience

- Broward River Crossing Reclaimed Directional Drill, JEA, Jacksonville, FL Permit application with Florida Department of Environmental Protection(FDEP), Army Corps of Engineers and CSX.
- Water/Wastewater Improvements Project Phase I, Tindall Hammock Irrigation and Soil Conservation District (THISCD), FL Construction service for a $ 4M wastewater improvement project. Activities include coordination with contractor and engineer, review of submittals, construction site observations and field report, and progress meeting.
- 10-Year Water Supply Facilities Work Plan Update, City of Boynton Beach, FL. Updates include population projections, water demand projections, water supply sources and treatment capacities analysis, and water supply projects identifications.
- Regional Reclaimed Water System Expansion Feasibility Study and Conceptual Design, City of Miramar, FL Activities include large users identification, conceptual planning of Wastewater Reclaimed Facility expansion and budgetary level cost estimate in two phases.
- Water and Wastewater System Capital Improvement Projects for Fiscal Years 2015 to 2032, City of North Miami Beach, FL Activities include evaluated the existing water and wastewater systems, regulation and compliance reviews, demand flow projections and capacity analysis, proposed water/wastewater systems capital improvements projects and engineer's options of projects cost.

Education

Ph.D. Environmental Engineering 2007, University of Central Florida

M.S. Environmental Engineering 2004, Harbin Institute of Technology

B.S. Water Supply and Drainage 2001, Harbin Institute of Technology

Skills

Computer Aided Design and Water Treatment Facilities

Auto/Water CAD, SAS, Sigma Plot, ArcGIS

Affiliations

American Water Works Association

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D. J. Silverberg, PWS, REP

Environmental

Mr. Silverberg, a Professional Wetland Scientist since 1995, has been conducting ecological consulting studies since 1987. He has conducted preliminary land use assessments, wetland delineations, and listed species evaluations for over 600 sites throughout Florida (FL), and wetland jurisdictional delineations for local, state, and federal regulatory programs. Permit applications for all levels of the U.S. Army Corps of Engineers (USACE) Permit Program, the FL Department of Environmental Protection (DEP), and various FL Water Management District Environmental Resource Permit programs.

Mr. Silverberg specializes in client and regulatory agency interaction, technical writing, wetland delineation, plant identification, and project management. He provided technical review and guidance to the National Aeronautics and Space Administration (NASA) and Kennedy Space Center contractors regarding compliance with state and federal wetland and protected species regulatory programs. He has also identified and mapped plant communities, including seagrasses, through photointerpretation and field investigation. Mr. Silverberg conducted habitat mapping analysis and prepared a restoration plan for the Indian Trails Water Control District in Palm Beach County, FL, and designed and supervised implementation of a 557-acre wetland creation, restoration, and enhancement project in the upper St. Johns River floodplain west of Melbourne, FL.

Project Experience

- Stanton Solar Farm. Provided wetland and listed species permitting support to Regenesis Power and Duke Energy
- Veterans Memorial Bridge Replacement. Provided ecological consulting services to Volusia County and the design team as part of the design and permitting of a high-rise bridge to replace the existing bascule bridge in Daytona Beach, Florida.
- Interstate 95 Design/Build – State Road 44 to US Highway 92. Provided ecological consulting and environmental permitting services.
- Consumers/Lake Hayes Water Transmission Main, Phase 2. Provided wetland and listed species permitting support to Seminole County Environmental Services for the extension of potable water mains within a Florida Power & Light power transmission corridor in the city of Oviedo, Florida.
- Turnpike/Plantation Force Main and Reclaimed Water Main. Provided listed species permitting support to the city of Leesburg, Florida for the extension of a wastewater force main and a reclaimed water main within a Florida Power Corporation power transmission corridor in the city of Leesburg.
- Central Disposal Facility, Off-site Mitigation Area, Brevard County, FL. Prepared a multi-faceted wetland mitigation plan for the restoration and enhancement of 554 acres of converted St. Johns River floodplain, and then conducted long-term monitoring of the success of the plan through data collection, analysis and compilation, coordination with regulatory agencies, and preparation of monitoring documents.
- Environmental Impact Statement (Draft) on Improving the Regulatory Process in Southwest FL. Prepared NEPA process document for the USACE, Jacksonville District, to document the likely long-term ramifications of instituting a multi-tiered regulatory review process for federal permit actions in a 1,000,000± acre study area situated in Lee and Collier Counties, FL.

Education

MS, Biological Sciences (Ecology), 1988, Florida Institute of Technology

BS, Biological Sciences (Marine), 1985, Florida Institute of Technology

Registrations

Professional Wetland Scientist (PWS): #000272

Environmental Professionals of Florida: Registered Environmental Professional (REP): #239

Authorized Gopher Tortoise Agent, Florida Fish & Wildlife Conservation Commission, #GTA 09-00004-D, March 2009

Skills

Ecology and Biology

Wetland Delineation

Land Use Assessments

MICHAEL ADEIFE, PE

Michael Adeife, P.E. has more than 24 years of combined design / management of engineering and construction experience. His engineering experience is extensive and yet diverse and encompasses storm water/hydraulics design and management, water resources, utilities, urban planning and civil design. Mr. Adeife's proven skills as a certified professional engineer / manager, his diverse engineering experience, and his commitment to delivery of quality, on schedule and budget controlled projects have propelled his success and continue to drive his passion to perform to the highest level of service.

RELEVANT EXPERIENCE

YEARS OF EXPERIENCE: 24

Education
1996 Master of Science in Civil Engineering – Florida International University

Licenses
Professional Registration: Florida – 56094

FLL Westside Watermain (30-inch, 24-inch and 16-inch DIP) Improvements – Broward County WWS
Engineer of Record responsible for consists of providing professional engineering design services for the preparation of construction documents for water transmission and distribution improvements required for maintaining the Fort Lauderdale Hollywood International Airport and related facilities within the airport service area and satisfying fire flow and potable demand needs. The new west side alignment includes a total of ultimately requires the design of a new segment of approximately 4,300 LF of 30-inch, 24-inch and 16-inch Ductile Iron and High Density Polyethylene Transmission water main pipeline. Included in this project is a 650 feet segment of 30-inch Pipeline Horizontal Directional Drilling (HDD) trenchless pipe construction required to traverse the pipeline across Lee Wagener Boulevard (SW 41st Court) a major heavy traffic roadway/thoroughfare corridor within the airport congested with major utilities and airport operational infrastructure. The design scope consisted of extensive utility investigations, utility coordination, utility design, roadway improvements.

Three Island Reuse Pipeline Design – City of Hallandale Beach
Principal in Charge responsible for providing design, permitting and construction administration of approximately 3,700 LF of 8 inch diameter pressurized reuse irrigation main from Wiley Street to Three Island Blvd along Diplomat Parkway and Atlantic Shores Blvd. The connection of the proposed irrigation pipeline is to an existing 24 inch reuse transmission main at Wiley Street and will terminate at Joseph Scavo Park. The irrigation main will be installed by a combination of open cut installation and horizontal directional drilling. The horizontal directionally drill segment occurs below the DeSoto Waterway Canal (a navigable canal within the City). This pipeline connects to underground storage tanks and a pump station at the park located on Three Island Blvd prior to providing connections for irrigation services. The project runs through both City of Hollywood and City of Hallandale Beach. The pump station is designed to provide pressurized reuse water after withdrawing from the storage tanks. The flows received will be monitored and capped at 250,000 gpd. The project will be designed in multiple phases so that the reuse water can be stored in tank (s) and supplied as the City of Hallandale Beach's demand increases.

Ravenswood Road 16-inch Force Main Improvements - Broward County WWS
Engineer of Record responsible for the engineering services required for the planning, design and development of construction drawings for proposed improvements that Broward Water and Wastewater Services required as part of

ongoing roadway improvements to Ravenswood Road. This project included 2500 LF of 16-inch Diameter Force Main Pipe and a Jack & Bore Trench-less Section covering 300 LF.

12-inch Reclaimed Water, Water & Sanitary Sewer - Palm Bay Utilities / FDOT District 5
Project Manager responsible for the utility relocation design and plans preparation services for two existing 12 inch lines running across the Turkey Creek Canal. The design included 8" Sanitary Sewer, 8" Reclaimed water Pipe and 8" Potable Water Main. All new mains were designed as DIP were designed to allow for suspension from the new structure spanning across Turkey Creek. The proposed water main and sewer force main required connection to existing asbestos concrete pipe material which necessitated structural design of special collars to facilitate the tie-ins.

Minnehaha Circle and Bucher Road Water Main Upgrades, - City of Maitland, FL
Principal in Charge responsible for the design and installation of new approximately 2,000 linear feet of 6-inch Water Main along Minnehana Circle and approximately 700 linear feet along Bucher Road. These water mains were designed in response to the City's desire to increase fire flows to this small neighborhood and increase domestic water volume and pressure. This system was design and constructed using directionally drilled fusible HDPE. Small entry and receiving pits were constructed at strategic locations in order to minimize the disturbance to the mature oak trees throughout the neighborhood. The project included the following specific assignments: Site Investigation, Data Collection and Verification, Water main Horizontal and Vertical Alignment Design, Construction Plans and Specifications, Permitting and Approvals and Limited Construction Support Services.

12-inch Watermain Upgrades & Master Meter Design – Town of Medley, FL
Project Manager and Design Principal for the civil engineering services required for the design 3000 linear feet of a new12 inch diameter potable distribution water main to service the Town from a Miami Dade WASD connection point along North West South River Drive. This project included service connections to all homes and properties along the project corridor from NW 72 Avenue to NW 74th Street. The project also included looping of the new main to existing mains located within cross streets. Project was required as part of the improvements to North West South River Drive and required extensive coordination with the pavement and drainage improvements proposed for the corridor as well as coordination with the Traffic Control schemes specified for the project.

QN-63 GOB Neighborhood Improvements – Miami Dade WASD
Engineer of Record responsible for the planning and design of the water distribution system for approximately 3,500 LF of 8" and 12" DIP water main within several residential streets and service connections to homes in the Town of Miami Lakes. The project required developing a Basis of Design Report to evaluate various design route alternatives.

Biscayne Point Neighborhood Infrastructure Improvement - City of Miami Beach, FL
Engineer of Record for the Biscayne Point Neighborhood Improvement Project that encompasses targeted potable water distribution and roadway/streetscape improvements. The project requires the design of approximately 19,000 LF of pressurized DIP water mains ranging in size from 8-inch to 16-inch and service connections to homes of more than 500 residents in Miami Beach.

Water Main Replacement Project, Johnson St to Taft St from N 66th Av to N 76th Terr. - City of Hollywood
Principal in Charge responsible for the design, permitting, bid & award and construction administration services for water main replacements and service connections between Johnson St (excluding segment between NW 72nd Av and N. 76th Terr.) to Taft St (excluding segment between NW 72nd Av and NW 66th Av) from N. 66th Av to N. 76th Terr. The improvements involved relocation of the existing water meters from back to the front of houses, new service connections, upsizing 6 inch and 8 inch pipes to 8 inch and 12 inch PVC (C-900) pipes respectively for a total of 76,800 linear feet. The project involved coordination with the City for future connections, compliance with jurisdictional agencies and fire safety requirements for the installation of hydrant within residential area. The project also included utility trench installation, pavement milling and resurfacing, marking and signage.

OSCAR L. RUBIO, PE

Mr. Rubio is an experienced Civil engineer with over 35 years of experience in water treatment, water distribution, wastewater treatment, wastewater collection and transmission, water reuse, and utility operations both private and municipal. He is experienced in all aspects of water, wastewater and general civil engineering provides a sound, broad base to develop policies and procedures required to ensure quality control and client satisfaction. Mr. Rubio has managed the design, permitting and installations of various municipal and industrial processes; designed, permitted, completed and performed start-up operations for municipal, industrial water and wastewater systems to meet EPA/FDEP and local environmental regulations. These included Miami Dade County, the City of Pompano Beach, Private Utilities, The City of Sunrise, BP Oil Company, Fortune 500 Companies such as Suave Shoes in Miami Lakes, Bertram Yacht, private clients such as Largo Honda, Lexus of North Miami, Lexus of Pembroke Pines.

RELEVANT EXPERIENCE

NW 170th St (36-Inch Diameter) Transmission Main Improvements I-75 Crossing At NW 170 Street- Miami Dade Water and Sewer Department

Project Manager was responsible for designing the micro-tunneling portion of the 36-inch water main that traversed underneath I-75. The micro-tunneling consisted of 580' of 52-inch Perma-lok steel casing with spacers with the 36-inch ductile iron pipe inside. Mr. Rubio was the Sr. Engineer for this project and was responsible for the design and permitting of the water main.

Three Island Reuse Irrigation and Pump Station, City of Hallandale Beach

QA/QC responsible for design of approximately 1,115 LF linear feet of new 8-inch PVC (C-900) reuse irrigation main which will tap into the existing 24-inch irrigation main located at the intersection of Wiley Street and Diplomat Parkway and run south along Diplomat Parkway, extending reuse irrigation water from City of Hollywood into the City of Hallandale Beach. The proposed main is then connected to a proposed storage tanks and pump station at the termination point to store reuse water and provide constant pressure to the reuse main that will stem out from the pump station. The project included electromagnetic flowmeter and an actuated control valve to monitor and control the flow as not to exceed the agreed upon maximum allowable volume in gallons per days (GPD) between the two Cities. The proposed project boundary is from Wiley Street to Three Island Blvd along Diplomat Parkway and Atlantic Shores Blvd. The proposed reuse main traversed from City of Hollywood to City of Hallandale Beach. The scope also included permitting, bid & award services and limited construction administration services. The construction method included both open cut and Horizontal Directional Drilling (HDD). HDD method was used to cross the Desoto Waterway Canal on Atlantic Shores Blvd.

YEARS OF EXPERIENCE: 35 +

Education:

1974 Bachelor of Science in Environmental Engineering & Urban Sciences – Florida International University

1972 Associate of Arts in Pre-Engineering Miami-Dade Community College

Associations/Memberships:

ASCE/EWRI (Fellow Member)
AAEE (BCEE)
AWWA (Life Member)
FWEA (Life Member)
FES (Life Member)
NSPE (Life Member)
AAAS (Member)

Professional Licenses:

Professional Engineer: Florida -# 24190

Rehabilitation of 54-inch PCCP Wastewater Transmission Pipeline (SW 280th Street/SW 112th Ave-SW 248th St/SW 107th Ave)- Miami Dade Water and Sewer Department

Project Manager responsible for the design of rehabilitation improvements relating to the rehabilitation of 13,000 linear feet of 54-inch diameter PCCP transmission force main commencing at SW 280th Street and SW 112th Avenue; which then proceeds in a northerly direction on SW 112th Avenue to SW 268th Street then proceeding east on SW 268th Street to SW 107th Avenue and then proceeding north on SW 107th Avenue to SW 248th Street. The project also includes a 100 linear feet segment of aerial crossing over the Biscayne Canal (C-102), north of SW 268th Street along 107th Avenue. This project is located in the southern area of Miami Dade County and is required as part of the EPA Consent Decree program.

New 54-Inch PCCP from SW 280th St. and SW 127th Ave. To SW 248nd St. and SW 107th Ave.- Miami Dade Water and Sewer Department

Project Manager responsible for the design of 18,000 linear feet of 54-inch diameter PCCP transmission force main in three phases required to expand WASD's transmission system in Southern area of Miami Dade County. The first phase encompasses an alignment that starts at SW 280th Street and SW 127th Avenue and then proceeds northerly on SW 127th Avenue to SW 268th Street then East on SW 268th Street to SW 112th Avenue proceeding North on SW 112th Avenue to SW 248th Street. This phase is approximately 18,000 linear feet. The second phase of this design involves a new 54-inch diameter PCCP force main connecting at end of Phase 1 at SW 112th Avenue and SW 248th Street; the proceeding easterly on SW 248th Street to SW 107th Avenue connecting to existing 54-inch force main. This segment is approximately 2,650 linear feet. This project is located in the southern area of Miami Dade County and is required as part of the EPA Consent Decree program.

