

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

July 7, 2016

Fort Lauderdale City Hall
100 N. Andrews Avenue, #619
Fort Lauderdale, Florida 33301

Attention: Althea Pemsel, Senior Procurement Specialist
Re: Design-Build Services for Installation of a 20-Inch Diameter Water Main, and a 16-inch Force Main.
RFP Project No. 465-11765

Dear Ms. Althea Pemsel and Evaluation Committee Members:

David Mancini & Sons, Inc., (DMSI) in conjunction with our Lead Design partner A&P Consulting Transportation Engineers, Corp. (APCTE), and DBE Utility Services as our sub, is pleased to submit our qualifications in response to the reference solicitation. DMSI's Design-Build Team has more than 15 years of experience understanding the technical challenges of tunnel, shaft, horizontal directional drill (HDD) installations and open cut utility construction and specifically, the geotechnical conditions within the proposed project limits. As an experienced Design-Builder, DMSI offers expertise in the design, permitting, construction and placement of water and sewer lines. In addition, DMSI employees have extensive experience throughout Miami-Dade County, primarily with Miami Dade and Broward Counties, and in-house resources has the ability and experience to self-perform all of the major work components of this trenchless and open cut installations.

SOME OF THE KEY BENEFITS IN SELECTING THE DMSI TEAM FOR THIS DESIGN-BUILD PROJECT:

The DMSI Team combines the technical capabilities of a locally prominent and highly qualified engineering consultants and a South Florida recognized engineering firm, APCTE with a proven record of delivering complex pipeline projects. The team provides unparalleled design capabilities in open cut design and trenchless systems. That expertise, through the Design Manager, Mr. Arnelio Alfonso, provides the assurance that the pipeline project delivered under this project is resilient and will remain in service for years to come.

Some of the Design-Build projects that DMSI along with APCTE, our design partner, has successfully completed are as follows:

- 54-inch Horizontal Directional Drill Force Main - \$10.4 Million
- 20-inch Horizontal Directional Drill Force Main at Miami International Airport - \$0.5 Million
- Norris Cut D/B Project - \$43.0 Million
- Washington Avenue - \$18.0 Million
- Lummus - \$12.0 Million
- Nautilus Neighborhood - \$38.0 Million
- Ocean Front - \$2.5 Million
- Biscayne Point - \$21.0 Million
- Little Flamingo - \$4.5 Million
- Harding Ave 36" & 30" FM - \$1.4 Million

The key personnel DMSI proposes for this RFP, not only exceed the technical requirements but also have additional design-build experience in similar roles on similar projects. With its' collaborative approach and experience working together, the DMSI Team has a proven history of success. A brief synopsis of the key personnel for this RDBS is shown on the Executive Summary.

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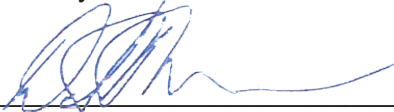
David Mancini & Sons, Inc. has been fortunate to work with several utility companies over the past years on several water and wastewater infrastructure projects. During that time, DMSI has assembled a team of industry leaders with proven experience in South Florida. Our key staff has gained first-hand knowledge of local conditions, local permitting requirements, stakeholder and public outreach concerns, multi-agency coordination needs, general contracting practices, and construction methodologies specific to pipeline installation. Our team's tenure on these projects has yielded an invaluable working relationship with their clients and other local regulatory agencies - one based on trust, quality, and responsiveness, while delivering cost-effective solutions.

One unique distinction of this Team is that early this year, DMSI partnered with APCTE in a Design-Build Project with the City of Miami Beach to install a redundant 54-inch Force Main. Our Team established a World's Record when it successfully completed the horizontal directional drill (HDD) installation of about 3,300 LF of a 54-inch HDPE Force Main along Euclid Avenue from 11th Street to just north of 5th Street.

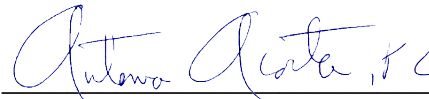
In summary, DMSI's Design-Build Team is committed to designing and constructing a successful project for the City of Ft. Lauderdale. We have assembled a team of local, highly skilled professionals who understand the level of quality expected by the City. Our team's experience includes a number of successfully completed projects and meets or exceeds the criteria set forth in this RFP.

Thank you in advance for your consideration for our proposal and we are looking forward to partner with the City of Fort Lauderdale Staff on this project.

Sincerely,



David Mancini, President
David Mancini & Sons, Inc.



Antonio G. Acosta, P.E., President
A&P Consulting Transportation Engineers, Corp.

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LEGAL NAME OF PROPOSER:

David Mancini and Sons, Inc. (DMSI)



DAVID
MANCINI
& SONS, INC.

FEDERAL EMPLOYEE IDENTIFICATION:

FEIN # 27-3716806

ADDRESS OF SUBMITTING PROPOSER:

1939 NW 40th Court
Pompano Beach, Florida 33064

CONTACT PERSON NAME:

DAVID A. MANCINI

TITLE: PRESIDENT

EMAIL ADDRESS OF SUBMITTING PROPOSER:

dmancini@dmsi.co

PHONE NUMBER AND FACSIMILE NUMBER:

PHONE : (305) 532-8827 | FAX: (305) 532-8835

SIGNATURE:

DATE OF SIGNATURE

July 7th, 2016

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EXECUTIVE SUMMARY

INTRODUCTION

The DMSI Team has prepared this executive summary based upon our understanding of the major project requirements. We have assembled a team tailored to meet each aspect of this contract. In assembling our staff, we not only looked at the special technical capabilities and construction experience of all proposed personnel, but also the current and projected workload and availability of each team member. The technical qualifications and construction experience of each of the staff selected matches the requirements of this project. *This executive summary is structured in the format established by City of Fort Lauderdale to evaluate and select the Design-Build Team as part of the Selection Criteria and includes the following sections:*

- 2: Qualifications of Firm
- 3: Qualifications of Team
- 4: Project Methodology and Approach
- 5: References
- 6: Price Proposal Form
- 7: Contract Forms

2: QUALIFICATION OF FIRM

DMSI TEAM PROJECT EXPERIENCE

The DMSI Team is a partnership of construction companies and engineering firms which will provide the City of Fort Lauderdale with depth of resources, industry leading professionals, and innovative solutions. DMSI has developed a team of local companies to provide the City of Ft. Lauderdale with comprehensive services for this project. The DMSI Team includes specialized firms who have a positive track record working with M-D WASH and the City of Miami Beach. Together, our partnership offers the City of Ft. Lauderdale unmatched project experience and expertise, depth of resources, collaborative relationship and hands-on local experience. **Table 1** on the following page indicates DMSI's Core Team experience, qualifications, and capabilities meeting the experience and qualifications requirements of the Request for Proposal (RFP) for this solicitation.



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TABLE 1

CONSTRUCTION CORE TEAM EXPERIENCE AND QUALIFICATIONS

	DMSI (Lead Contractor)	APCTE (Lead Engineer)
a) Firm must be registered as legal entity in State of Florida.	✓	✓
b) Firm engineer of record must have a current Florida active license as a professional engineer.		✓
c) Firm contractor must have a current Florida active certified general contractor's license with unlimited building classification.	✓	
d) Capacity to provide performance and payment bonds.	✓	
e) Capacity to meet City's insurance requirements.	✓	✓
f) Firm or principals shall have no record of judgments, pending lawsuits against the City or criminal activities involving moral turpitude with no conflicts of interest that have not been waived by the City Commission.	✓	✓
g) A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal/bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids or leases of real property to a public entity, may not be awarded or perform work as a Contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes , for category two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.	✓	✓
h) Neither Firm nor any principal, officer, or stockholder shall be in arrears or in default of any debt or contract involving the City (as a party to a contract, or otherwise), nor have failed to perform faithfully on any previous contract with the City.	✓	✓
i) Firm must have completed at least two (2) projects similar in size and nature within the past five (5) years.	✓	✓
j) The proposed team must have worked together and completed at least one (1) project as a team.	✓	✓



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As you will be able to see throughout this proposal, the **DMSI Team** has designed and constructed more pipeline projects of similar or greater size and complexity than any other team. With an aggregate bonding capacity in excess of \$100 million, **DMSI** is recognized as one of the most technically advanced underground utility, road building and earth moving contractors in South Florida. Over the past 30 years, David Mancini, President and Qualifier of DMSI, has successfully delivered multiple design-build projects with a total combined value of more than \$150 M. DMSI is recognized in the construction industry for completing the projects within time and budget.

The DMSI Team includes specialized construction and engineering firms who have a positive track record working for South Florida on similar projects. Together, our partnership offers the City of Ft. Lauderdale unmatched expertise, depth of resources, collaborative relationship, and local experience. All of the Design-Build Team Key Personnel qualifications and experience perfectly match their proposed roles for this project.

Since Incorporated in 2010, following the Mancini Family Estate Succession Planning, DMSI's construction experience history now spans FOUR GENERATIONS and SIX DECADES of underground utility excellence. DMSI is a heavy civil general contractor and construction management firm headquartered in Miami Beach, Florida since its inception. DMSI is defined by its employees - honest, experienced, forward-thinking, professional and hard-working. DMSI's team members form collaborative relationships with owners, developers, design teams, subcontractors and others to assist in delivering the most desirable and economical solution to the construction goal, reinforcing the company's reputation for superior workmanship and performance. DMSI's business philosophy is dedicated to trusting relationships, excellent service and workmanship that has enduring character and meeting or exceeding customer expectations every time.

1st Generation | In the Mid 1950's Charlie D'Agostini and his Brothers incorporated Northwest Construction, specializing in Underground Utility and Tunneling Construction within the Detroit, Michigan area.

2nd Generation | In 1958 Charlie D'Agostini's Daughter Gilda, married Richard Mancini and soon after he started working for Northwest Construction gaining experience as a general superintendent. In 1965 Richard Mancini, with the help of Charlie D'Agostini, incorporated Ric-Man Construction which specialized in underground utility and excavation construction throughout the State of Michigan.



3rd Generation | In 1981, Ric-Man Construction established a parallel operation in the State of Florida, in which David Mancini relocated to Florida and started working as a laborer for Ric-Man Construction, Inc. In 1983, Richard Mancini and his eldest son, David Mancini, formed Ric-Man International Inc. a Florida Corporation specializing in underground utility and excavation. In 1985 David Mancini was promoted to president of Ric-Man International until late 2010 when David Mancini resigned to incorporate David Mancini & Sons, Inc. (DMSI).

4th Generation | In October 2010, David Mancini, together with his sons David Jr. and Richard incorporated David Mancini & Sons, Inc. which specializes in streetscape, underground utility, roadwork

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and trenchless construction. When DMSI was incorporated over 70% of the staff from Ric-Man International Inc., ranging from key to field personnel joined DMSI bringing along extensive years of experience and teamwork to DMSI. Currently DMSI has a staff of over 70 employees.

The company specializes in delivering large-scale projects which entail difficult tasks, conditions and schedules. DMSI executes projects through a variety of delivery systems, ranging from traditional contracting arrangements to turn-key design-build as well as CM/GC project execution. Typical projects include, large diameter pipelines, underground utilities, commercial and industrial site developments and trenchless utility installations.

DMSI's Team understands what is needed and will perform with the City of Ft. Lauderdale best interest in mind. Integrating into the designers and contractors team as well as coordinating efforts with stakeholders will require seasoned professionals with experience in neighborhood improvement projects. The DMSI Team brings confidence in project management water infrastructure engineering design and construction through verifiable experience on similar design-build projects. All of our Key personnel have experience in all elements of the scope of work and are 100% committed to the City of Ft. Lauderdale's successful implementation of this project.

Overview of Project Team Organization

The DMSI Team is organized into project leadership, project delivery and technical support services. The image below depicts the hierarchical structure from the project leadership team to the technical support services.

- **Project Leadership Team** is responsible for the overall program management as well as individual project assignments.
- **Project Delivery Team** are responsible for performing the design and construction to final completion.
- **Technical Support Services** provide multi-disciplinary resources to support project delivery.