Munisport Landfill Closure, Miami-Dade County Public Works and Waste Management (PWWM)

Miami- Dade County and the City of North Miami currently have a Grant Agreement in place to fund the closure and remediation of the City's Munisport Landfill. Mr. Rubio was the Senior Engineer assigned to this project and was responsible for the technical expertise surrounding the Groundwater Remediation through a Class I Well for closure of the landfill. Both the groundwater remediation and the closure of the landfill required regulatory agency compliance for various permits, compliance with the Comprehensive Landfill Closure Plan and Schedule of Values as well as opinions on the probable construction costs and close coordination with PWWM.

54-Inch West Flagler Street Contingency Plan Interceptor- Miami Dade Water and Sewer Department

Project Manager Contingency plan describing various lift station shut-downs, tanker pick-ups, master booster station re-routing of flows, repair methods and public information protocol in the event of a break Plan was successfully implemented on Thursday, March 10, 1994, when the 54-inch force main broke at the intersection of West Flagler St. and 67th Ct. in Miami-Dade County, FL.

North Andrews Neighborhood Improvement District Force Main Extension- Broward County Water and Wastewater Services

Project Engineer Consisted of 20-inch diameter ductile iron P401 lined force main extension connecting the manifold of smaller force mains (8-, 12-, 16- and 18-inch DIP/P401 lined) from the North Andrews Neighborhood NE 58 Street and N Andrews Avenue to the regional pump station at NW 66 Street and west of NW 2 Avenue. Route included open cut installation through the neighborhood streets from NE 58 Street to NE 4 Avenue to the southernmost west bound lane of Cypress Creek Road and along Cypress Creek Road (NE 62 Street) to NE 1st Avenue under the I-95 overpass, north on NE 1st Avenue to N. Andrews Avenue, then north on Andrews Avenue to NE 66 Street and west along NW 66 Street to west of NW 2 Avenue and tied to the regional pump station.

SHARMIN SIDDIQUE, P.E.

Ms. Siddique has over 21 years of experience in municipal, site development and infrastructure projects. She is a proven leader in managing civil engineering projects located in diverse environments and has managed full project life-cycles from planning to closeout. She has also been a technical lead for water, wastewater, stormwater and site development projects.

RELEVANT EXPERIENCE

YEARS OF EXPERIENCE: 21

Education:
1995 Bachelor of Science in Civil Engineering - Northern Arizona University, Flagstaff, AZ

Registrations/Certifications:
Florida Engineering Society (FES)

Professional Licenses:
Professional Engineer: Florida -# 65562, NY #086910-1, IL #062.061428

Three Island Reuse Irrigation and Pump Station, City of Hallandale Beach
Project Manager responsible for providing design, permitting and construction administration of approximately 3,700 LF of 8 inch diameter pressurized reuse irrigation main from Wiley Street to Three Island Blvd along Diplomat Parkway and Atlantic Shores Blvd. The connection of the proposed irrigation main is to an existing 24 inch reuse transmission main at Wiley Street and will terminate at Joseph Scavo Park. The irrigation main will be installed by a combination of open cut installation and horizontal directional drilling. The horizontal directionally drill segment occurs below the DeSoto Waterway Canal (a navigable canal within the City). This pipeline connects to underground storage tanks and a pump station at the park located on Three Island Blvd prior to providing connections for irrigation services. The project runs through both City of Hollywood and City of Hallandale Beach. The pump station is designed to provide pressurized reuse water after withdrawing from the storage tanks. The flows received will be monitored and capped at 250,000 gpd. The project will be designed in multiple phases so that the reuse water can be stored in tank (s) and supplied as the City of Hallandale Beach's demand increases.

4km long 600 mm HDPE DR 11 Pipe Rehabilitation Project, City of Moose Jaw, SK, Canada
Design, Tender Package Preparation and Construction Administration. Project scope included engineering analysis and report, new alignment, design drawings, construction method and preparation of tender documents. The project involves both Directional Drilling and Open Cut installation method. The pipeline is aligned through City Streets and goes under the golf course, CPR, CNR and Moose Jaw River. The Pipe replaces the existing 500 mm pipeline that connects the existing Pump House at the northwest location of the City of Moose Jaw and the existing pipeline at the Lillooet Street, at the south end of the City.

60" DIP Force Main Feasibility Study and Design – Miami-Dade County Water and Sewer Dpt.
Project Manager and Engineer of Record for 60" DIP Force Main from South Miami Heights Water Treatment Plant at SW 117th Street and US1 to 72" Pipe at Old Cutler Road. The scope of services included analysis of alternative routes to transport reject water flows for approximately 2.5 miles and design of the pipe for the selected route. In detail, the feasibility scope involved evaluation of minimum impact on existing storm drainage systems, existing underground utilities, existing traffic systems, low impact on business and/or public facilities, minimum ROW or easement acquisition, accessibility and ease of future maintenance, project cost, maximum additional improvements, and minimum public agency coordination. The design scope included the selection of the pipe material, pipe layout

configuration, construction method, connection detail, plan & profile, maintenance of traffic plan, pavement restoration, relocation of utilities for the selected route, all related permitting, cost estimates and specifications. The design involved both open cut and micro tunneling construction methods. The design route involved crossing through major roadways such as Turnpike and US1.

Water Main Replacement Project and Reuse Main Project- Hollywood Blvd to Johnson Street from FL Turnpike to N. 72 Avenue and Between Johnson and Taft Street from FL Turnpike to N. 66th Avenue & Reuse Main for N 64 Avenue from Taft Street to Johnson Street and Johnson Street from N 66 Avenue to Route 441- City of Hollywood

Project Manager responsible for the design, permitting, bid & award and construction administration services for water main replacements and service connections. The improvements involves relocation of the existing water meters from back to the front of houses, new service connections, upsizing 6 inch and 8 inch pipes to 8 inch and 12 inch PVC (C-900) pipes respectively for a total of 110,957 linear feet. The scope also includes design, permitting, bid and award and construction services for 12 inch Reuse Main for N 64 Avenue from Taft Street to Johnson Street and Johnson Street from N 66 Avenue to Route 441. The total length of reuse main to be installed in this project is 6,600 feet. The project Involves coordination with the City for future connections, compliance with jurisdictional agencies and fire safety requirements for the installation of hydrant within residential area. The project also includes utility trench installation, pavement milling and resurfacing, marking and signage.

Water Main Replacement Project, Johnson St to Taft St from N 66th Av to N 76th Terr. - City of Hollywood

Project Manager responsible for the design, permitting, bid & award and construction administration services for water main replacements and service connections between Johnson St (excluding segment between NW 72nd Av and N. 76th Terr.) to Taft St (excluding segment between NW 72nd Av and NW 66th Av) from N. 66th Av to N. 76th Terr. The improvements involved relocation of the existing water meters from back to the front of houses, new service connections, upsizing 6 inch and 8 inch pipes to 8 inch and 12 inch PVC (C-900) pipes respectively for a total of 76,800 linear feet. The project involved coordination with the City for future connections, compliance with jurisdictional agencies and fire safety requirements for the installation of hydrant within residential area. The project also included utility trench installation, pavement milling and resurfacing, marking and signage.

Design Build Services for Replacement of Watermains and Service Conversions in the Shenandoah Area (Phase A) – Miami-Dade Water and Sewer Department, City of Miami

Engineer of Record responsible for the design, permitting and construction administration services for the Design Build Project DB13-WASD-03. The scope of work includes installation of new 8-inch water mains and service conversions for the area enclosed by SW 8th street to SW 16th Street between SW 27th Avenue and SW 17th Avenue in Shenandoah Area within City of Miami. The project area is primarily a residential area and has Shenandoah Elementary School. This is Phase A of two Phases undertaken by Miami Dade Water and Sewer Department (M-DWASD). The project consists of replacement of existing undersized and deteriorated DIP water mains to improve system pressure, provide fire flow protection and water service conversions. The estimated total length for the proposed 8-inch DIP water main is 39,000 linear feet and for 6-inch DIP water main is 1,100 linear feet. The water main was designed to keep the installation depth to a minimum as permitted by M-DWASD to minimize dewatering. The allowable pipe deflection was also utilized to reduce number of fittings to reduce cost. The watermain was designed to be installed by open cut method. The project includes 761 water service conversions from back of property to front of property and approximately 1,160 water service connections. The scope also included pavement milling and resurfacing for the full width of the roadway, pavement marking and signage.

EVELYN L. RODRIGUEZ, P.E.

Ms. Rodriguez has 6 years of experience in general civil engineering design. Her latest design experience has potable water main and sanitary sewer extensions as well as storm sewer design for private and public projects. She has experience on site development. She has been the engineer in pump station design and has assisted in project cost estimates and construction administration services. She has worked on rehabilitation of runways as well as airport water and wastewater master plans.

RELEVANT EXPERIENCE

Biscayne Boulevard (SR-5) 12-inch Forcemain Extension Improvements – City of North Miami; North Miami, FL.
Civil designer responsible for the design of a 12-inch force main, technical specifications and Engineer's probable cost of construction. The project includes the replacement of an existing portion of City of North Miami 8-inch forcemain with a new 12-inch forcemain, connecting existing private pump stations to the new 12-inch forcemain and redirecting the flow by connecting to the City's existing 12-inch forcemain to meet regulatory, adequate capacity and hydraulic criteria. The project locations are: NE 105 Street, Biscayne Boulevard, NE 107 Steet, East Dixie Highway and NE 16 Avenue.

Watermain Replacement Program- 72nd Avenue to 76th Avenue from Polk Street to Johnson Street – City of Hollywood; Hollywood, FL.
Civil designer responsible for the design of an 8-inch watermain replacements and service lines connections between Johnson Street to the north, Polk Street to the south, N.72 Avenue to the east and N. 76th Avenue to the west within public right of way. The project includes water meter relocations from the back to the front of each property, upgrading existing hydrants and designing additional hydrants, new service line connections, pavement restoration, signage and stripping, technical specifications and Engineer's probable cost of construction.

YEARS OF EXPERIENCE: 6

Education:
2013 Master of Science in Engineering Management – Florida International University

Licenses
Florida Professional Engineer #78548
Fortera Certification

Registrations/Certifications:
Member - American Society of Civil Engineers
Member – Chi Epsilon
Member- Tau Beta Pi
Member- National Society of Collegiate Scholars

Watermain Replacement Program- Johnson Street to Taft Street from N 66th Avenue to N 76 Terrace – City of Hollywood; Hollywood, FL.
Engineer responsible for the design of an 8-inch watermain replacements and service lines connection between Johnson Street (excluding segment between NW 72nd Avenue and N. 76th Terrace) to Taft Street (excluding segment between NW 72nd Avenue and NW 66th Avenue) from N 66th Avenue to N 76 Terrace within public right of way. These improvements are necessary due to the age, frequent repairs and material of the existing pipes. The estimated total length of water mains to be installed in this project is 76,800 feet. In addition, the relocation of the existing meter from back to the front of houses (behind the sidewalk) as well as compliance with jurisdictional agencies and fire safety requirements. The project will also include pavement resurfacing, marking and signage, technical specifications and Engineer's probable cost of construction.

Design Build Services for Replacement of Watermains and Service Conversions in the Shenandoah Area (Phase A) – Miami-Dade Water and Sewer Department; City of Miami, FL.
Engineer responsible for the design of a new 8-inch water mains and for the service conversion. The project consists of the replacement of the existing undersized and deteriorated water mains in order to improve system pressure and provide fire flow protection, and for water service conversions (transfer of services from the rear to the front of properties) in the Shenandoah Area (Phase A) of the City of Miami. The estimated total length for 8-inch water mains is 39,000 linear feet and 1,100 linear feet for 6-inch ductile iron water main. The project includes 761 water service conversions from rear of property to front of property and approximately 1,160 water services. The project will also include pavement resurfacing, marking and signage, technical specifications and Engineer's probable cost of construction.

8-inch Watermain (N 56 Ave, from Douglas St. to Stirling Road to N 58 Avenue) - City of Hollywood, Hollywood, FL Civil designer responsible for the construction administration services for the project. She did site inspections and pipe pressure testing. Scope of work included the design of approximately 5,000 LF of 8-inch DIP water main within the City of Hollywood. The project limits are from the intersection of N 56th Avenue and Douglas Street, north to Douglas Street and Stirling Road and west to N 58th Avenue and Stirling Road. The project impacted both the City's and FDOT's right of way and as such, designing to both entities' standards was required as well as permitting with both agencies. Services also included Bid and Award and Construction Administration.

FIU Central Utilities Backflow Preventer– Florida International University (FIU); Miami, Fl. Civil designer with responsibilities that include site layout, utility relocation of potable water and opinion of probable cost. She was also responsible for site inspections during the installation. This project includes the design of a backflow preventer to be in compliance with the utility owner and permitting agencies.

Omni Area Utility Improvements – City of Miami; Miami, Fl. Civil designer responsible for the upgrade design of the water distribution system for most of the major streets within the Omni Neighborhood. The project involves the design of approximately 18,000 LF of 12" & 16" water mains.

Central Romana Corporation; La Romana, Dominican Republic. Engineering Intern, responsible for drawing structures and plan and profiles for new construction projects. Visited many construction sites and provided aid with the measurements and verification of calculations, which included computing areas of structural planes.

NW 96th Street– Town of Medley; Medley, FL.
Designer for providing professional engineering design services for the preparation of construction documents for drainage improvements along NW 96th Street from SW River Drive to NW 87th Avenue. The scope of work included design of exfiltration trenches, pavement markings, permitting and opinion of cost.

NW South River Drive– Town of Medley; Medley, FL.
Designer for preparing a conceptual design for a neighborhood improvement along NW South River Drive and on Medley East Riverside neighborhood in the Town of Medley. The scope includes designing sidewalks, road improvements, signs, pavement markings and an opinion of cost.

SW 66th Street Improvements Phase II – City of South Miami; Miami, Fl. Civil designer responsible for the beautification of SW 66th Street by milling and resurfacing the road, installing new sidewalks, adding bulb-outs, landscaping and decorative light poles. Some drainage work is also included, such as the addition of a 25 feet exfiltration trench.

EDWARD HINTE, P.E.

Mr. Hinte has more than 42 years of experience in the planning, design and construction of transportation facilities ranging from expressways and interstate highways to roadway improvements of municipal streets, arterials and intersections. Mr. Hinte's experience encompasses all phases of urban and rural highway design, including vertical and horizontal geometry, design location studies, right of way, drainage design, utility relocation design, MOT design, signage and pavement marking design, and cost estimates. He is Engineer of Record for projects involving resurfacing, restoration and rehabilitation of roadways. Mr. Hinte provides independent quality assurance and control on transportation related projects, as well as civil projects with transportation components. Mr. Hinte is an institution when it comes to transportation design in South Florida.

RELEVANT EXPERIENCE

YEARS OF EXPERIENCE: 42

Education:
1973 Bachelor of Science in Civil Engineering, Lafayette College

Registrations/Certifications:
Member - American Society of Civil Engineers

Licenses
Professional Engineer: Florida -- 31979

FDOT D6: SR-968 / SW 1st Street from SW 17th Avenue to SW 6th Avenue – Miami-Dade County, FL
Engineer responsible for plan preparations for reconstruction and milling and resurfacing of SW 1st Street in Miami-Dade County. Reconstruction of a highly urbanized roadway section though Little Havana in the City of Miami from SW 17th Street to SW 6th Street (MP0.791 – MP1.954).

FDOT 6: SR 823/Red Road (2.0 m) - Miami-Dade County, FL
Engineer for the reconstruction of the 2.0-mile section of a six lane urban facility. Responsibilities included geometric design of roadway features including drainage, traffic control, and signing & pavement markings.

FDOT 6: Districtwide Roadway Plans Review - Miami-Dade County, FL
Engineer responsible for the plans review of roadway plans including traffic control plans, computation books and cost estimates.

FDOT D4: I-95/ SR9 and Spanish River Boulevard/ SR 800 Interchange – Palm Beach County, FL
Engineer responsible for Horizontal & vertical geometry in development of 30% concept plans. The project includes widening of I-95 for approx. 3.5 miles from just north of Glades Rd to Congress Ave. It also includes design of a 2 1/2 level interchange at Spanish River Blvd & I-95 in Boca Raton, FL.