STAFFING PLAN: Our team has carefully analyzed the scope of work and has selected key personnel with the right blend of technical experience and capabilities, to successfully deliver this project. As evidence by the resumes and organizational chart submitted with this Step 1—Statement of Qualifications, our staffing plan addressed the project's resources demands and includes a skilled staff to address all specialty items required by the scope of work. The organizational chart shows the key personnel assigned to this project along with their role, years of experience, and percentage of availability.

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KEY DESIGN BUILD CONSTRUCTION STAFF (PRIME)



David Mancini (DMSI), Design-Build Project Manager; Phone: (305) 592-7283; Fax: (305) 593-1594; email: dmancini@dmsi.co

Mr. Mancini has more than 34 years of construction experience from Michigan to Florida, David Mancini has built David Mancini & Sons, Inc. (DMSI) into the premier underground civil contractor in South Florida. David served as President and Qualifier for his father, Richard Mancini, at Ric-Man International, Inc. from 1985-2010. Since incorporating David Mancini & Sons, Inc. in 2010, his “hands on” abilities and vast pool of knowledge have enabled DMSI to become the leader in large diameter pipeline construction. Serving as Design-Builder Manager, David Mancini has successfully completed a long list of projects within an urban environment throughout South Florida that include the installation of transmission water mains (PCCP & DIP), transmission force mains (PCCP & DIP), sanitary sewers, storm sewers, pump stations, jack and bores, micro tunnels, directional drills, roadways, sub-aqueous crossings, and neighborhood improvement projects over the past three decades.



Fabio Angarita (DMSI), Design-Build Lead Construction Manager - 80% available; Phone: (305) 592-7283; Fax: (305) 593-1594; email: fangarita@dmsi.co

Mr. Angarita, has successfully completed over \$60 million of municipal projects in highly urban environments throughout Miami Dade County, Florida including roadway reconstruction, stormwater projects, sewer pump stations, force mains (PCCP & DIP), sub-aqueous crossings, **HDD Installations** and neighborhood improvement projects over the past decade. His daily duties will include: construction management, schedule work for subcontractors and correspondence with engineers and owners, public relations coordination, etc.



Nelson Liberti (DMSI), Pipe Installation Superintendent; Phone: (305) 592-7283; Fax: (305) 593-1594; email: nliberti@dmsi.co

Mr. Liberti, Pipeline Superintendent for David Mancini & Sons, Inc., has experience in small and large diameter pipeline installations, roadway and infrastructure since 1993. Nelson oversees as pipeline superintendent for David Mancini & Sons, Inc. approximately \$25 Million Dollars of projects per year. These projects include Construction/design build, sanitary sewers, water mains, force mains, drainage, pump stations, directional drilling, jack and bores, and micro tunnels. Serving as Pipeline Superintendent, Nelson Liberti has successfully completed a long list of projects within an urban environment throughout South Florida that include the installation of transmission water mains (PCCP & DIP), transmission force mains (PCCP & DIP), sanitary sewers, storm sewers, pump stations, jack and bores, micro tunnels, **directional drills**, roadways, sub-aqueous crossings, and neighborhood improvement projects over the past two decades.



Christopher Lazzari (DMSI), Quality Assurance / Quality Control (QA/QC); Phone: (305) 592-7283; Fax: (305) 593-1594; email: clazzari@dmsi.co

Mr. Lazzari has over 24 years' experience in accounting, construction management and cost estimating in the field of underground utility, roadwork and all facets of civil construction. In addition since 2011 Mr. Lazzari has overseen the Design Build QA/QC practices for DMSI. As Project Manager, Chief Estimator and Design Build QA/QC manager Mr. Lazzari's experience developed around projects involving the installation of water mains, drainage improvements, roadwork, sanitary sewer and bridge construction. He has obtained further specialization in **directional drilling**, PCCP, box culvert construction, pump stations, treatment plants and sewer force mains for various publicly bid Design Build projects for municipalities throughout Florida, New York and Texas.

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Jack “Bruno” Roth (DMSI), Design-Builder Safety Manager; Phone: (305) 592-7283; Fax: (305) 593-1594; email: aalfonso@apcte.com

Mr. Roth has over 30 years experience in the construction industry specializing in OSHA safety and construction disciplines for major civil infrastructure projects including water main, storm water, wastewater, solid waste pipelines and treatment plant projects. He has experience at the local and regional level for large scale projects requiring the coordination of various construction disciplines and is knowledgeable in both private and public sector construction and OSHA safety requirements. Mr. Roth has been responsible for capital improvement development projects for treatment plants and potable water distributions. Projects included sanitary sewer, storm water and water systems for Miami Dade, Monroe, Broward and Palm Beach Counties.

TEAM LOCATION / AVAILABLE RESOURCES: *All of our construction and design team members have offices located in Miami-Dade and Broward Counties.* This, in addition to using ProjectWise for design and document control will enhance the project documentations, accelerate decision-making, and expedite construction activities. **Table 2** below indicates DMSI equipment resources.

TABLE 2—EQUIPMENT RESOURCES		
EQUIPMENT	DMSI	MAX. REQUIRED
Excavator	15	4-6
Front End Loader	12	4-6
Bulldozers	2	2
Maintenance Trucks	4	2
Pumps	5	2-4
Dump Trucks	3	2-4
Water Trucks	4	2
Milling Machines	8	2
Vibratory Rollers	9	2
Street Sweepers	2	2

The DMSI’s Design-Build Team was assembled with a number of goals in mind. ***We have brought together a team of industry leaders with proven experience in South Florida, with an emphasis on past working relationships and teaming together in a collaborative environment.*** Most members of our Team have been fortunate to work together over the past 20 years in the successful execution of several water and wastewater infrastructure projects. As a result, our key staff has gained first-hand knowledge of local conditions, City of Fort Lauderdale design standards, local permitting requirements, stakeholder and public outreach concerns, multi-agency coordination needs, general contracting practices, and construction methodologies specific to pipeline installation. Our team's tenure on these projects has yielded an invaluable work relationship with local municipalities staff and other local regulatory agencies - one based on trust, quality, and responsiveness, while delivering cost-effective solutions.