FDOT 4: I-95/SW 10th Street Interchange - Broward County, FL
Engineer for the design of a three leg trumpet type grade separated interchange at the juncture of I 95 and SW 10th Street. Problems encountered included bridging an environmentally sensitive canal in the NW Quadrant, and fitting two ramps into the SE Quadrant without disturbing an existing street and thus not requiring any ROW acquisition.

FDOT 7: US 41/SR45 - Pasco County, FL
Engineer for the design of the reconstruction of a 4.5-kilometer section of a six-lane urban/four lane rural divided facility. Responsibilities included geometric design of roadway features, traffic control, and signing & pavement markings and signalization designs. Responsibilities also included post design services.

FDOT 4: I-595 Express/ Florida Dept. of Transportation – Broward County, FL
Engineer responsible for alternative technical concepts, plans review and design coordination for the P3 Design-Build improvements to the I-595 corridor in Broward County, Florida. Project consisted of 10.5 miles of widening, additional auxiliary lanes, Reversible Toll Lanes, new bridges & Ramps, Sound Barriers & Greenway.

MICHAEL MOSSEY, P.S.M.
Senior Project Surveyor

KEITH & ASSOCIATES, INC. consulting engineers

Experience Highlights
Over 38 years of experience in land surveying and mapping in South Florida

Education
Maryville College, Maryville, Tennessee

Professional Registration
Professional Surveyor & Mapper, Florida (#5660) 07-06-96

Professional Affiliations
Florida Society of Professional Surveyors & Mappers

Secretary, Broward Chapter, FSMS, 1999-2000 and 2000-2001

Mr. Mossey has 38 years of experience in land surveying and mapping in South Florida. He has extensive senior project management experience for large-scale projects and continuing service, on-call type contracts for both public and private sector clients. He is a highly talented Quality Surveyor with a successful track record in budget estimation, valuation of items and completing projects on time. His ability to lead the team to perform in a fast paced environment and meet stringent deadlines has provided critical schedule enhancements for our clients.

Mr. Mossey is knowledgeable in the use of a wide range of state-of-the-art surveying equipment, automated field data collection systems and associated computer technologies. He has extensive experience in field crew supervision, quality control and client relations. He has overseen and performed construction, right-of-way, control, boundary, as-built (both acreage and coastal), topographic, quantity and condominium surveys. In addition, he has provided full service platting in the tri-county area jurisdictions, title encumbrance determinations, GIS data base building and American Land Title Association (ALTA) surveys. His experience includes numerous coastal topographic surveys in accordance with the current requirements of the Florida Department of Environmental Protection, Division of Beaches and Shores.

SELECTED PROJECT EXPERIENCE

Lauderdale Marine Center: Mr. Mossey served as Project Surveyor for this industrial marina redevelopment project located on the New River in the City of Fort Lauderdale. Project included surveying, land acquisitions, land use modifications, rezoning, site engineering and design, permitting, community liaison, platting, construction inspection services, environmental assessments and construction cost estimates on this 50-acre state-of-the-art marina complex. With diligent project management and aggressive construction administrative services the 34-acre Phase 1 Marina was completed on time and within budget in 2006. The project has now completed the 18-acre Phase 2 Boat Yard and Marina expansion of similar uses as Phase 1. Offsite improvements include: roadway, utility and drainage improvements to resolve existing issues within the neighborhood roadways.

City of Fort Lauderdale Miscellaneous Surveying Services – Ft. Lauderdale, FL: Mr. Mossey served as the main surveyor for this continuing contract for the City of Ft. Lauderdale. He performed various surveys for various projects including Topographic Design Surveys, Land Title Surveys, Relocation FAA Survey Submittal Assistance, Designation and Mapping, Specific Purpose Survey and Sketch and Design.

City of Ft. Lauderdale General Services: As Survey Project Manager, Mr. Mossey prepared extensive Topographic Design Surveys for City of Ft. Lauderdale's Water Works 2011 Program for redevelopment of approximately 20-square miles of infrastructure in the City's utility expansion program. Projects included the Miami Road, Sewer Septic Areas 8, 3 and 4, Wastewater Treatment Plants and the Sistrunk Boulevard project.

S.F.W.M.D. Acme Basin B Discharge Project: Project included the reconstruction limits of C-1 Canal and Flying Cow Roadway Right of Ways from S.R. 80 to the L-40 Levee. Mr. Mossey served as Senior Survey Project Manager for this 4.5-mile canal expansion and roadway reconstruction project in Wellington. Project included a complete topographic design survey, canal cross-sections, right of way determination, title document review, and horizontal and vertical control for South Florida Water Management Control District. Sketch of descriptions were also prepared for land acquisition parcels.

Boca Raton Water Supply Wells 28W, 31W &33W, Boca Raton: The City of Boca Raton was looking to install 3 new water-supply wells including surface equipment along a right-of-way or easement between Don Estridge High Tech

PROJECT EXPERIENCE

Middle School and the proposed Countess de Hoernle Park. The site is located south of Spanish River Blvd, east of Military Trail, and west of I-95. As a sub-consultant to CDM, Keith and Associates providing surveying services for this project site which is an undeveloped property corridor located at the SW ¼ of Section 12, Township 47S, Range 42E within the city limits of Boca Raton**.**

Broward County Water & Wastewater GIS/UAZ Modernization: Keith and Associates was the lead Professional on this Broward County Water and Wastewater Services (WWS) contract, which included several hundred miles of water and sewer piping and appurtenances. The goal of this 18-month project was to obtain sub-meter accurate NAD83 HARN state plane coordinates for the WWS' surface visible features and to populate the WWS GIS shapefiles with the pertinent utility survey information.

Pompano Beach GIS Mapping Services Pilot Project, Pompano Beach, FL: Keith and Associates was tasked to locate all water meters and valves, sanitary manholes and cleanouts, and storm drainage inlet structures and manholes with at least sub-meter grade GPS (Global Positioning System). The general limits of the project are from McNab Road (SE 15th Street) to the southerly edge of water of Lettuce Lake (just North of SE 8th Street) and from the easterly right-of-way of Federal Highway to the westerly edge of water of the Intracoastal Waterway. Mr. Mossey served as Senior Project Surveyor for this GIS project and is currently working in this geographic area and progress up to 1,550 data points. Once completed, K&A will edit the files by moving the existing utilities, including any pipes, services or laterals that connect to the structure, to the true, GPS-verified location. The attribute data attached to each utility will remain unchanged.

Sanitary System Improvements Survey, Broward County Water and Wastewater Services, Hillsboro Beach, FL: As a Sub-Consultant to Brown and Caldwell, Keith & Associates, Inc. provided surveying and mapping services for the Sanitary Sewer Improvement Project along Hillsboro Mile (A-1-A). The scope included preparing a Topographic/Design survey from right-of-way to right-of-way along Hillsboro Mile starting at the inlet bridge and extending north to S.E. 10th Street. The survey included the acquisition and mapping of the above ground improvements and utilities within the survey corridor approximately 16,000 linear feet.

Broward County District 1A Water Treatment Plant Preliminary Design Phase I, Lauderdale Lakes, FL: Mr. Mossey provided surveying services associated with expansion and development new well sites for the Broward County Water Treatment Plant No 1A Property generally located at 3701 North State Road 7 in the City of Lauderdale Lakes, Broward County. K&A provided Topographic surveys for the 2 Floridian well sites and pipeline alignment routes to the plant, a topographic survey for the injection well, and utilized all available existing record utility as-built information provided by utility companies, from the most reliable source, to identify underground utilities.

General Engineering/Surveying Services Contract City of Pompano Beach S.E. 8th Court Bridge Replacement: The project consisted of the replacement of the existing bridge at S.E. 8th Court across Santa Barbara Shores Canal, in the City of Pompano Beach. The project consists of demolition of existing structure and installation of a new bridge structure, headwalls, concrete deck, handrails, guardrails, and existing utilities. As Survey Project Manager, Mr. Mossey prepared the topographic and right of way survey including channel sounding and utility locations.

Hillsboro Canal – SFWMD: Mr. Mossey acts as the Lead Client Service Manager for the South Florida Water Management District Bathymetric and Topographic surveys of the Hillsboro Canal located between the Palm Beach and Broward County line, from the Arthur R. Marshall Loxahatchee Wildlife Refuge to the Intracoastal Waterway as part of the Comprehensive Everglades Restoration Program (CERP). The work includes locating the existing right-of-ways, subdivision lines, creating a base-map and obtaining horizontal and vertical topographic information from right-of-way to right-of-way, including cross-sectional data within the canal.

DANIEL M. CHECCHIA
Director of Subsurface Utility Engineering

Experience Highlights
Over 19 years of experience in Transportation engineering, surveying, subsurface utility locating, and utility coordination services.

Education
AS of Applied Science in Construction Technology, Suffolk County Community College

Certifications
FDOT Maintenance of Traffic

Mr. Checchia has over 19 years of experience in transportation engineering, surveying, civil design and construction related fields, the last eight years of which have been focused in Utility Coordination and Subsurface Utility Engineering. His duties are to oversee the day-to-day operations of all Subsurface Utility Engineering and Coordination projects for our firm.

Mr. Checchia is responsible for assisting clients with utility research, identification, data management and coordination. Besides having developed a strong rapport with local utilities and municipalities, his knowledge and experience in Subsurface Utility Engineering process allows him to easily recognize utility conflicts during design and construction. He has been involved on a variety of projects such as design, design build and private sector work. Mr. Checchia's understanding of the Quality Levels defined with the ASCE Guideline 38-02, "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data" enables him to manage a project from pre-design to post construction, negotiating to minimize utility impacts and suggesting and implementing cost effective timely resolutions for utility conflicts.

Mr. Checchia is fully knowledgeable with the FDOT Utility Coordination process, with eight years of involvement working on multiple types of transportation projects. His coordination philosophy is to maintain an open and productive dialogue throughout the initial investigation; detailed coordination and post design follow up. Early in his career, Mr. Checchia spent over six years with the Florida Department of Transportation (FDOT). He was a Survey Design Technician EAS Level III at FDOT District Four responsible for processing analyzing and delivering final surveys as well as reviewing consultant projects. He was a technical delegate for FDOT District IV Survey and Mapping Advisory Committee tasked with formulating new field procedures, deliverables and compatibility with other FDOT disciplines.

SELECTED PROJECT EXPERIENCE

Design/Build Replacement & Rehabilitation of 72-inch Sanitary Force Main, Miami-Dade County, FL: As a sub-consultant to the design/build team of WadeTrim and Ric-Man Construction, Keith and Associates provided Surveying and Subsurface Utility Engineering services along 159th Street and NE 6th Avenue and 159th Street and North Miami Avenue. Subsurface utility designation was performed in the areas to identify utilities horizontally and select facilities that would be located (verified) through non-invasive methods. These locations were critical to the success of the design and construction effort.

The Wave Modern Streetcar Project, Ft. Lauderdale, FL: As a Sub-Consultant to HDR Engineering, Inc., Keith and Associates was tasked with providing Surveying and Subsurface Utility Engineering (SUE) services for this modern streetcar in Downtown Fort Lauderdale between Northwest 6th Street and Southeast 17th Street. The system would operate 5 modern streetcars in mixed traffic along existing roadways and would utilize transit signal priority. Mr. Checchia is currently serving as Project Coordinator of all utility related services providing designation, location and mapping of existing subsurface utilities; Utility designation of all known tone-able and non-tone able utilities within the apparent right of way of the Phase 1A Streetcar limits. Up to 44 locations (test holes) shall be utilized to verify radar data and designations.

Port of Miami Tunnel, FDOT District 6: The Port of Miami Tunnel Project consists generally of (i) the widening of the MacArthur Causeway Bridge, (ii) tunnel connections between Watson Island and Dodge Island (Port of Miami) and (iii) connections to the Miami roadway system. Mr. Checchia is the project coordinator of all utility related services for the Port of Miami Tunnel Project as a consultant to BOUYGUES Civil Works Florida. This project includes subsurface utility engineering (SUE) locations in the area of the proposed tunneling on both the Watson and Dodge Island sides of the tunnel, and sweeping the ground penetrating radar for potential unknown subsurface utilities.

PROJECT EXPERIENCE

Districtwide Subsurface Utility Engineering (SUE) and Survey Utility Excavation - FDOT District IV: Mr. Checchia provided ASCE Standard Quality Level A–D Subsurface Utility Engineering services to designate, locate by excavation, survey and map existing surface and subsurface utilities to support the design of construction plans on a districtwide basis on projects selected by the District office. Services include providing the exact horizontal and vertical locations of existing underground utilities by way of electromagnetic, sonic and other geophysical location techniques including air/vacuum or other non-destructive excavation procedures.

D4 Ravenswood Bridge Replacement, Fort Lauderdale, FL –As a sub-consultant Bolton Perez & Associates, Keith and Associates handled the Utility Coordination for this Bridge Replacement Project on Ravenswood Rd., north of Griffin Rd. Our Design ticket with Sunshine State One Call of Florida identified twelve (12) Utility Agencies and the Broward County Traffic Engineering Dept. Several Utility Meetings were conducted to clarify the construction phasing and Utility involvement. Five (5) Utility Agencies (MCI/Verizon, Buckeye Pipeline, City of Dania Beach, Level 3, and Florida Gas Transmission) had facilities in the area but were not involved in the Project and we negotiated/coordinated six (6)Non-Reimbursable Utility Work Schedules (AT&T , Comcast, FPL Distribution, FPL Transmission, FPL Fibernet, and TECO Peoples Gas). Broward County Water and Wastewater entered into a "Utility Work by Highway Contractor Agreement" for the Engineering and Design of the relocation/adjustment of the water and sanitary lines that were impacted by this bridge replacement project. Utility Certification was completed on schedule.

Ft. Lauderdale-Hollywood International Airport, Broward County: Mr. Checchia, as Senior Project Manager, was tasked with providing the providing ASCE Standard Quality Level B (Designating) and Quality Level A (Locating) Subsurface Utility Engineering services as a subconsultant on many projects for the airport such as:

- **Eastside Watermain Improvemts:** (Sub-Consultant to EAC Consulting) Mr. Checchia was responsible for supervising the designation and location of existing utilities for the eastside Watermain improvements along perimeter road. Multiple crews performed tasks associated with the identification, verification and delineation of utilities.
- **Westdisde Watermain Improvements:** (Sub-Consultant to EAC Consulting) Mr. Checchia was responsible for supervising designation and location of existing utilities for the Westside Watermain improvements. Multiple crews performed tasks associated with the identification, verification and delineation of utilities.
- **Westside Development Utility Certification Project:** (Sub-Consultant to RS&H) Mr. Checchia directed multiple crews in order to identify existing utilities to be mapped and incorporated into the plans.
- **Perimeter Road Water & Sewer Utility Improvements:** (Sub-Consultant to EAC Consulting) Mr. Checchia provided professional services associated with topography surveying and subsurface utility locations for the proposed upgrades of the potable water distribution and sanitary sewage transmission system along North Perimeter road (SW 34th Street), along South Perimeter Road at the FLL Airport.

SR 816 (Oakland Park Blvd) from East of 31st Avenue to East of I-95, FDOT District IV: As a Sub-Consultant to HDR Engineering, Inc., Keith and Associates (K&A) provided surveying and subsurface utility engineering services for additional Drainage and DTM surveys. K&A surveyed an additional 30 drainage structures including rim, bottom and invert elevations while noting pipe size, material, direction and condition. K&A also surveyed 89 curb ramps located throughout the project limits. The survey for each curb ramp extended 25 feet before and after the ramp (including curb and gutter) and extends 5 feet beyond the top of the ramp. K&A also located 39 features that were obstructed during the aerial photogrammetry.

S.E. 8th Court Bridge Replacement, Pompano Beach: Mr. Checchia provided utility location support for the design of the bridge. Utility designation (QL-B) and locates (QL-A) were performed to assist the design team in identifying existing utilities within the proposed footprint.