ABILITY OF DMSI TEAM TO COORDINATE WITH THE CITY ON A REGULAR BASIS

One of the fundamental keys to our Design-Build Team is being able to effectively interface with the City of Ft. Lauderdale. This familiarity will serve the entire Project Team during all phases of the project, especially during the design phase. Our team’s knowledge and past experience will facilitate the initial collaborative effort and will allow us to coordinate with the City on a regular basis. With that experience

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in place, we will drive the project to a successful path and will eliminate the learning curve often experienced between an owner and the Design-Build Team. DMSI's Design-Build Team is familiar with City, County and FDOT ordinances and regulations, as well as guidelines that apply to this project, such as utilization reports and work history disclosure reports. Our team views this project as a partnership with the City of Ft. Lauderdale. As good partners, mutual goals will be developed for the overall benefit of the project and the community, including quality, scheduling and budget goals.

ABILITY OF DMSI TEAM TO BE RESPONSIVE IN A TIMELY AND EFFECTIVE MANNER TO THE CITY OF FT. LAUDERDALE

The DMSI Design-Build Team's availability is another key component to successfully interfacing with the City. The majority of our team currently maintains an office in the Miami-Dade/Broward City area. The team's proximity to both the project site and City offices eliminates logistical issues that can plague larger projects with similar characteristics. Our team will be available to meet with the City at your location of choice and at times most convenient with your schedule. Key personnel from our



team will be available for public information and community outreach meetings to ensure public concerns are addressed at the field level, rather than through City personnel. We recognize this as a major determinant of the project's overall success. During the construction phase, our team will have dedicated resources available to respond to emergency situations in a timely manner, both during working and non-working hours.

DMSI's Design-Build Team will be flexible in how we interface with the City. We believe our team's previous experience provides a thorough level of understanding as it relates to City expectations, however, we also understand the client's needs can change. A good example would be our regular and emergency communication. The DMSI Design-Build Team has a number of procedures related to communication that we plan to implement on this project. A clear line of communication will be established from the initial meeting, defining points of contact for both normal operational interactions as well as emergency situations. Protocols for electronic and voice communications and document sharing will be defined. Team meetings attendance will be documented by the DMSI Design-Build Team and shared with the entire Project Team for review and comment. These meeting minutes will outline action items and the decisions or resolutions made at the meeting. Project scheduling progress reports will be generated and provided on a weekly basis. These reports highlight the work plan schedule for the review period, showing work activities completed and scheduled durations for upcoming project tasks and milestone dates related to all phases of construction (design, permitting and construction). The report will also provide projected cost information and define progress on both short-term and long-term project goals. Our team will provide the City with the necessary tools to evaluate and monitor overall project performance. The City will play an advisory role as we implement these communication measures, allowing them to fine-tune these details to their specific preferences.

As with any project, effective management is the key to the overall success. ***DMSI's Design-Build Team has a significant advantage over other teams because several of our Team members have worked together in several conventional and design-build projects.*** Our Team has established routine successful management approaches and controls. These controls allow us to plan the work efficiently and track expenditures accurately. This also allows us to recognize variances earlier in the project. Being proactive and identifying issues early on allows more time to strategize and prevent those issues from having a major impact. These controls in turn allow our team to provide the City of Ft.

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Lauderdale with accurate, real-time project data at a level catered to your needs.

DMSI's Team Lead Engineer APCTE is a full-service engineering firm with over 15 years of experience working as a consultant for several municipalities throughout Broward and Miami-Dade County. Both firms are ideally suited to seamlessly interface with the City of Ft. Lauderdale and to be responsive and effective to the City's needs for this project. Their unique history working with Miami-Dade and Broward Counties is validated through the outstanding grades we've received on previously completed projects. They have included a listing of these outstanding scores as part of this technical proposal.

Throughout APCTE's years of experience, their engineers have established a resilient working relationship with regulatory agencies personnel and they are pleased to have the opportunity to serve the City. With APCTE leading the design and permitting efforts, the City can rest assured that they will skip the learning curve and will work with a group of engineers that is familiar with the City's staff and preferences.

ABILITY OF DMSI TEAM TO PROVIDE GENERAL PUBLIC INFORMATION | PUBLIC OUTREACH

The DMSI Team has had the opportunity to coordinate public involvement efforts for several design-build projects and is very familiar with the issues that will affect the businesses, residents and other stakeholders that have been identified within the project area.

It will be important to note that while emphasizing the benefits of the project, the Public Involvement Plan (PIP) includes all components necessary to ensure timely dissemination of information, mitigation of potential construction impacts and opportunities for stakeholders to provide input.

We find that different communities and demographics require different outreach strategies, and it is imperative to consider these factors in developing any public involvement campaign. The DMSI's Team has significant experience in tailoring outreach campaigns to fit the needs of diverse communities.

We will ensure that stakeholders from all aspects of the community will be engaged in the process. Civic, community and faith-based organizations, as well as appointed and elected officials, will have various opportunities to receive project information, provide feedback and attend outreach events. Communi-

The fact sheet features a header with the Miami-Dade Water and Sewer Department logo and the title 'Project at a Glance'. Below this, it lists the project value as \$72 million and the expected completion as Summer 2016. The project area is described as being between Fisher Island and the Central District Wastewater Treatment Plant. Key project information includes construction starting in July 2014, 5,300 feet of tunneling, an 8.5-foot tunnel diameter, 2,700 feet of open cut work, and 60-inch force main installation. The bottom of the fact sheet includes the slogan 'QUALITY. VALUE. ECONOMIC GROWTH.' and the website 'WWW.MIAMIDADE.GOV/WATER'. An aerial map shows the project location between Fisher Island and Virginia Key. Contact information for Alicia Gonzalez and Adriana Lamar is provided at the bottom.

MIAMI-DADE COUNTY | **MIAMI-DADE WATER AND SEWER DEPARTMENT**

Project at a Glance

Value: **\$72 million**
Expected Completion: **Summer 2016**
Project Area: **Between Fisher Island and the Central District Wastewater Treatment Plant located on Virginia Key**

Key Project Information:

- Construction began in July 2014
- 5,300 feet of tunneling
- Tunnel diameter 8.5 feet
- 2,700 feet of open cut work
- 60-inch force main installation

QUALITY. VALUE. ECONOMIC GROWTH.
WWW.MIAMIDADE.GOV/WATER

FOR MORE INFORMATION | **Alicia Gonzalez**
Public Information
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agonzalez@mrgmiami.com

Adriana Lamar
Chief, Public and Governmental Affairs
786-552-8087
alamar@miamidade.gov

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cation with all affected members living, working and playing in the project area will be open and in plain language.

DMSI will coordinate and execute a public meeting prior to the start of construction to allow stakeholders the opportunity to view plans, speak one-on-one to project staff and provide comments. The DMSI Team strongly believes in outreach strategies such as hand-delivering fliers along a corridor in order to gain a better understanding of the affected community, arranging informal meetings among elected officials and constituents, and utilizing local media as a resource to reach a target audience.

A variety of techniques will be used to keep the general public apprised of construction activities to include:

Maintenance of Traffic: A traffic control plan for the Maintenance of Traffic (MOT) will be developed. The MOT will be designed to minimize adverse impacts to local residents and businesses during construction. It will also include maintenance of pedestrian traffic and provisions for ADA-compliant paths throughout, as well as specific attention to bus stops where required. A variety of special events occur within or near the project area, including music festivals such as Ultra Music Festival and various concerts and sporting events. These events draw hundreds of thousands of participants, therefore the project team will work closely with area agencies, organizations, developers and event planners to ensure safe and efficient travel for all street users during the installation of the water main. A number of outreach and communications tools will be employed to provide accurate, frequent and real-time information.



Property Owner Coordination: Coordination with property owners and managers is recommended, as these contacts can assist the team throughout the length of the project by posting notices in public areas and disseminating information, often verbally, to residents. It is vital that all activities be coordinated with all residents to identify their concerns and how the project team can accommodate their particular needs throughout the life of the project. It is important to identify how the project team can successfully complete the project without impacting their daily activities.

Agency Coordination: The DMSI Team will be in close coordination with City of Ft. Lauderdale, including first responders (Police & Fire Rescue). Any MOT information and alerts will be issued through each agency's Public Information Officer. Close coordination is also vital to ensure Americans with Disabilities Act (ADA) compliance. DMSI will coordinate communications and operational efforts.

ABILITY TO COMPLY WITH INSURANCE REQUIREMENTS AND PERFORMANCE BOND

Please see on the following pages a copy of DMSI Insurance Binder and proof of Performance Bond.

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
7/5/2016

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 McNish Group, Inc. 26622 Woodward Ave. Ste. 200 Royal Oak MI 48067		CONTACT NAME: Adrienne Michaelson PHONE (A/C, No, Ext): 248-544-4800 E-MAIL ADDRESS: amichaelson@mcnish.com FAX (A/C, No): 248-544-4801	
INSURED DAVID10 David Mancini & Sons, Inc. 1939 NW 40th Court Pompano Beach FL 33064		INSURER(S) AFFORDING COVERAGE INSURER A : Amerisure Insurance Co. NAIC # 19488 INSURER B : Amerisure Partners Ins. Co. 11050 INSURER C : Amerisure Mutual Insurance Co. 23396 INSURER D : INSURER E : INSURER F :	

COVERAGES

CERTIFICATE NUMBER: 1961813887

REVISION NUMBER:

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	Y	Y	CPP207615508	4/1/2016	4/1/2017	EACH OCCURRENCE \$1,000,000. DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000. MED EXP (Any one person) \$10,000. PERSONAL & ADV INJURY \$1,000,000. GENERAL AGGREGATE \$2,000,000. PRODUCTS - COMP/OP AGG \$2,000,000. \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	Y	Y	CA207674505	4/1/2016	4/1/2017	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000. BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			CU208759403	4/1/2016	4/1/2017	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y	N/A	WC207674405	4/1/2016	4/1/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
A	Design Professional Liab Installation Floater			CPP207615508	4/1/2016	4/1/2017	1,000 Ded 1,000,000 5,000 Ded 500,000

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

Bid 465-11765 Water Main/Force Main Las Olas.
 Additional Insured as required by written contract w/respects to General Liability: City of Fort Lauderdale. Waiver of subrogation applies to the GL and Auto in favor of the Certificate Holder.
 Thirty (30) days prior written notice except ten (10) days for non payment shall be given to Certificate Holder in the event of cancellation or non-renewal of the insurance.

CERTIFICATE HOLDER

CANCELLATION

City of Fort Lauderdale 100 N. Andrews Avenue Ft Lauderdale FL 33301	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
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ACORD 25 (2014/01)

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Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public



CERTIFICATE OF LIABILITY INSURANCE

OP ID: FS

DATE (MM/DD/YYYY)
06/28/2016

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 Jag Insurance Group 2151 LeJeune Road, Suite 308 Coral Gables, FL 33134 Luis Gazitua		CONTACT NAME: LUIS R. GAZITUA PHONE (A/C, No, Ext): 305-842-3600 FAX (A/C, No): 305-842-5974 E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: A&PCO-1	
INSURED A&P Consulting Transportation Engineers Corp. 10305 NW 41st Street, #115 Miami, FL 33178		INSURER(S) AFFORDING COVERAGE	
		INSURER A : Continental Insurance Company INSURER B : Valley Forge Insurance Company INSURER C : Transportation Insurance Co. INSURER D : Security National Insurance Co 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	ADD'L SUBR INSR	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-EVENT <input type="checkbox"/> LOC			4025679252	06/11/2016	06/11/2017	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 15,000 MED EXP (Any one person) \$ 300,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			4025679137	06/11/2016	06/11/2017	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (PER ACCIDENT) \$ COMP DED \$ 500 COLL DED \$ 500
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DEDUCTIBLE \$ RETENTION \$			4025679218	06/11/2016	06/11/2017	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$ \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	4025679171	06/11/2016	06/11/2017	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Professional Liability			SES1326983 RETRO 8/18/2000	08/18/2015	08/18/2016	Limit 3,000,000 Retention 25,000

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

CERTIFICATE HOLDER City of Fort Lauderdale 100 N. Andrews Avenue Ft. Lauderdale, Florida 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 
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ACORD 25 (2009/09)

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July 5, 2016

To Whom It May Concern

RE: Financial Statement

To Whom It May Concern:

We at David Mancini & Sons, Inc. would like to thank you for the opportunity to serve the City of Fort Lauderdale; however, our financial statement is proprietary and confidential and therefore, we do not wish it be made public.