Project Methodology & Approach

Design-Build Team Approach

The City of Ft. Lauderdale requires a knowledgeable and experienced Design-Build team who can successfully design and construct critical water and force main pipeline crossings. The ideal team should be able to provide:

- Similar successful project design experience
- Similar successful construction experience
- Capable project managers who are well respected
- A team that understands the project challenges and limitations, establishes goals, then completes goals on-time.

The TB Landmark team can deliver on these goals. Our team has a working relationship along with a full resume of pipeline experience, including crossing of critical rivers/streams. We understand what it takes to design, permit and construct these types of projects. The team has experience in design and installation of pipeline in similar congested areas, where minimized public impact is key.

Approach to Organization / Management

The City of Ft. Lauderdale requires a well-established, organized Design-Build team who is ready to plan and execute the project successfully. Our Design-Build team will be actively involved in the project from concept to solution, while listening to and understanding the City's needs. We understand that cost-effective quality solutions delivered on time are critical to the City. Our approach is straightforward, and it begins with early the establishment of goals as follows:

- Listen to and understand the project needs, establishing project challenges or limitations
- Clearly define the team's roles, yet collaborate consistently as one team
- Define the project goals in a plan and establish a schedule early
- Establish key experienced personnel who can successfully deliver the project goals

Quality Control

TB Landmark and the team are successful firms who are focused on quality products. We have established processes and procedures to consistently deliver quality products, without overbearing the project cost and schedule. While the construction and design QA/QC processes naturally differ, the Design-Build team works as one to deliver a quality design followed by quality construction.

The design team implements its quality assurance / quality control (QA/QC) plan through review of design documents by an experienced professional not involved in the day-to-day design process of the project. GAI believes in the value of implementing the QA/QC plan from the start of the project, and throughout the design process. The intent of this QA/QC process is to eliminate design errors or omissions, and to produce cost effective and complete designs for GAI's clients. Prior to each submittal, all drawings, specifications, and calculations will be checked and formally reviewed by the designer and a peer who also has the appropriate expertise. Comments are formally documented, corrected and then checked for final delivery. While GAI's QA/QC plan is implemented "in-house", GAI will also be coordinating with, and monitoring the QA/QC programs of TB Landmark and other sub-consultants. This also includes constructability reviews by TB Landmark's construction experts.

The construction team is committed to quality control, assurance and customer satisfaction. During design, TB Landmark will provide QA/QC and constructability reviews of the design team, working closely with each other to design a product which can effectively be constructed. During construction, TB Landmark will implement a process of quality control, beginning with a pre-project plan. This includes site and equipment safety, site access, equipment tests, calibration and checks, operational plans, compliance plans, and a means to document the project criteria are all met. For directional drilling, this specifically involves best practices for erosion and sedimentation control, understanding and documenting potential wetlands or water retention areas and pre-planning to mitigate any impact to those lands. By understanding the local subsurface geology and geotechnical conditions, we can plan for contingencies, adjust means & methods and install these City facilities in the most efficient manner possible. Additionally, TB Landmark establishes best practices that are routinely monitored, checked and discussed at team meetings. Any concerns or issues are discussed and documented if they arise.

The team consists of quality driven organizations, with procedures in place that are followed, documented and evaluated as the project progresses. We will work together closely for the City to meet all quality, safety, and security requirements on the project.

Teamwork

A well-established, organized Design-Build team is required to plan and execute the project successfully. Our Design-Build team will be actively involved in the project from concept to solution, while listening to and understanding the City's needs. We understand that cost-effective quality solutions are critical to the City.

One of the keys to a successful team approach is to have a clear understanding of the team's roles and identification of key team members, who will remain involved from start to finish. At a contract level, TB Landmark Construction, Inc. will be the lead firm of the Design-Build project, executing the agreement with the City. TB Landmark will lead the construction efforts and work as one team with sub-consultants and sub-contractors. GAI will lead the engineering/design efforts, working under agreement with TB Landmark. Within the team's organization and management plan, there will be a single point of contact with each firm during design, procurement and construction. These key personnel will lead project efforts with consistent communication, allowing us to listen and understand the City's needs at all times.

As noted in our Organizational Chart, the following persons will be the primary points of contact:

Robin Thigpen, Project Director – Robin will be responsible for the overall execution of the project. He will execute all contract negotiations with the City, provide valuable oversight of all preconstruction activities, and help to expedite all phases of the project. He will be a single point of contact for the City should any issue arise that cannot be resolved with the project team.

Marty Adams, Build - Project Manager – Marty will be your local direct point of contact for the Build effort. He will provide overall project coordination and planning, including working with the design team and leading resource management during construction.

Jay Ameno, PE, Design - Project Manager – Jay will lead the design effort for this project. He will, alongside with Marty, closely communicate with the design and construction team to develop a quality constructible product. He will be directly involved with the City throughout the design process, and remain active throughout construction to deliver project success.

Coordination

Coordination amongst the entire team, both internal and external, is critical for project success. This begins with consistent and open communication, supported by a management plan to maintaining schedule and overcome challenges.

Internal Coordination: As discussed prior, successful completion of a Design-Build project requires a team who can understand and work closely with each other. TB Landmark and GAI Consultants have such a relationship, and we will work seamlessly as one team, along with other sub-contractors and sub-consultants. Our team has already begun a coordination effort, and will continue to meet, brainstorm and collaborate on the design and construction elements throughout this project. Our team's ability to openly communicate and quickly react to any project needs will keep the project on schedule.

External Coordination: External coordination must consider everyone involved in the project, including, but not limited to:

- Ft. Lauderdale – As the client, frequent open communication with the City's project manager and team is priority #1. We consider ourselves as part of the City's team, and project success requires proper coordination throughout the project. This coordination also includes communication and working with the City's Engineer/ Reviewer as desired by the City.
- Permitting agencies – Permitting agencies must be properly coordinated with to avoid project delays. Beginning in the early phases of design, along with the City, we will identify and begin coordination with all permitting agencies (DEP, Army Corps, SFWMD, City, County, etc). This will include pre-application meetings, followed by timely documented applications and communication.
- Property Owners & Local Community – When constructing a project in areas which consist of nearby residences and business, coordination is critical to maintain traffic, property access, and to maintain business. Further, proper outreach to property owners/ stakeholders must begin early in the project, and continue until project completion. Each property presents unique challenges, and we must communicate to address each of these needs. Communication with local stakeholders will be via a variety of methods with the City, but may include local public hearings, mailers, flyers, web/e-mail, and direct in-person meetings.

Quality and Schedule Control

Successful completion of a Design-Build project first requires an understanding of the Owner's needs and goals, with consideration for specific needs, challenges and limitations. Decisions made early in the project will impact the schedule, cost and overall project goals. This requires clear communications and a close working relationship at the onset, from which decisions regarding design, cost, schedule, and constructability flow. The members of our proposed team have completed multiple projects utilizing the Design-Build delivery method. This Design-Build team brings extensive familiarity of similar and related projects to the process.

This team includes quality driven organizations, with procedures in place that are followed, documented and evaluated at the project progresses. We are committed to quality control and schedule adherence, beginning with a strong management plan. We will provide and maintain schedule via our project

delivery system (PDS), which monitors schedule, budget, quality control and incorporates best practices. Our project managers remain actively aware of the schedule, equipment and manpower requirements, while remaining focused on the client and project needs.

Throughout the project, maintenance of the schedule is critical to the project's success. This effort will be overseen by the Project Director, and managed by the respective Design / Build Managers. In our experience, changes to the schedule often occur based on unforeseen impacts. However, early identification to potential delays in the schedule, along with communication and a plan to adjust the schedule, while maintaining the critical path, will ensure the overall project's success and timely delivery.

For the entire project duration, the team implements and utilizes project scheduling software, which is routinely monitored and updated at team meetings. The team also implements its quality control/quality assurance (QA/QC) plan through review of design documents by peer review. This is further discussed in the project approach section.

Conceptual Design & Construction Plan

The City of Ft. Lauderdale requires a knowledgeable and experienced Design-Build team who can successfully deliver these critical new water and force main assets with the least impact to the community overall, the natural environment and the personal and professional lives of those in the area. We have reviewed and understand the City's need to construct the following main items:

- Construct a new 20-inch water main crossing the Intracoastal Waterway (ICW) by Horizontal Directional Drill (HDD)
- Construct a new 16-inch force main crossing the ICW by HDD
- Construct by open-cut new 16-inch PVC piping on-shore and make connection to proposed and existing piping.
- Cut, cap and transfer existing mains to new pipelines. Provide new valves, fittings, and other appurtenances required to complete proper transitions.

The conceptual layout provided for this project included primarily focused the directional drills, but also provided concepts of the open cut trench construction along Las Olas Boulevard, Las Olas Circle, South Birch Road and Banyan Street. As preliminary proposed, the open cut route would result in heavy restoration costs and significant impact to traffic flow of all types, crossing from mainland Ft. Lauderdale to the beach. Impeding this area is counter-intuitive to movement, and could also create an economic burden if not properly handled. Therefore, in our proposed design, we have considered alternate routes that will save time in design, permitting, construction and inspection, but will also save money through impact reduction to residents, businesses, tourism and planned community attractions such as the International Boat Show and the Winterfest Boat Parade, occurring in November and December, respectively. Considering the requirement to achieve substantial completion for the water main by or before January 12, 2017 and for the City to make the most of revenue-producing assets throughout that time, we must work in tandem to produce a successful outcome for all stakeholders.

Project Phases

Kickoff, Data Collection and Preliminary Design: Upon selection and completion of contractual requirements with the City, the team will immediately begin by establishing kickoff meeting(s) and data collection efforts in order to further improve on the proposed concepts. This will include survey, geotechnical samples, and review of area GIS, as-builts, and flow/hydraulic data as available. This data will be utilized throughout design, but initially for preliminary designs for purposes of permitting pre-application meetings, public hearing/notifications and for initial review by the City.

At this stage and throughout the project, both the engineer and construction staff will be involved. A prompt kickoff and data collection effort is key to "getting out of the gates" early to maintain project schedule.

Design: The design phase will progress quickly from the preliminary design based upon feedback from the City, any permitting pre-application comments and internal constructability reviews. At this stage, the engineering team will lead the majority of efforts, with TB Landmark working closely to maintain constructability and to continue to work on public outreach, communicating and addressing concerns by stakeholders.

The design will address the pipeline routes, crossing details, conflict adjustments, roadway/MOT, landscape, restoration, and other potential environmental or infrastructure impacts. Relative to the community, the design must be considerate of noise, air, and light pollution, clearly noting limitations and areas of special concern. Depending upon the desired submittal process desired by the City, our team is prepared to quickly progress through the design elements.

Permitting: Permitting will begin early in the project, and will primarily run through the design phase, followed by construction related stages. We understand preliminary permitting process has already begun for this project with the existing design. Our team will continue with this momentum by meetings and communicating with agencies early and throughout the project. This will begin early in the design stage. Additionally, it is also

equally important to remain in communication throughout construction, including proper closeout and clearances. We anticipate permitting efforts may include:

- FDEP/BCHD – Design/Construction permits for new potable water mains and force mains.
- Roadway/MOT – Utility permits for impacts/crossings of local County, City or DOT roads.
- SFWMD - ERP if there are impacts to water bodies, streams or stormwater elements.
- ACOE – Army Corps of Engineers
- Coast Guard – Coordinate for crossing of navigable waterway.
- BCEPGM –Growth Management – Permitting of Force Main and Directional Drill
- Other Environmental impacts – Potential permits for, protected species, trees, construction/noise ordinance variances. These permits are as required, and may involve SFWMD, FWC, County, etc.

Construction: Upon final design approval, and obtaining all required permits, construction activities will commence. This will include procurement of all materials, mobilization, staging, and pipeline work. Shop drawing submittals and review will begin immediately to avoid lost construction time while awaiting for materials. As a design-build project, the contractor and engineer will work closely with the City to develop specifications which are clear and agreed to, so the procurement process can begin well ahead of anticipated construction efforts.

Community outreach will continue from the design phase throughout construction, with the team working closely with the City to provide status/progress updates to all stakeholders. A direct point of contact will be established for any concerns or issues throughout construction with local residents and business owners, so any concerns or issues can be promptly resolved.

TB Landmark will lead the construction phase, with engineering staff remaining involved throughout for components such as construction oversight, permitting, shop drawings, public outreach and regular meetings.

Public Outreach

This project will impact a primary artery, Las Olas Boulevard that connects downtown with the beach. The effects of construction may be felt by residents, businesses, tourism and community events. Therefore, as your Design-Build partner, it is vital that we make every effort to hold discussions with stakeholders to make them aware of this pending capital improvement project that will serve the needs of our community for decades to come. Communication with these stakeholders is key, but we must work to communicate with each stakeholder at their desired level. To do so, we must implement outreach with a variety of communication methods, from flyers, local association meetings, phone and email. Additionally, we believe the use of modern web updates and social sites such as Nextdoor.com is an outstanding technology tool to directly update neighbors of project schedule and impact. This variety of communication allows us to learn and document each homeowner, business or other stakeholder communication preferences, so we can establish and maintain trust with the neighborhood, working with the City to convey optimism and the benefit these new assets will provide to local residents.

Further building on the individual trust, we must work with boat owners and their crews to understand what vessels will be moored near the alignment of the proposed submerged land easement and discuss any potential conflicts with the Las Olas Marina and boat traffic. By understanding each situation from their perspective, we are able to connect the right project personnel (City or DB team) with them and proactively address their concerns. This is often a concern when it comes to impacts to ROW, such as, driveways, lawns, trees and other perceived personal property. By understanding and documenting local concerns, it allows our team to consider and implement through design, means & methods that most reasonably meet all stakeholder interests. Reaching out early in the project, and building trust, will reduce potential unexpected conflicts with local stakeholders, therefore keeping the project on schedule.

Whenever a pipeline primarily routes through areas which impact the public, proper outreach is essential. Local citizens will experience traffic impacts, and likely impact to the right-of-way in front of their home or business, often impacting “personal infrastructure” such as mailboxes, driveways, lawns, trees, etc. Minimizing this impact is key, but often cannot be avoided. Our Design-Build team understands these concerns, and will design our approach to mitigate impacts to the public and work with the City to reach out to the community stakeholders from conceptual design to final completion. Clear and open communication with local residents and businesses begins by reaching out as follows:

- To initially establish the project, the following will be considered:
  - ◇ Hold/attend local meetings with residents to present the project
  - ◇ Utilize newspaper ads
  - ◇ Mail notifications / door hangers
  - ◇ Use web / social media

At these initial meetings and outreach, a contact list will be developed based on each home or business in the affected area. Any identified critical locations or stakeholders with key concerns will be flagged/noted accordingly. We will work with the community to identify the preferred means of contact with

each person/group. Continued status updates can be provided as need for identified groups or individuals. Additionally, with potential impacts to the nearby park, we will work closely with the park and the public to notify them of the project schedule and area closures.

- To provide continued status updates, the following communication methods will be considered.
  - ◇ Continue to attend and update neighbors at local meetings
  - ◇ Routinely update web / social media
  - ◇ Utilize email updates
  - ◇ Provide door to door visits, phone calls, and/or local door tags, to identify specific local area notifications for "week of" impacts to streets, driveways, environment, etc

Point of Contact: Additionally, it is imperative to identify key points of contact. This typically includes a primary project representative and a City representative. At project kickoff, these points of contact will be discussed, established and agreed to with the City. A "points of contact" card and signs will be developed for use at meetings, flyers, email notifications, and be on-hand with team members during survey/construction. Community members should always expect a call back within 1 business day for routine questions. During construction, when more frequent calls may occur, critical items will receive an immediate/ASAP response from the project team.

Response: Any communication with local residents and business owners will be documented in a detailed log/database, connecting the notice to a specific property. If the communication relates to a complaint, damage or other concern, the site project manager will be immediately notified, and a response plan will be established. At weekly project meetings, public communication will be discussed and updated, so the team is aware of any concerns and can adjust or react accordingly to mitigate any issues. Should property damage occur, the design-build team will work at a personal level to restore the property to "at or better" than previously existing conditions.

Innovation

Project success comes with team collaboration and innovation. Although many concepts seem simple in theory, field execution, while addressing community needs and incorporating technology for overall pollution mitigation, is a fluid process and requires ongoing adjustments.

Design for effective and low-impact constructability – By working closely, our team will prepare designs for constructability. This will consider the practical ability to install the pipeline while remaining "low-impact" relative to existing infrastructure, roadways and personal property. For directional drilling, pipeline laydown/staging areas will closely be considered in the design to minimize impact to the community. TB Landmark is well versed and fully capable of self-performing both open cut and directional drill installations, with a variety of pipeline materials.

Permitting – Early outreach and pre-application meetings with agencies is key. We will work closely with permitting agencies, asking for their support and providing open communication to express permits to the extent possible. Our team will remain in communication with them through permit approval and permit closeout.

Construction sequencing – Design to allow for project sequencing/phasing, so construction can occur more rapidly with multiple crews operating in sequence. This will likely include a blend of crews working, typically in the order of 1) directional drill team, 2) open cut/service line team, 3) roadway repair, and 4) ROW repair. This allows for a stacked approach, which more rapidly completes project zones, minimizing the schedule and overall impact.

Community Outreach – As previously discussed, our team intends to work with the city to use a multi-point approach to public outreach. Our methods of communication will adjust/adapt to be in tune with the desires of the neighborhood. We will consider a full variety of methods to address a variety of preferences, likely ranging from in person meetings to email updates. Additionally, web and social media has a growing popularity and provides another way to directly target and notify local neighbors without interrupting their busy life. This includes consideration of technology such as nextdoor.com and other social media methods. We will work closely with the City to establish a program which best satisfies the goals of effective communication.

Design Concept

A Design-Build project of this type, with this level of visibility requires an experienced team who can seamlessly install these facilities as a turn-key team with minimize use of sub-contractors. In addition to the subaqueous challenges, the Las Olas Blvd area presents multiple challenges including traffic, existing utilities, landscape, and other environmental impacts. Additionally, the team must work closely with local residents and business owners to limit the impact to property and daily life.

As referenced previously, our team also understands the need to accommodate traffic and schedules including key events such as the International Boat Show and the Winterfest Boat Parade during this busy season. Our proposed design and project schedule are based upon minimizing impact to traffic (both road and waterway) for these key events.

Our proposed concept is further detailed in this section. Additional figures of the proposed changes are provided in this section. To meet the schedule and minimize traffic impact, our proposal is based upon an alternate route plan incorporating design ideas as follows:

- Crossing Alignment: With permission from the City to utilize the parking facilities and field area on the east side of this project where the Hazen plans show both the force and water main coming together on Las Olas Circle, the TB Landmark Team proposes to use this area as our entrance pit and to push ream our hole from east to west along the submerged land easement. By placing the rig on the east side and building a sound containment device, it mitigates any noise pollution against the condominium building, it's parking structure and pool deck on the west side at the intersection of Las Olas Blvd and Poinciana Drive. This change also provides for a one-way flow of bentonite (drilling mud) back toward the rig for reclamation and recycling while keeping large equipment out of the park and ROW where over-head powerlines are present. Our team intends to utilize soft utility engineering (SUE) digs for locating of potential existing or abandoned utility lines in the vicinity of our run-lines in Merle Fogg Park.
- Maintenance of Traffic (MOT): To mitigate lane closures on Las Olas Boulevard, we propose design route changes to minimize cuts and tie-ins and coordination with the awarded contractor for City Project 11900 on the northeast side of Las Olas and the Intracoastal Waterway (ICW). We also intend to modify the connection on the west side by moving the connection westward to minimize the shutdown of traffic lanes. The west side connection will be made early in the project to alleviate congestion due to holiday traffic later in the project. Final tie-in will be made completing the water pipeline scope ahead of the January 12, 2017 schedule. With City & business revenues being tied to the flow of traffic on Las Olas Blvd, our team intends to keep that artery open.
- West Side Tie In: Prior to beginning HDD operations, through consultation with the City as to timing, on the west side of the bridge on Las Olas Blvd, we propose to move the tie in location west to make the required cut for tie-in back to the park-side of the project to immediately get that lane closure out of the way. By moving the connection to the west, we will reduce the impact of the lane closures do to the proximity of the pipe to the south side of the road (see proposed location figure). The isolation of the water main in Merle Fogg Park will be abandoned in place and grout filled. By grout-filling and not excavating the old pipe, we will save money on removing palm trees and repair of communication lines or disturbing the gas line. Pipe fusion by a certified fusion expert will take place on the west side of the project where rollers will hold our pipe and allow for being pulled into place. We do anticipate having to make a mid-weld in the pipe during pull-back operations, but by splitting into two fused runs, we will only partially block the drive and boat dock access along Idlewyld Drive temporarily. Then, we shall commence installation of the new 20" water line by HDD on the east side of the ICW. Once pulled into place, the rig will be moved and prepared for the force main shot. When the first area is free of drilling equipment, we plan to excavate the remaining trench, moving northward toward the ingress/egress intersection of Las Olas Boulevard and Las Olas Circle, where a final tie-in will be made completing the water pipeline scope ahead of the January 12, 2017 schedule.
- East side Tie In: Once the East side area is free of drilling equipment, we plan to excavate the remaining trench, where a final tie-in will be made completing the water pipeline scope ahead of the January 12, 2017 schedule. We would like to work with the 11900 contractor and bring the force main west and north under the Las Olas Boulevard Bridge on Las Olas Circle. In keeping with the new construction we recommend a route which will go under the bridge then turn 90 degrees east and parallel Las Olas Boulevard east of the proposed structure in the area of the proposed sidewalks. The route will then go east to Birch Road and run the force main north in the parking lot just west of Birch Road. The force main will continue north past Banyan Street and then cross Birch Road where the traffic on Birch Road and Banyan Street will be less impacted and result in fewer underground interferences. This will connect to the existing force main in Birch Road. The existing 16" ductile iron water main will be removed from the parking lot as per project requirements and restored to grade only. No other landscaping will be required here. The proposed 20" water main will be installed as per Hazen preliminary design drawings.
- Waterway: The Intercostal waterway crossing at Las Olas is an area of frequent waterway traffic, requiring consideration for the construction methods to minimize any impact to the waterway and boating. Using past experience as our guiding light, the TB Landmark Team proposes to utilize a Geoprobe, in lieu of a wire-line guided steering and locating system. The advantage with this technology is that it allows for tool location and minimizes interference caused by vessels or other items in the channel. With a wire-line system, a boat anchor or similar material drifting along the channel bottom could

catch on or move one or both wires below that create the magnetic field for tool-head location tracking and result in an incorrect bore path. With a live gas line in conflict to these proposed bores, our choice must be safe. Once the probe exits the ground, we will change tooling to build our hole for pipe accommodation and pull-back. Which cutting or hole-opening tools will be used depends on the specific geology through the bore path. Based on the geotechnical report, we anticipate a mix of lime rock and coquina, both of which may require use of a mud motor to drill through.

By making these proposed changes, we've reduced the risk of this construction project to the community and stakeholders by substantially reducing maintenance of traffic (MOT), minimizing work directly on heavily trafficked public roadways, identified other utility conflicts as well as surface features and how to avoid them during construction of City Project 12196.

Schedule

Working together, the team has developed a preliminary design and construction schedule for the project, with a total contract time of 10 months. The schedule provided below is preliminary based upon our understanding of the project requirements. Further detail will be determined during project kick-off with close coordination and input by the City. This schedule integrates the data collection, design, permitting, public outreach, review process and construction efforts.

Workload & Team Commitment

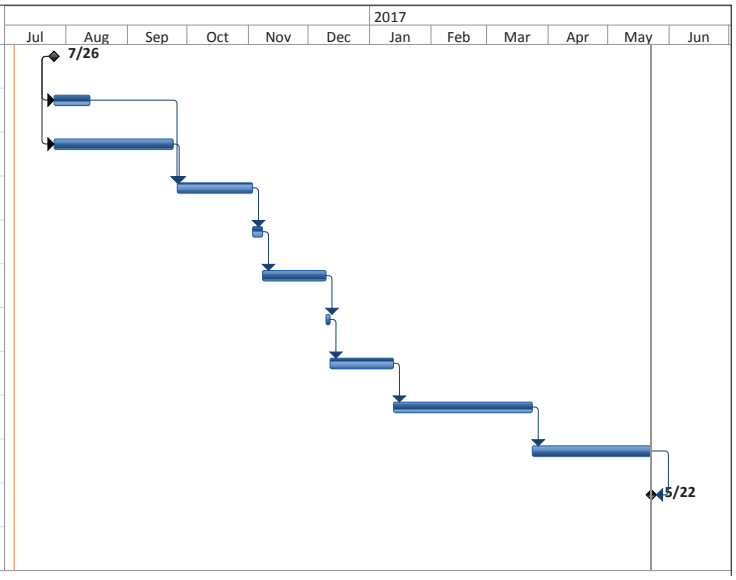
The City of Ft. Lauderdale requires a knowledgeable and experienced Design-Build team who can successfully design and construct these critical water and force mains in the timeframe requested in the RFP documents. While TB Landmark Construction, Inc. works as both a prime and sub-contractor in various states, we have the resources available; including financial capability, equipment, skilled drillers and labor and with the oversight of two reputable engineering firms to execute this project on behalf of the City of Ft. Lauderdale and its residents. Our current project backlog is approximately $10 million and based on the timing laid out in the RFP, we will have the resources to dedicate.

Staff Commitment

The TB Landmark team is committed to providing high quality and timely completion to the City. We will provide and maintain schedule via our project delivery system (PDS), which monitors schedule, budget, quality control and incorporates best practices. Our project managers remain actively aware of the schedule and manpower requirements, while remaining focused on the client and project needs.

Both TB Landmark, GAI and the team are firms with the capacity to handle projects of this size. For engineering/design effort, the engineering firms have available staff for this project, including the project manager who is local and accessible. For construction, TB Landmark has available staff, teams and equipment necessary to promptly and successfully construct this project. These firms track and adjust project backlog regularly. While both teams have project backlog, the team presented is currently committed to mostly short-term projects, and we have sufficient availability to commit to this project for its duration.

ID	Task Name	Duration	Start	Finish
1	Notice to Proceed/Kickoff	0 days	Tue 7/26/16	Tue 7/26/16
2	Data Collection/Preliminary Design	14 days	Tue 7/26/16	Fri 8/12/16
3	Design, Permitting and Survey	44 days	Tue 7/26/16	Fri 9/23/16
4	Survey, Mobilization, MOT, Pilot Shot for WM	28 days	Mon 9/26/16	Wed 11/2/16
5	Boat Show - No Work	3 days	Thu 11/3/16	Mon 11/7/16
6	Proposed Water Main Construction	24 days	Tue 11/8/16	Fri 12/9/16
7	Winterfest Boat Parade - No Work	2 days	Sat 12/10/16	Sun 12/11/16
8	Proposed Water Main Completion	24 days	Mon 12/12/16	Thu 1/12/17
9	Proposed Force Main Completion	50 days	Fri 1/13/17	Thu 3/23/17
10	Punch Out/Clean Up	42 days	Fri 3/24/17	Mon 5/22/17
11	Final Completion	0 days	Mon 5/22/17	Mon 5/22/17
12				



Schedule and Budget Commitment

The TB Landmark team is fully prepared to deliver project success. With our team's working experience, available manpower, innovative ideas, and communication plans, we believe our team is well placed to deliver the Las Olas crossing on-time and in-budget while helping improve the local community. Our team is and will remain committed to the City throughout the duration of this project. As previously noted in the project schedule presented, we are committed to delivering this project on-time while minimizing community impact.

Design-Build Team Resources

Successful design and construction of this project requires a Design-Build team with the right resources. From technical engineering expertise to top-notch directional drilling equipment, the TB Landmark team delivers the right resources.

Team & Facilities

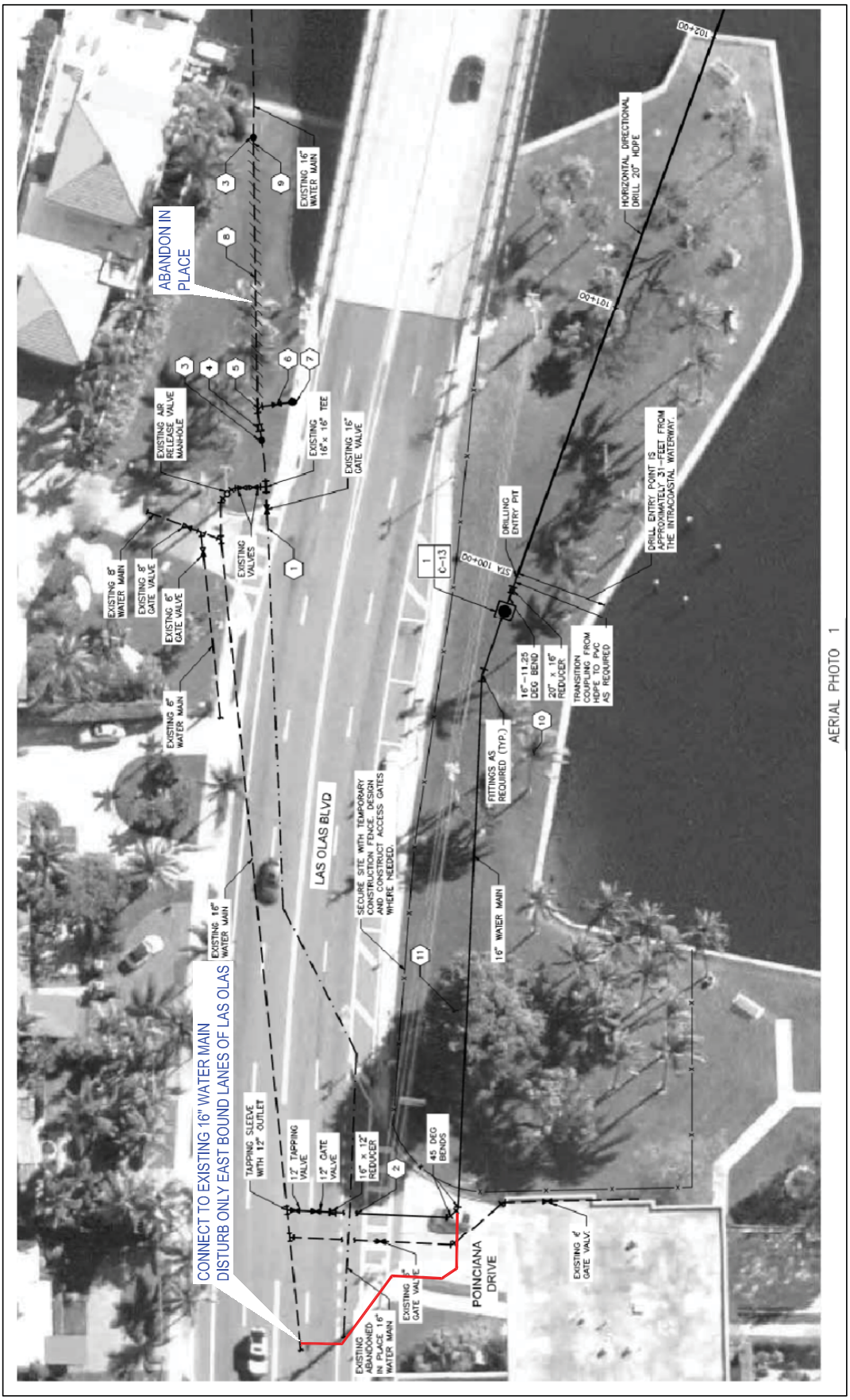
The TB Landmark team is fully prepared to deliver project success. With our team's working experience, available manpower, innovative ideas, and communication plans, we believe our team is well placed to deliver this project on-time and in-budget while helping improve the local community. Our team is and will remain committed to the City throughout the duration. The following are key points which set our team apart:

- Engineering Manpower – The presented team provided local engineering knowledge, who have completed similar projects, and who understand South Florida regulations. Our engineering lead has more than 30 years of South Florida expertise, and is supported by a team of experts to cover every facet of this project, from subaqueous directional drilling design to landscaping.
- Top-Notch Equipment – TB Landmark is a self-performing general and underground contractor that specializes in horizontal directional drilling. We are the firm who seeks challenging projects like this one every day.
- Field Team Experts – Although TB landmark is headquartered in Jacksonville, our crews know sub-surface geology and what it takes to work throughout Florida every day. We have South Florida based personnel, with specialized crews for both Directional Drills and Open-Cut pipeline work.
- Familiarity with subaqueous horizontal directional drilling in various geology from Florida to North Carolina.