Our financial records are available for your appropriate staff to review at our accounting office in Pompano Beach, FL. Please advise us 48 hours in advance.

If you have any questions regarding our financial information, please feel free to contact our Controller, Kimberley Weldon at (954) 977-3556.

Sincerely,

David Mancini
President

July 7th, 2016

Fort Lauderdale City Hall
100 N. Andrews Avenue #619
Fort Lauderdale, Fl. 33301

REF: Project No. 465-11765, Request for Financial Statement

Attention: Althea Pemsel, Senior Procurement Specialist

We at A&P Consulting Transportation Engineers, Corp. would like to thank you for the opportunity to serve the City of Fort Lauderdale; however, our financial statement is proprietary and confidential and therefore, we do not wish it to be made public.

Our financial records are available for your appropriate staff to review at our office located at 10305 N.W. 41st Street, Suite 115, Doral, Florida 33178. Please advise us 48 hours in advance in order to assure you that our controller will be available.

If you have any questions regarding our financial information, please feel free to contact our Controller, Ms. Giset Fernandez-Abela at (305) 592-7283

Respectfully Yours,

A handwritten signature in blue ink, appearing to read 'Antonio G. Acosta', is written over the typed name. The signature is fluid and cursive.

Antonio G. Acosta, P.E. - President

Travelers Casualty And Surety Company Of America

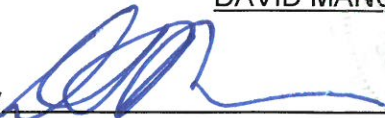
BID BOND

KNOW BY ALL MEN THAT THESE PRESENTS: That we DAVID MANCINI & SONS, INC of 1210 Washington Ave Suite 250, Miami Beach, FL 33139, hereinafter referred to as Principal, and Travelers Casualty And Surety Company Of America as Surety, are held and firmly bound unto City Of Fort Lauderdale of 100 North Andrews Avenue , Fort Lauderdale, FL 33301, hereinafter referred to as Obligee, in the sum of FIVE AND 00/100 PERCENT Dollars (5.00%) for the payment of which we bind ourselves, our legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a proposal to Obligee on a contract for Relocation of Existing 16-Inch WM and Installtion of 16-Inch FM at East Las Olas Boulevard

NOW, THEREFORE, if the said contract be awarded to Principal and Principal shall, within such time as may be specified, enter into the contract in writing and give such bond or bonds as may be specified in the bidding or contract documents with surety acceptable to Obligee; or if Principal shall fail to do so, pay to Obligee the damages which Obligee may suffer by reason of such failure not exceeding the penalty of this bond, then this obligation shall be void; otherwise to remain in full force and effect.

Signed and sealed this June 29, 2016.

DAVID MANCINI & SONS, INC
(Principal)
by  (Seal)

Travelers Casualty And Surety Company Of America
(Surety)

by  (Seal)
Angelo G. Zervos, ATTORNEY-IN-FACT



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. 226845

Certificate No. 006618064

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

Angelo G. Zervos, Gus E. Zervos, Donald W. Burden, and Veronda D. Gordon

of the City of Southfield, State of Michigan, 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.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 29th day of January, 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: [Signature]
Robert L. Raney, Senior Vice President

On this the 29th day of January, 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.



[Signature]
Marie C. Tetreault, Notary Public

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, 20 16.


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.

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY 54-INCH HDPE FORCEMAIN ALONG EUCLID AVENUE

This Design-Build consisted of the installation of a 54" PCCP FM for the City of Miami Beach serves as the marquee project in our roster exhibiting our Team's commitment to ensure that all our clients concerns are met. A proposed 54" redundant force main was implemented along Euclid Avenue in the City of Miami Beach. The force main (FM) was a crucial component of the City of Miami Beach to improve the quality of service in this touristic area. Phase I installed a 54" HDPE force main along Euclid Avenue from 11th Street to Washington Avenue and along Washington Avenue from Euclid Avenue to Commerce Court. The scope of services for this section of the project included the design and construction of around 4,450 LF of 54" HDPE force main installed by Horizontal Directional Drilling (HDD). A connection to Pump Station #31 was included in this phase. The project required constant communication with the city, as the team worked around the clock to deliver the project within the tight schedule. The project's expedited design schedule was met, with no major setbacks.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	54-inch HDPE Force Main along Euclid Avenue Miami Beach, Florida
<i>Project description</i>	See above
<i>Date of project completion</i>	2016
<i>Awarded contract amount and final contract amount</i>	\$10,400,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	The City of Miami Beach added additional scope of work to the original contract to include some additional ROW Improvements.
<i>If HDD project, please provide number of linear feet and diameter size</i>	4,450 LF of 54-inch HDPE FM installed by Horizontal Directional Drill (HDD)
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of FM, watermain, storm sewer, pump station, pavement restoration and streetscape
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI, Lead Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, FM and drainage improvements were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Shafts Constructed to install Pump Station Structures, Complete HDD and Open Cut Operation by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Bruce Mowry, P.E. Phone: (305) 673-7080 ext. 6565 Fax: (305)673-7073 City of Miami Beach 1700 Convention Center Dr. Miami Beach, FL 33139 Brucemowry@miamibeachfl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY

HORIZONTAL DIRECTIONAL DRILL (HDD) OF 20-INCH HDPE FM AT MIAMI INTERNATIONAL AIRPORT

The scope of services for this project included the design and construction of 800 LF of 20" HDPE force main by horizontal directional drilling (HDD). The purpose of the project was to replace a failed section of an existing force main, servicing the Miami International Airport (MIA). The project was vastly complex, requiring extensive coordination to ensure proper alignment, radius of curvature, and entrance/exist angles that would allow the minimum clearance between existing utilities. Additional coordination was required to facilitate a clear path for the directional drilling below Ramps K, I, and L that service the Miami Intermodal Center. The project required constant communication with the M-D WASD, as the team worked around the clock to deliver the project within the tight schedule. The project's expedited schedule was met; both in the design and construction phase. A well executed design and close coordination with the emergency operation contractor allowed construction to take place within a week's time, with no major setbacks. The design started on January 25, 2010 and completed in a week. By February 15th, 2010 the new line was already in service.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	HDD of 20-inch HDPE FM at Miami International Airport Miami, Florida
<i>Project description</i>	See Above
<i>Date of project completion</i>	2010
<i>Awarded contract amount and final contract amount</i>	\$ 500,000
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	800 LF of 20-inch FM installed by Horizontal Directional Drill
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was an emergency replacement project, which included installation of a force main, and pavement restoration
<i>Indicate firm's role in the project (design/build, lead designer, or lead contractor).</i>	DMSI , Lead Design Build Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All force main improvements were fully complete prior to decommissioning the existing system. Extensive public outreach was performed to maintain all operations
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Complete HDD Operation by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	DMSI, David Mancini , Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Adolfo Fassrainer, P.E. Phone: (305) 470-5496 Fax: (305) 470-5179 Florida Department of Transportation District 6 1000 N.W. 111th Avenue Miami, FL 33172 Adolfo.fassrainer@dot.state.fl.us

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY

HORIZONTAL DIRECTIONAL DRILL (HDD) OF 24-INCH HDPE FM AND 24-INCH WM AT BISCAYNE CANAL, NORTH MIAMI

The scope of services for this project included the design and construction of 900 LF of 24-in FM and 24-in WM installed by HDD. The existing water and sewer mains that cross the Biscayne Canal were attached to an existing pedestrian bridge. These lines were in conflict with a proposed storm-sewer pump station that will be built in the northeast corner of the intersection of NE 131st ST and Griffin Blvd. therefore, these two lines will be replaced. The project included the installation of 450 LF of 24-in FM installed by HDD under the Biscayne Canal from Griffin Blvd to NE 2nd Ave. The new 24-in FM will be interconnected to the existing force mains on both sides of the canal. The project also encompasses 450 LF of 24-in WM installed also by HDD, which also crosses the Biscayne Canal. The proposed WM has been permitted by FDEP and includes isolation valves, leak testing assemblies and interconnections to the existing water mains. The project is still under construction.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	HDD of 24-inch HDPE FM and 24-inch HDPE WM at Biscayne Canal, North Miami, Florida
<i>Project description</i>	See Above
<i>Date of project completion</i>	2016
<i>Awarded contract amount and final contract amount</i>	\$ 650,000
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	450 LF of 24-inch FM and 450 LF of 24-inch WM installed by Horizontal Directional Drill
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project included installation of a 24-inch FM, a 24-inch WM and pavement restoration
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI , Lead Design Build Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	The project is under construction
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Complete open cut and HDD Operation by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	DMSI, David Mancini , Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Hasan A. Rizvi, P.E. City Engineer, Public Works Department City of North Miami 1815 NE 150 ST North Miami, FL 33181 Office: 305-895-9838, ext. 15005 hrizvi@northmiamifl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY BISCAYNE POINT NEIGHBORHOOD ROW IMPROVEMENT PROJECT

This Design-Build Neighborhood Improvement Project included extensive underground utility construction of over 24,000 linear feet of 8" to 16" DIP Water Main. Deep shaft construction for the installation of a drainage pump station. The project also required pipe tapping at several locations to tie in the new watermain. The project also included a storm water collection system consisting of over 8,500 LF of drainage collection from 18" to 48" Diameter, over 1,000 LF of 24" PVC drainage and 6 drainage injection wells. Site concrete work consisted of new curb and gutter, sidewalk and landscaping. Limits of excavation for the pipe and structures varied in depth from 5ft to 20ft, and dewatering of the trenches via pumps was utilized as the water table began about 2-3 feet below ground surface.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	Biscayne Point Neighborhood ROW Improvement Miami Beach, Florida
<i>Project description</i>	See Above
<i>Date of project completion</i>	2014
<i>Awarded contract amount and final contract amount</i>	\$ 23,000,000
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Due to Sea level rise, flooding and a new drainage design criteria, the City of Miami Beach added additional scope of work to the original contract to meet today's standards.
<i>If HDD project, please provide number of linear feet and diameter size</i>	Not Applicable
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain, storm sewer, pump station, pavement restoration and streetscape
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI , Lead Design Build Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water and drainage improvements were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Shafts Constructed to install Pump Station Structures, Complete Open Cut Operation by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	DMSI, Albert Dominguez, P.E. , Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Carla Dixon Phone: (305)673-7080 Fax: (305)673-7073 City of Miami Beach 1700 Convention Center Dr. Miami Beach, FL 33139 CarlaDixon@miamibeachfl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY

30-INCH FORCE MAIN REPLACEMENT ALONG HARDING AVENUE

This Design-Build Project included the extension of a 30" Ductile Iron Force Main underground utility construction with pipe tapping along Harding Avenue, from 69th Street to 73rd Street, including the crossing of SR-934/71st Street, in Miami Beach, Florida. This pipeline extension was performed as an emergency project to provide a parallel redundant pipeline to the existing 36" Ductile Iron Force Main which blew out and was temporarily repaired. Line stops were installed at the southern end of the project in order to shut down the flow and isolate a section of pipeline to install a 30" M.J. Resilient Seated Gate Valve. Project also included interconnections to existing 16" and 20" force mains and minor storm water collection and disposal, and site concrete work.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	30-inch Force Main Replacement along Harding Avenue, Miami Beach, Florida
<i>Project description</i>	Design Build of 30" Ductile Iron Forcemain for the City of Miami Beach
<i>Date of project completion</i>	2012
<i>Awarded contract amount and final contract amount</i>	\$1,307,849.50
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	Not Applicable
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain.
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI, Lead Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations.
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	All Open Cut and trenchless Work Completed by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Mike Alvarez City of Miami Beach 1700 Convention Center Drive Miami Beach, FL 33139 (305)673-7071

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY NAUTILUS NEIGHBORHOOD IMPROVEMENTS

The Nautilus Neighborhood included all of the area from Surprise Lake south, to the south end of the 41st Street right-of-way, and from Biscayne Bay east to the Indian Creek waterway, inclusive of the Orchard Park sub-neighborhood. Streetscape Improvements: Reconfiguration of W. 42nd St. from North Michigan Ave. to North Meridian Ave.; the Intersection of Prairie Ave. / Chase Ave / W. 44th St.; Landscaping within the Right-Of-Way; Lighting Upgrades

Storm water Improvements: 16,300 In. ft. of conveyance pipe; 92 inlets and 74 manholes; Gravity drainage wells and 31 pressurized drainage wells; 6 Stormwater pumping stations.