Technology

The TB Landmark team intends to implement and utilize a variety of technology items to maintain frequent and easy communication and information sharing, therefore reducing response time and avoiding additional delays in schedule.

- Team sites - file sharing systems (including with the City) – Operating as a team requires working together on documents as a team. We utilize file sharing databases, with "cloud" capabilities to quickly and securely share documents on a variety of platforms. We are flexible and work with our clients to meet their desires/needs.
- Skype meetings / video chatting: With the use of skype for business, video chatting, instant meetings, and screen sharing, the team can quickly collaborate during the design and construction process. Our staff is easily accessible via a variety of methods. With full remote access and VPN capability, we can remote e-mail, access servers, make calls, or instant message with team members from virtually anywhere. This minimizes response time to questions or critical in-field issues which may arise.
- Tablets/Cellular – For viewing plans, video chatting and text messaging field images, the concept is simple: Utilize technology and remain connected/available wherever you are. With cloud data/sharing, engineers and construction team personnel can immediately share, access, and discuss project details. This benefit can result in screen sharing for brain storming ideas or in-field adjustments at any time, therefore reducing our reaction time.


CONNECT TO EXISTING 16" WATER MAIN
DISTURB ONLY EAST BOUND LANES OF LAS OLAS
ABANDON IN PLACE
LAS OLAS BLVD
POINCIANA DRIVE
EXISTING 16" WATER MAIN
TAPPING SLEEVE WITH 12" OUTLET
12" TAPPING VALVE
12" GATE VALVE
16" x 12" REDUCER
45 DEG BENDS
EXISTING GATE VALVE
EXISTING ABANDONED IN PLACE 16" WATER MAIN
SECURE SITE WITH TEMPORARY CONSTRUCTION FENCE AS NEEDED AND CONSTRUCT ACCESS GATES WHERE NEEDED.
EXISTING 8" WATER MAIN
EXISTING 8" GATE VALVE
EXISTING 6" GATE VALVE
EXISTING 6" WATER MAIN
EXISTING AIR RELEASE VALVE MANHOLE
EXISTING VALVES
EXISTING 16" x 16" TEE
EXISTING 16" GATE VALVE
EXISTING 16" WATER MAIN
STA 100+00
DRILLING ENTRY PIT
DRILL ENTRY POINT IS APPROXIMATELY 31'-FEET FROM THE INTRACOASTAL WATERWAY.
HORIZONTAL DIRECTIONAL DRILL 20" HDPE
101+00
102+00
16" WATER MAIN
FITTINGS AS REQUIRED (TYP.)
16"-11.25 DEG BEND
20" x 16" REDUCER
TRANSITION COUPLING FROM HDPE TO PVC AS REQUIRED
EXISTING 6" GATE VALVE
AERIAL PHOTO 1


CONNECT TO EXISTING 16" FORCE MAIN
PROPOSED MULTI PURPOSE PARKING GARAGE
UNDER BRIDGE
16" FORCE MAIN TO DIRECTIONAL DRILL
Setch Rd

Vermeer  ATLAS BORE PLA

Do not use or rely upon this ATLAS Bore Planner for avoidance of underground utilities.

Utility locations and the planned bore path displayed in the ATLAS Bore Planner must be considered estimates until exact locations are determined by the user. When the actual boring operation approaches the estimated locations of underground utility installations, the exact locations must be determined by safe and acceptable means. OHSA CFR 29 1926.651.

T B Landmark Construction, Inc.
11220 New Berlin Road
Jacksonville, FL 32226
(904) 751-1016

Las Olas HDD

Job: Lauderdale FM.vd3

Machine: D100x120 II
Date: June 23, 2016
Minimum Cover: 0.0"

Longitude: 0° 0' 0.000000"
Latitude: 0° 0' 0.000001" N
Bearing: 0°
Elevation: 0"

Entry Angle: -14.0°
Setup Distance: 200.00'
Setup Left/Right: 0.00'

Rod
Rod Length: 20.00'
Diameter: 3.5"
Bend: 197.40'
Quantity: 62
Entry Point Offset: -0.0"

Pilot Bit: 6.0"
Reamer: 32.0"

Pilot Hole Volume: 1818 gallons
Backreamed Hole Volume: 51702 gallons

Pilot Hole Mud Volume: 9088 gallons
Backreamer Mud Volume: 258511 gallons
Total Mud Volumes: 267599 gallons

Notes

Vermeer

ATLAS BORE PLANNER V3.2

Do not use or rely upon this ATLAS Bore Planner for avoidance of underground utilities.

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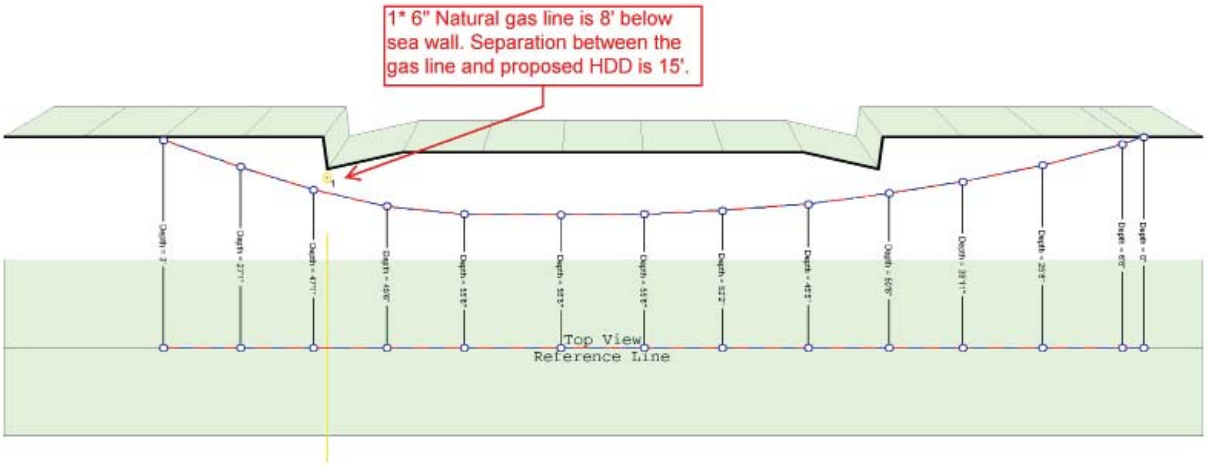

Lauderdale FM - D100x120 II July 6, 2016 2:57:50 pm Page 2 / 4

Vermeer

ATLAS BORE PLANNER V3.2

Do not use or rely upon this ATLAS Bore Planner for avoidance of underground utilities.

T B Landmark Construction, Inc. · 11220 New Berlin Road Jacksonville, FL 32226 · (904) 751-1016

Plan

Rod	Length ft	Dist. ft	Depth ft/in	L/R ft	Pitch °	Azimuth °	Act.Depth ft/in	Act.L/R ft	Act.Pitch °
1	20.00	219.40	7'10"	0.00	-14.1	0.0			
2	40.00	238.80	12'9"	0.00	-14.1	0.0			
3	60.00	258.20	17'7"	0.00	-14.1	0.0			
4	80.00	277.60	22'5"	0.00	-14.1	0.0			
5	100.00	297.01	27'3"	0.00	-13.0	0.0			
6	120.00	316.54	31'7"	0.00	-12.5	0.0			
7	140.00	336.07	35'11"	0.00	-12.5	0.0			
8	160.00	355.60	40'3"	0.00	-12.5	0.0			
9	180.00	375.12	44'6"	0.00	-12.5	0.0			
10	200.00	394.74	48'5"	0.00	-9.4	0.0			
11	220.00	414.48	24'8"	0.00	-9.3	0.0			
12	240.00	434.22	31'	0.00	-9.3	0.0			
13	260.00	453.96	37'4"	0.00	-9.3	0.0			
14	280.00	473.71	43'7"	0.00	-7.9	0.0			
15	300.00	493.59	48'10"	0.00	-4.3	0.0			
16	320.00	513.54	51'3"	0.00	-4.1	0.0			
17	340.00	533.49	52'9"	0.00	-4.1	0.0			
18	360.00	553.44	54'2"	0.00	-4.1	0.0			
19	380.00	573.39	55'6"	0.00	-3.1	0.0			
20	400.00	593.38	56'	0.00	-0.2	0.0			
21	420.00	613.38	56'1"	0.00	-0.2	0.0			
22	440.00	633.38	56'2"	0.00	-0.2	0.0			
23	460.00	653.38	56'3"	0.00	-0.2	0.0			
24	480.00	673.38	56'4"	0.00	-0.2	0.0			
25	500.00	693.38	56'5"	0.00	-0.2	0.0			
26	520.00	713.38	56'4"	0.00	0.4	0.0			
27	540.00	733.38	56'2"	0.00	0.4	0.0			
28	560.00	753.38	56'1"	0.00	0.4	0.0			
29	580.00	773.38	55'11"	0.00	0.4	0.0			
30	600.00	793.38	55'10"	0.00	0.4	0.0			
31	620.00	813.37	55'4"	0.00	2.1	0.0			
32	640.00	833.36	54'7"	0.00	2.1	0.0			
33	660.00	853.35	53'10"	0.00	2.1	0.0			
34	680.00	873.33	53'1"	0.00	2.1	0.0			
35	700.00	893.32	52'5"	0.00	2.1	0.0			
36	720.00	913.30	51'5"	0.00	3.0	0.0			
37	740.00	933.27	50'4"	0.00	3.0	0.0			
38	760.00	953.24	49'4"	0.00	3.0	0.0			
39	780.00	973.21	48'3"	0.00	3.0	0.0			
40	800.00	993.18	47'2"	0.00	3.0	0.0			

Vermeer

ATLAS BORE PLANNER V3.2

Do not use or rely upon this ATLAS Bore Planner for avoidance of underground utilities.

T B Landmark Construction, Inc. · 11220 New Berlin Road Jacksonville, FL 32226 · (904) 751-1016

Plan

Rod	Length ft	Dist. ft	Depth ft/in	L/R ft	Pitch °	Azimuth °	Act.Depth ft/in	Act.L/R ft	Act.Pitch °
41	820.00	1013.14	43'9"	0.00	5.3	0.0			
42	840.00	1033.05	38'9"	0.00	5.3	0.0			
43	860.00	1052.97	33'10"	0.00	5.3	0.0			
44	880.00	1072.88	28'10"	0.00	5.3	0.0			
45	900.00	1092.80	23'10"	0.00	5.3	0.0			
46	920.00	1112.70	50'	0.00	6.6	0.0			
47	940.00	1132.57	47'9"	0.00	6.6	0.0			
48	960.00	1152.43	45'5"	0.00	6.6	0.0			
49	980.00	1172.30	43'1"	0.00	6.6	0.0			
50	1000.00	1192.16	40'9"	0.00	6.6	0.0			
51	1020.00	1211.99	38'2"	0.00	8.1	0.0			
52	1040.00	1231.79	35'4"	0.00	8.1	0.0			
53	1060.00	1251.59	32'6"	0.00	8.1	0.0			
54	1080.00	1271.39	29'8"	0.00	8.1	0.0			
55	1100.00	1291.19	26'10"	0.00	8.1	0.0			
56	1120.00	1310.90	23'6"	0.00	10.6	0.0			
57	1140.00	1330.57	19'10"	0.00	10.6	0.0			
58	1160.00	1350.23	16'2"	0.00	10.6	0.0			
59	1180.00	1369.89	12'6"	0.00	10.6	0.0			
60	1200.00	1389.54	8'10"	0.00	11.4	0.0			
61	1220.00	1409.02	4'3"	0.00	14.1	0.0			
62	1237.51	1426.00	-0"	0.00	14.1	0.0			

Equipment List

UNIT#	YEAR	TRUCK/EQUIP DESCRIP.	SERIAL #
205	2000	VERMEER E550 EVACUATOR VACCUMM TRAILER W/ 29HP DEUTZ DIESEL ENGINE	1VRT20292Y1000218
219	2001	28 MCELROY TRACSTAR BUTT FUSION	
226		KUBOTA M4050 AGRICULTURAL TRACTOR	10854
227	1999	RING-O-MATIC 750 PORTABLE VACUUM	1R95B1422XP303924
229	2001	SULLAIR 185CFM AIR COMPRESSOR	137024
234	2001	SULLAIR 185H AIR COMPRESSOR	137025
236	2000	VAXCAVATOR VT 800 D	8D0810002/34013
241	2002	18 HIGH FORCE BUTT FUSION MODEL #A18556(	SN# C02864
242	1988	7550 VERMEER TRENCHER	1VRF112WXJ1000128
249	2003	VERMEER DIRECTIONAL DRILL 80 X 100	1VRT290L1Y1000276
250	2003	CAT 420DIT BACKHOE LOADER	BLN06009
251	2003	CAT 420DIT BACKHOE LOADER	BLN06010
254	2000	TULSA IRON RIG RECYCLER	1T9B2292XY1649016
256	2004	TRAC STAR 500II	M#AT5000102/S#C10697
257	2004	KOMATSU PC 200 EXCAVATOR	S/N# A86844
259	1998	Vermeer Trencher V4150A	1VRP070V0W1000487
260	2004	618 Mcelroy Low Pressure Fusion Machine	SN#C00573 / MDL#1855602
262	2004	Cat 304CR Mini Excavator	SN#NAD01162
266	2000	800 Gallon Vactron	432DN25FVZ0006300
268	2005	Cat 420DIT Backhoe Loader	BLN12059
269	2005	Cat 420DIT Backhoe Loader	BLN12422
271	2004	Laymor Broom	30128
273	2006	T900 Fusion Machine	C15743
274	2006	302.5C Cat Excavator	GBB00903
275	2006	304CR Cat Excavator	FPK00893
278		Vermeer Vac	
279	2006	420EIT Cat Backhoe	KMW00636
280	2006	930G Wheel Loader	TWR02331
281	2007	AZ500 Milling Machine	50000186
282	2007	Cat DozierD3GLGP	BYR01607
283	2007	KOMATSU PC228	32693
284	2007	Cat 305	DGT01875
285	2006	MT345B Tractor	CR30722
286	2005	Cat Backhoe 420 D	BLN12056
288		Takeuchi TL140	21402111
289	2008	Vermeer 36 x 50	1VR4230D281000491
290	2008	Vermeer 36 x 50	1VR4230D881000494
291	2009	Stow Concrete Mixer	SN# K2752168
292	2009	Sullair Air Compressor	200809080088
293	2009	Cat 303.5CR	DMY02073
294	2009	Cat CS433E Roller/Compactor	CFP00168
295	2010	McLaughlin Auger Bore	3642c09210924

Equipment List

297	2003	Perkins 4 cyl Hydraulic Pump	SN# D6984
298	2009	Thompson Pump	6V-1142
299	2002	Tri Flo Recycler	4J1FS30321B006586
1201	2010	Vermeer D100 x 120	1VRZ33041A1000474
1202	2010	Vermeer 20x22 Drill machine	1VR6180TXA1000468
1203	2010	420 EIT Backhoe	DAN00349
1204	2010	185 CFM Sullair Compressor	SN110020
1205	2004	Vactron 12 T/ATrailer	5HZBF162X4LC41112
1206	2003	McLeroy Fusion Machine	97N2650-2
1207	2009	Laymore Sweeper	30279
1209	1989	Sullair Cpompressor	00498495
1210	1990	Sullair Compressor	004103975
1211	1997	Onan Generator	C970633188
1212	2012	420 EIT Backhoe	DAN02225
1213	2012	Vermeer D36 x 50 drill machine	1VR4230D6C1000888
1214	2012	Komatsu PC138USLC-8	26592
1215	2004	Tulsa MCS350 Reclaimer	1T9B2292611649018
1216		Spectrum Diesel Gen w/ Trl	CTT07584
1217	2012	John Deere 450 Dozer	1T0450JXCCD228425
1218	2012	Vermeer MX240-10 Mix System	1VR6120P3C2001698
1219	2012	Vermeer MX240-10 Mix System	1VR6120P1C2001697
1220	2006	Cat 930 Loader with Side Boom	s/n TWR01349
1221	2013	Vermeer 330x500 Directional Drill Rig	1VR450076D1000147
1222	2007	Laymoure Sweeper 29596	s/n LM-29596
1223	2013	Vermeer Recycler R9	1VRB533B9D1000121
1224	2013	400 Mud Pump	1VRB20050C1000108
1225	2009	Boat	
2000	2004	HRD-500-1 Drilling Unit	5002004001
2001	1997	Vermeer D24X40 Navigator	1VMR16094V1000326
2002	1999	Vermeer 80X100 Navigator	1VRT290L6X1000157
2003	2005	New Holland Front End Loader	N3F000649
2004	2005	Kobelco Execavator Model SK210	YQ080U2381
2005	2005	John Deere CT332 Skid Steer	T0032TB115190
2006	1997	Kobelco Model SK300LC Excavator	YCU1990
2007	2002	1500 Gal Recycler	3031864/02
2008	2006	CS8000 Gal Recycler	1A9GF5340SP600022
2009	2010	5000 Gal Recycler	1A9SF4221L6000024
2010	2004	1500 Gal Recycler	
2011	1994	Miller 400 Amp Welder	700653
2012	2003	4-3/4" Mud Motor	
2013	2003	7" Mud Motor	
2014	2007	Digitrack Eclipse Locator & Remote	EDD3928
2015	2007	Digitrack Eclipse Locator & Remote	EDD3876
2016	2004	P500 Skid Matted Mud Pump	P500-01-08-01

Equipment List

2017	2008	OPI Unit, Drillpipe Makeup/Breakout/Spinup	
2018	1994	621B Case Loader	
2019	2001	1236 McElroy Fusion Machine	
2020	2001	John Deere JS45 Generator	
2021		METPRO Skid Pump	#P6085451005 / 018523
2022	2000	412/618 Fusion Machine Model 1245001	SN C00179
2023		Blue Thompson Pump	6V534
2024	2014	CAT 304 Excavator	TTN01964
2025	2014	Hyd Water Pump / National Pump	D1521
2026	2014	CAT 336EL Excavator	FJHD1252
2027		Lincoln SAE400 Diesel Welder	
2028		Lincoln SAE400 Diesel Welder	
2029		Miller Big 40 Diesel Welder	
2030		Lincoln Vantage 300 Diesel Welder	
2031		Lincoln Ranger 300 Diesel Welder	
2032		Lincoln Ranger 300 Diesel Welder	
2033		Lincoln Ranger 300 Diesel Welder	
2034		140BM Asphalt Cutter	SN# 6287
2035	2011	Kawasaki Mule 610XC	JK1AFED17AB500563

Tab 5 - References

References

TB Landmark has established a trusting relationship by performing and delivering quality projects, timely service, and with cost savings in mind. Below are client references.

Hodges Bayou 30" Emergency Bore

Completed an emergency subaqueous bore consisting of 2,450LF 30" FPVC via HDD

Contract Amount:	$ 839,500.00
Location:	Lynn Haven, FL
Job Start/End:	January 2016
Owner Contact:	Preble-Rish, Inc. (Engineer) 203 Aberdeen Parkway Panama City, FL 32405 Cliff Lee (850) 252-5070 wilsonc@preble-rish.com

Sanford Reclaimed Water Interconnect With Volusia Co.

T B Landmark completed construction of a new reclaimed water main starting at Wayside Park in Seminole Co. and ending near the Lake Monroe Park entrance in Volusia Co. The reclaimed water main was 20" D.I. open cut construction along a 1400-ft (+/-) portion of the route, plus approximately 1350-ft of new 24" HDPE subaqueous directional bore construction, the majority of which crosses under the St. Johns River. The project also included a new above grade valve and antenna in Wayside Park and a new above grade interconnect (included a meter, control panels, and antenna) in Volusia Co.

Contract Amount:	$ 994,739.00
Location:	Sanford, FL
Job Start/End:	June 2014 / October 2014
Owner Contact:	City of Sanford 300 N. Park Avenue Sanford, FL 32772 Paul Moore (407) 688-5106 moorep@sanfordfl.gov

Pendola Point Reclaim Water & Force Main, Tampa Port Authority

TB Landmark installed 12,830LF of 12" reclaimed water line and 13,782LF of 8" wastewater force main from the City of Tampa's Howard F. Current WWTP to the NexLube facility on Pendola Point. The job included a wire lined 2,770LF 30" subaqueous drill under the Port Sutton Channel.

Contract Amount:	$ 2,779,744.19
Location:	Tampa, FL
Job Start/End:	February 2013 / December 2013
Owner Contact:	Tampa Port Authority 1101 Channelside Drive Tampa, FL 33602 Dan Abbitt (813) 905-5013 dabbitt@tampaport.com

Flemington Water Transmission Main & Force Main, - Wilmington, NC

As a subcontractor to Hall Contracting, TB Landmark provided labor and equipment for two (2) subaqueous drill shots under the Cape Fear River. The first shot was performed to install 1,224 LF of 12" HDPE water main and the second shot included pull-back of 1,510 LF of twin 8" HDPE force main pipes through the same bore hole.

Contract Amount:	$ 682,245.61
Location:	Wilmington, NC
Job Start/End:	July 2015 / August 2015
Owner Contact:	Hall Contracting 6415 Lakeview Road Charlotte, NC 28269 K. Michael Hall (704) 598-0818 kmhall@hallcontracting.com

District II Broward River Crossing Design/Build - Jacksonville, FL

TB Landmark Construction, Inc. and GAI Consultants, Inc. partnered in the design/build pursuit of this 30" diameter, 2,800 LF subaqueous drill shot of HDPE reclaim water main beneath the Broward River. This new asset was the missing link that connects the water production plant with an existing line across the river located at a JEA power plant.

Contract Amount:	$ 3,165,000.00
Location:	Jacksonville, FL
Job Start/End:	April 2016 / June 2016
Owner Contact:	Jacksonville Electric Authority (JEA) 21 W. Church St. T-4 Jacksonville, FL 32202 Elizabeth DiMeo, PE (904) 665-8139 dimeea@jea.com

Tab 6 - Price Proposal Form

CITY OF FORT LAUDERDALE

ADDENDUM No. 4
REVISED PRICE PROPOSAL
June 24, 2016

PRICE PROPOSAL FORM
RFP # 465-11765 DESIGN-BUILD SERVICES FOR

RELOCATION OF EXISTING 16-INCH WATER MAIN AND INSTALLATION OF 16-INCH FORCE MAIN AT EAST LAS OLAS BOULEVARD

DESIGN

1. Design Development	**$** 414,441.50
2. Construction Administration	**$** 513,442.00
SUBTOTAL DESIGN COSTS	**$** 927,883.50

CONSTRUCTION

GENERAL

3. Mobilization/Demobilization	**$** 391,250.00
4. Maintenance Of Traffic *(For both water main and sewer main construction)*	**$** 186,862.50
5. Restoration *(For both water main and sewer main construction)*	**$** 308,780.00

WATER

6. 20-Inch On-Shore Piping *(Includes labor, material, bends, valves, ARV's, manholes, testing, tapping existing water main, reducer, etc.)*	**$** 524,070.08
7. 20-Inch HDPE Pipeline – Directional Drill	**$** 857,933.46
8. Cut & Cap Existing 16-Inch Water Main *(Includes valves, line stops, grouting, and all incidentals)*	**$** 48,093.75

SEWER

9. 16-Inch On-Shore Piping $ 481,528.41

(Includes labor, material, bends, valves, ARV's, manholes, testing, tapping existing force main, etc.)

10. 16-Inch HDPE Pipeline – Directional Drill $ 822,167.38

SUBTOTAL CONSTRUCTION COSTS $ 3,620685.58

PERMIT ALLOWANCE

11. Permitting **$200,000.00**

(For both Design and Construction)

TOTAL BID – Design, Construction, and Permit Allowance Costs (proposed "Contract Price")

four million seven hundred forty eight thousand five hundred sixty nine dollars and 8 cents
(IN WORDS)

$ 4,748,569.08
(FIGURES)

1. The prices listed in the Price Proposal Form shall include the total cost to complete the Work including but not limited to materials, labor, equipment, profit, bonds, insurances, etc., as necessary to ensure proper execution of the design-build services and product requested by the City of Fort Lauderdale. Any pricing, quantities, costs or services that are not listed above, and are known to be required, must be added by the Proposer and listed on a separate sheet and included in the total.

2. I hereby certify that I am authorized to act on behalf of the firm, individual, partnership, corporation or association making this proposal and that all statements made in this document are true and correct to the best of my knowledge. I agree to hold this proposal open for a period of one hundred and eighty (180) days from the deadline for receipt of proposals. . .

3. I understand and agree to be bound by the conditions contained in the Request for Proposal and shall conform with all requirements of the Request for Proposal.

Robin R Thigpen
Name: (Please Print)

Robin R Thigpen President 7/6/2016
Proposer Signature Title: Date:

Tab 7 - Contract Forms

NON-COLLUSION STATEMENT:

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below, to their best knowledge, any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Fla. Stat. (1989), who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement. Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they hold a controlling financial interest (ownership of five (5) percent or more), unless in their City duties they are not involved in:

3.3.1 The award of the contract, or
3.3.2 Determining contract provisions, or
3.3.3 The enforcement of the contract.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME	RELATIONSHIPS

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

TRENCH SAFETY

Bidder acknowledges that included in the appropriate bid items of his bid and in the Total Bid Price are costs for complying with the Florida Trench Safety Act, Florida Statutes 553.60 – 553.64. The bidder further identifies the costs of such compliance to be summarized below:

Trench Safety Measure (Description)	Units of Measure (LF/SF)	Unit (Quantity)	Unit Cost	Extended Cost
A. Trench Box	LF	700	$10.00	$7,000.00
B.			$	$
C.			$	$
D.			$	$7,000.00

Total: $

The bidder certifies that all trench excavation done within his control in excess of five feet (5') in depth shall be in accordance with the Occupational Safety and Health Administration's excavation safety standards, C.F.R. s. 1926.650 Subpart P., and the Florida Trench Safety Act, Florida Statutes 553.60-553.64.

Failure to complete the above may result in the bid being declared non-responsive.

DATE: 7/7/16

(SIGNATURE)

STATE OF: FLORIDA COUNTY OF: DUVAL

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Robin Thigpen
(Name of Individual Signing)

who, after first being duly sworn by me, affixed his/her signature in the space provided above on this 7th day of July, 2016.

NOTARY PUBLIC

My Commission Expires: 07/15/2016

Notary Public State of Florida
Loren Ward
My Commission EE 216313
Expires 07/15/2016

QUESTIONNAIRE SHEET

PLEASE PRINT OR TYPE:

Firm Name: T B Landmark Construction, Inc.

President Robin R. Thigpen

Business Address:
11220 New Berlin Rd. Jacksonville, FL 32226

Telephone: (904) 751-1016 Fax: (904) 751-4125

E-Mail Address:
madams@tblandmark.com

What was the last project of this nature which you completed?

Broward River Directional Drill Crossing - Jacksonville, FL - 2016

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses and telephone numbers):

1) JEA - 21 West Church St. Jacksonville, FL 32202
Beth DiMeo (904) 665-8139
2) Hall Contracting - 6415 Lakeview Road Charlotte, NC 28269
K. Michael Hall (704) 598-0818
3) Tampa Port Authority - 1101 Channelside Dr. Tampa, FL 33602
Dan Abbitt (813) 905-5013

How many years has your organization been in business? 16+

Have you ever failed to complete work awarded to you; if so, where and why?

NA

The name of the qualifying agent for the firm and his position is: Robin R. Thigpen, President

Certificate of Competency Number of Qualifying Agent: CUC057226

Effective Date: 07/08/16 Expiration Date: 08/31/16

Licensed in: Duval County, FL Contractor's License #(s) CGC060694

(County/State)

Expiration Date:
08/31/16

NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.

Contractor must have proper licensing prior to submitting bid and must submit evidence of same with bid.

QUESTIONNAIRE SHEET

1. Have you personally inspected the proposed work and have you a complete plan for its performance?

Yes

2. Will you sublet any part of this work? If so, list the portions or specialties of the work that you will.

TBL intends to self-perform the construction portion of the work.

a)

b)

c)

d)

e)

f)

g)

3. What equipment do you own that is available for the work?

See attached equipment list

4. What equipment will you purchase for the proposed work?

None

5. What equipment will you rent for the proposed work?

As needed

CONSTRUCTION BID CERTIFICATION

Please Note: All fields below must be completed. If the field does not apply to you, please note N/A in that field. If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration) T B Landmark Construction, Inc.

Address: 11220 New Berlin Rd.

City: Jacksonville State: FL Zip: 32226

Telephone No. (904) 751-1016 FAX No. (904) 751-4125 Email: madams@tblandmark.com

Does your firm qualify for MBE or WBE status: ~~MBE~~ ____ ~~WBE~~ ____

If a corporation, state the name of the President, Secretary and Resident Agent. If a partnership, state the names of all partners. If a trade name, state the names of the individuals who do business under the trade name.

Name	Title	Name	Title
Robin R. Thigpen	President		
Timothy C. Beasley	Vice-President		

ADDENDUM ACKNOWLEDGEMENT - Bidder acknowledges that the following addenda have been received and are included in the bid:

Addendum No.	Date Received	Addendum No.	Date Received	Addendum No.	Date Received	Addendum No.	Date Received
1	6/15/16	2	6/15/16	3	6/20/16	4	6/24/16

VARIANCES: If you take exception or have variances to any term, condition, specification, or requirement in this bid you must specify such variance in the space provided below or reference in the space provided below all variances contained on other pages within your bid. Additional pages may be attached if necessary. No variances will be deemed to be part of the bid submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. If submitting your response electronically through BIDSYNC you must also click the "Take Exception" button.

The below signatory affirms that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida. The below signatory agrees to furnish all labor, tools, material, equipment and supplies, and to sustain all the expense incurred in doing the work set forth in strict accordance with the bid plans and contract documents at the unit prices indicated if awarded a contract. The below signatory has not divulged to, discussed, or compared this bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Furthermore, the undersigned guarantees the truth and accuracy of all statements and answers contained in this bid. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a bid, that in no event shall the City's liability for bodder's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars ($500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Robin Thigpen
Name (printed)

Signature

7/7/16
Date:

President
Title

Revised 04/15/15

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT

MINORITY BUSINESS ENTERPRISE (MBE) - WOMEN BUSINESS ENTERPRISE (WBE)

PRIME CONTRACTOR IDENTIFICATION FORM

In order to assist us in identifying the status of those companies doing business with the City of Fort Lauderdale, this form must be completed and returned with your bid package.

Name of Firm:	T B LANDMARK CONSTRUCTION, INC
Address of Firm:	11220 New Berlin Rd. Jacksonville, FL 32
Telephone Number:	904-751-1016
Name of Person Completing Form:	Robin Thigpen
Title:	President
Signature:	
Date:	7/7/16
City Project Number:	465-11765
City Project Description:	Water Main/Force Main Las Olas

Please check the item(s) which properly identify the status of your firm:

- [x] Our firm is not a MBE or WBE.
- [ ] Our firm is a MBE, as at least 51 percent is owned and operated by one or more socially and economically disadvantaged individuals.
  - [ ] American Indian [ ] Asian [ ] Black [ ] Hispanic
- [ ] Our firm is a WBE, as at least 51 percent is owned and operated by one or more women.
  - [ ] American Indian [ ] Asian [ ] Black [ ] Hispanic

The City, in a continuing effort, is encouraging the increased participation of minority and women-owned businesses in Public Works Department related contracts. Along those lines, we are requiring that each firm provide documentation detailing their own programs for utilizing minority and women-owned businesses.

Submit this information as a part of this bid package and refer to the checklist, to ensure that all areas of concern are covered. The low responsive bidder may be contacted to schedule a meeting to discuss these objectives. It is our intention to proceed as quickly as possible with this project, so your cooperation in this matter is appreciated.

CONTRACTOR CHECKLIST

☑ List Previous City of Fort Lauderdale Contracts

None

☑ Number of Employees in your firm 86

--Percent (10.5 %) Women

--Percent (30 %) Minorities

--Job Classifications of Women and Minorities

Foremen
Operators
Mechanics
Drivers
Laborers

☑ Use of minority and/or women subcontractors on past projects.

Yes

☑ Nature of the work subcontracted to minority and/or women-owned firms.

Video
Site restoration
Flatwork including: concrete and asphalt
Materials suppliers

☑ How are subcontractors notified of available opportunities with your firm?

Direct contact

☑ Anticipated amount to be subcontracted on this project.

TBL intends to self-perform the construction portion of the work.

☑ Anticipated amount to be subcontracted to minority and/or women-owned businesses on this project.

TBL intends to self-perform the construction portion of the work.

CONTRACT PAYMENT METHOD BY P-CARD

THIS FORM MUST BY SUBMITTED WITH YOUR RESPONSE

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

Payments will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of a contract.

Please indicate which credit card payment you prefer:

__X__ Master Card

_____ Visa Card

Company Name: T B Landmark Construction, Inc.

Robin Thigpen
Name (printed)

Signature

7/7/16
Date:

President
Title

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

ITB # 465-11765 Water Main/Force Main Las Olas

ISSUED: 6/15/2016

This addendum is being issued to amend the solicitation and response to questions and comments received. The following amendments to the Scope of Services are as follows:

Changing Section 1.3 SUBMISSION DEADLINE

To Read: Wednesday, June 29, 2016, at 2:00pm

All other terms, conditions, and specifications remain unchanged.

Althea Pemsel, MA, CPSM
Senior Procurement Specialist

Company Name: T B Landmark Construction, Inc.
(Please print)

Bidder's Signature: _____

Date: 7/7/16

City of Fort Lauderdale • Procurement Services Division
100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301
954-828-5144 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 3

ITB # 465-11765

ISSUED: 6/17/2016

This addendum is being issued to amend the solicitation and response to questions and comments received at the Pre-Bid Meeting on Thursday, June 16th, 2016 and upload Geotechnical Report. Additionally, Revise Page 24, Section 4.2 Contents of Qualification Statement/Submittals, Number 4. Project Methodology & Approach. The following amendments to the solicitation are as follows:

Questions (Q) and Answers (A):

Q1) Is the Guaranteed Maximum Price based on a time and materials basis or fixed price?

See Special Conditions Section 2.12 Price Proposal.

Q2) Request that the City reconsider the Minimum Qualifications in Section 3.4 item j) as it will eliminate qualified companies to bid due to the fact they have not worked together as a team but have performed similar work individually.

The City's prefers the proposed team have worked together and completed at least one (1) project as a team.

Q3) Will the City allow a DBF to have an underground license to do business verses a certified general contractor per Section 3.4 Minimum Qualifications item c)?

The City will allow either a General Contractors' license or an Underground Utility license.

Q4) When providing example projects to qualify the team component of the solicitation, does the City prefer those project to be similar in scope to this one?

Yes.

Q5) In Section 4 Submittal Requirements item 4.2 Contents of Qualifications number 4. Project Methodology & Approach; what is the City expecting percentage wise in terms of providing conceptual design along with the submission.

The City no longer require a conceptual design and the submission of the design will be after contract award.

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954-828-5144 Fax 954-828-5576
purchase@fortlauderdale.gov

Q6) Does the City want the proposers to submit the forms electronically or in the hardcopy along with proposal?

The forms (in Section 4 Submittal Requirements item 4.2 Contents of Qualifications number 7. Contract Forms) MUST be submitted along with the hardcopy proposal.

Q7) Is the bid bond to be submitted along with the hardcopy proposal at time of submission deadline?

Yes. Do not submit electronically.

Q8) How will the evaluation committee decide how to evaluate and score the Price Proposal component of the criteria for 30 points?

The lowest bidder gets ranked one, and the next lowest bidder gets ranked two and this continues to the last proposal.

Q9) Is this a prevailing wage project?

No.

Q10) What is the condition of the existing water main pipe? What is the condition of the force main?

The existing water main was constructed in the 70's/80's and is DIP pipe. Unaware of current condition and no force main currently exists.

Q11) Is the water main the only conflict with FIND?

Yes.

Q12) Can the proposer submit more than 50 pages if necessary? Does the 11x17 pages count as one?

The City prefers the responses to be not more than fifty (50) pages double-sided and encourage the proposers to be conservative with the proposals. Yes, the 11x17 pages count as one page.

Q13) How many members are on the selection committee and have they been selected yet?

There will be 3 members of City staff that make up the selection committee and it has not been finalized yet.

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Q14) Will the evaluation of qualifications and the price proposal be evaluated together?

Yes the selection committee will evaluate all criteria including price proposal together.

Q15) Will the sign-in sheet from the pre-bid meeting be posted on BidSync?

Yes.

Q16) When is the deadline for questions?

June 23rd, 2016 by 5:00 PM.

Q17) Does the Schedule of Values need to be including with the proposal submission along with the Price Proposal Form?

Yes.

Q18) In section 3.4 Minimum Qualifications item i), it states that the two (2) projects need to be similar in size and nature; does similar mean linear footage and directional drilling?

Yes.

Q19) Section 4.1 Number of Copies calls for one (1) bound original and one (1) unbound original. To avoid redundancy, can we submit just one original either bound or unbound, whatever the City's preference?

No.

Q20) Can you please provide the CADD drawings?

CADD files will be provide to the awarded DBF.

Q21) Is Las Olas blvd where the water main connects and where the force main crosses in a FDOT Right of Way? If so, are there restricted working hours?

Yes. It is a FDOT right-of-way. The working hours are under review at this time.

Q22) The specifications call out that the lowest price proposal will receive 30 points. What is the scoring criteria for the 2nd,3rd, etc price proposals?

See Question and Answer #8.

Q23) Is the pipe size shown on the plans OD or ID?

Outside Diameter (OD).

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Q24) What Percentage is the plans that get submitted with the Proposal? (ie: 30%, 60%).

See Question and Answer #5.

RFP Revision

Section 4.2 Contents of Qualification Statement/Submittals, 4. Project Methodology & Approach

The City no longer requires a conceptual design and the submission of the design will be after contract award.

The following bullet point has been deleted from the RFP:

- Provide a conceptual design for the proposed Project. Include design, construction, planning, coordination, scheduling, maintainability and any other areas that utilize new or time saving techniques to accomplish the work in a timely manner without sacrificing quality. Include the maintainability of the water main and force main;

All other terms, conditions, and specifications remain unchanged.

Althea Pemsel, MA CPSM
Senior Procurement Specialist

Company Name: T B Landmark Construction, Inc.
(please print)

Bidder's Signature: _____

Date: 7/7/16

City of Fort Lauderdale • Procurement Services Division
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ADDENDUM NO. 4

RFP # 465-11765

ISSUED: June 24, 2016

This addendum is being issued to amend the solicitation and response to a question received via BidSync, and to Remove and Replace Price Proposal Form with the Revised Price Proposal Form dated June 24, 2016. The following amendments to the solicitation are as follows:

Remove and Replace Price Proposal Form:
Remove and replace current Price Proposal Page with **Revised Price Proposal Form, in Addendum No. 4, dated June 24, 2016**. This revised Price Proposal Page must be submitted with your proposal.

Question and Answers:
Q1) Please provide a copy of the Contract Agreement between the City and the successful D&B contractor.

A1) A draft sample of the agreement is attached for review.

Note: Two (2) attachments were uploaded to the Documents section in BidSync for review purposes:

1. Addendum No. 4, Revised Price Proposal Form
2. Sample Draft Contract

All other terms, conditions, and specifications remain unchanged.

Althea Pemsel
Senior Procurement Specialist

Company Name: T B Landmark Construction, Inc.
(Please Print)

Bidder's Signature: _____

Date: 7/7/16

Bid #465-11765 - Water Main/Force Main Las Olas

CITY OF FORT LAUDERDALE

City of Fort Lauderdale, FL
Time left: 4 hrs, 48 mins
Bid started: Jun 07, 2016 12:49:49 PM EDT
Bid ends: Jul 07, 2016 2:00:00 PM EDT
Pre-bid conference: Optional

Download Bid Packet | Remove from My bids

Details | Documents | Q&A | Pre-bid conference

Bid #465-11765 - Water Main/Force Main Las Olas RFP

Time started: Jun 07, 2016 12:49:49 PM EDT
Bid contact: See contact information
Issuing agency: City of Fort Lauderdale, FL See other Bids by this agency
Description: The City of Fort Lauderdale is actively seeking Proposals from qualified, experienced, and licensed firm(s), referred to as Design-Build Firm, to provide design-build services for the design, permitting, and construction of a water main and force main crossing the Intracoastal Waterway in the area of East Las Olas Boulevard. All inquiries concerning this RFP including questions and requests for additional information shall be sent via the BIDSNYC question and answer tool. The City's contact for this RFP is:

Procurement Services Division
Althea Pemsel, Senior Procurement Specialist
100 N. Andrews Avenue, 6th Floor
Fort Lauderdale, FL 33301
Fax: 954-828-5576
Email: apemsel@fortlauderdale.gov

Bid Security: A certified check, cashier's check or bank officer's check, for five (5) percent of the Price Proposal, made payable to the City of Fort Lauderdale, Florida, or bid bond in such amount, shall accompany each proposal.

Added on Jun 15, 2016:
The Bid Opening Date has been changed, See Addendum No. 1.
Added on Jun 20, 2016:
This addendum is being issued to amend the solicitation and response to questions and comments received at the Pre-Bid Meeting on Thursday, June 16th, 2016 and upload Geotechnical Report. Additionally, Revise Page 24, Section 4.2 Contents of Qualification Statement/Submittals, Number 4. Project Methodology & Approach.

NOTE: Some documents were inadvertently deleted, you must *Download a New Packet to ensure you have a complete bid packet*. The new packet will include the Pre-bid Sign-in Sheet, Geo-technical Report, and Addendum No. 3 along with standard forms.

Added on Jun 24, 2016:
This addendum is being issued to amend the solicitation and response to a question received via Bid Sync, and to Remove and Replace Price Proposal Form with the Revised Price Proposal Form dated June 24, 2016. The following amendments to the solicitation are as follows:

Remove and Replace Price Proposal Form:
Remove and replace current Price Proposal Page with **Revised Price Proposal Form, in Addendum No. 4, dated June 24, 2016**. This revised Price Proposal Page must be submitted with your proposal.

Question and Answers:
Q1) Please provide a copy of the Contract Agreement between the City and the successful D&B contractor.

A1) A draft sample of the agreement is attached for review.

Note: Two (2) attachments were uploaded to the Documents section in Bid Sync for review purposes:
1. Addendum No. 4, Revised Price Proposal Form
2. Sample Draft Contract

All other terms, conditions, and specifications remain unchanged.

Added on Jun 27, 2016:
Please Note:
The Bid Opening Date has been changed TO READ:
July 7, 2016 at 2:00pm.

Product Feedback

CAM #16-0742
EXHIBIT 5
Page 108 of 114

Classification codes: View classification codes
Regions: Florida, Broward

Vendor viewed report

Fill out the qualifications for this agency. Click here

Addendum # 1 - made on Jun 15, 2016 10:26:30 AM EDT

Previous Performance Period Selection: 120 days **New Performance Period Selection:**
Description/Bid Comments: (Information was added)
New Documents: 163-11765 Water Main - Force Addendum No 1.doc
Removed Terms Documents: NON COLLUSION STATEMENT
Removed Terms Documents: CITB Trench Safety (27 Jun 2014)
Removed Terms Documents: Bidder Questionnaire CITB
Removed Terms Documents: General Terms & Conditions Formal
Removed Terms Documents: Contractor Payment by P-Card Form
Removed Terms Documents: Construction Bid Certification Page 4-15-15
Removed Terms Documents: CITB SIGNATURE PAGE (27Jun2014)
Removed Terms Documents: CITB_Prime_Contractor_Identification27_Jun_2014

Addendum # 2 - made on Jun 15, 2016 1:57:25 PM EDT

Previous Bid End Date: Jul 06, 2016 2:00:00 PM EDT **New Bid End Date:** Jun 29, 2016 2:00:00 PM EDT

Addendum # 3 - made on Jun 20, 2016 5:03:22 PM EDT

Description/Bid Comments: (Information was added)
Removed Documents: 163-11765 Water Main - Force Addendum No 1.doc
New Documents: General Terms and Conditions.docx
New Documents: Non-Collusion Statement.doc
New Documents: CITB Trench Safety.docx
New Documents: CITB_Prime_Contractor_Identification27_Jun_2014.htm
New Documents: Construction Bid Certification Page 4-15-15.doc
New Documents: QUESTIONNAIRE SHEET 12-3.docx
New Documents: Contractor Payment by P-Card Form.doc.docx
New Documents: 465-11765 Pre-bid Sign-In Sheet.pdf
New Documents: P12196 - Geotech Report_6-15-16.pdf
New Documents: 465-11765 Water Main - Force Addendum No 3.doc
New Documents: 465-11765 Water Main - Force Addendum No 1.doc

Addendum # 4 - made on Jun 24, 2016 6:10:46 PM EDT

Description/Bid Comments: (Information was added)
New Documents: Revised Price Proposal Form - No. 4.docx
New Documents: Sample Draft Agreement Design Build 052316.docx
New Documents: 465-11765 Water Main - Force Addendum No. 4.doc

Addendum # 5 - made on Jun 27, 2016 1:00:57 PM EDT

Previous Bid End Date: Jun 29, 2016 2:00:00 PM EDT **New Bid End Date:** Jul 07, 2016 2:00:00 PM EDT
Description/Bid Comments: (Information was added)

How do I respond to a paper response bid?
Instructions may vary. Ask the bid contact(s) for this agency's process.

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that **T B Landmark Construction, Inc.**
as Principal, hereinafter called the Principal, and **Travelers Casualty and Surety Company of America**
a corporation duly organized under the laws of the State of **CT**
as Surety, hereinafter called the Surety, are held and bound unto **City of Ft. Lauderdale**
as Obligee, hereinafter called the Obligee, in the sum of

Five Percent of Bid Amount Dollars(**5%**)
for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Water Main and Force Main Intracoastal Waterway Crossings at Las Olas Blvd.**

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and Sealed this 29th day of June, 2016.

Lauren Ward
(Witness)

{ T B Landmark Construction, Inc.
(Principal) *(Seal)*
Robin Thigpen, President
(Title)

J Eaves
(Witness)

{ **Travelers Casualty and Surety Company of America**
(Surety) *(Seal)*
(Title)
Robert T. Theus, Attorney-In-Fact

TRAVELERS

POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

Attorney-In Fact No. 229425 **Certificate No.** 006737917

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Fitzhugh K. Powell Jr., Robert T. Theus, Susan W. Jordan, Walter N. Myers, and Benjamin Powell

of the City of Jacksonville, State of Florida, their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

Any and all consents required by the Department of Transportation, or the Central Florida Expressway Authority, State of Florida, incident to the release of retained percentages and/or final estimates.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 12th day of April, 2016.

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company
Travelers Casualty and Surety Company
Travelers Casualty and Surety Company of America
United States Fidelity and Guaranty Company

State of Connecticut
City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the 12th day of April, 2016, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.
My Commission expires the 30th day of June, 2016.

MARIE C. TETREAULT NOTARY PUBLIC CONNECTICUT

_____
Marie C. Tetreault, Notary Public

58440-8-12 Printed in U.S.A.

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 29th day of June, 2016.

Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

T B Landmark
CONSTRUCTION, INC.

T B Landmark Construction Inc.
11220 New Berlin Road
Jacksonville, FL 32226
904.751.1016 | tblandmark.com

gai consultants

GAI Consultants, Inc.
2255 Glades Road, Suite 324A
Boca Raton, FL 33431
561.988.2611 | gaiconsultants.com