Water Systems Improvements: 39,944 In. ft. of 8" DIP Water Main; and the relocation of 177 water meters from rear easements to the public sidewalks through trenchless technology.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

<i>Project name and location</i>	Nautilus Neighborhood Improvements
<i>Project description</i>	Approximately 1,400 Linear feet of 20-inch watermain
<i>Date of project completion</i>	2010
<i>Awarded contract amount and final contract amount</i>	\$32,500,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	Not Applicable
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain, water meter relocations, lighting, curb and gutter, ADA compliance
<i>Indicate firm's role in the project (design/build, lead designer, or lead constructor).</i>	DMSI, Lead Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations.
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	All Open Cut and trenchless Work Completed by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Jose Perez Phone: (305) 673-7000 Fax: (305) 673-7073 City of Miami Beach CIP Office joseperez@miamibeachfl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY LUMMUS NEIGHBORHOOD IMPROVEMENTS

The Lummus sub-neighborhood is generally described as that area bounded by 16th Street to the north, 5th Street to the South, Washington Avenue to the West, and Ocean Drive to the East. The area consists of multi-family structures with significant retail / commercial components, portions of which are within historically designated areas. This neighborhood is located in the heart of South Miami Beach and includes much of the National Register Architectural District. As part of this project we developed and prioritized streetscape and urban improvements throughout the neighborhood as well as upgrade water and stormwater infrastructure in accordance with the Design Criteria Package (DCP).



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

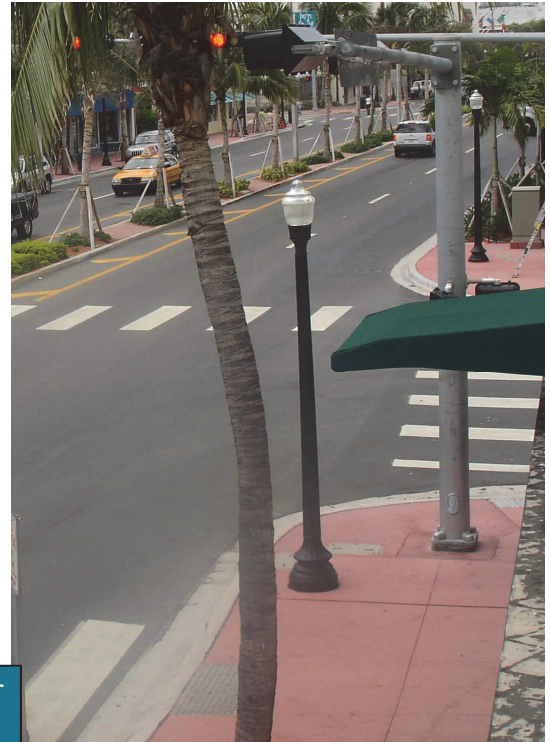
<i>Project name and location</i>	Lummus Neighborhood Improvements
<i>Project description</i>	Gravity drainage wells, sanitary sewer capacity improvements, water main upgrades
<i>Date of project completion</i>	2008
<i>Awarded contract amount and final contract amount</i>	\$13,400,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	Not Applicable
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain, water meter relocations, lighting, curb and gutter, ADA compliance
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI, Lead Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations.
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Not Applicable
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Jose Perez Phone: (305) 673-7000 Fax: (305) 673-7073 City of Miami Beach CIP Office joseperez@miamibeachfl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY WASHINGTON AVENUE IMPROVEMENTS

The project included the following improvements: milling & resurfacing, new gravity drainage wells, sanitary sewer capacity improvements which consist of pipe/manhole up-sizing, water main upgrades, relocation of water meters/meter boxes, new decorative lighting system, landscape and irrigation upgrades, replacement of curb & gutter and sidewalk from 11th St. to 16th St., design of intersection bumps-outs, compliance with ADA requirements, modification of parking space layout, relocation of existing utilities, coordination with the CMB Parking Department to remove and reinstall parking meter heads and parking signs, & signature median improvements from 5th St. to Lincoln Rd.



DMSI was the Lead Constructor and APCTE was the Engineer of Record for this Design Build Project.

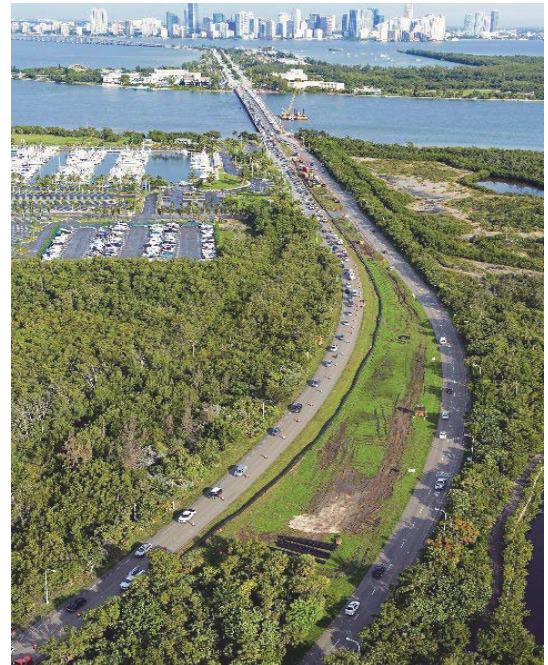
<i>Project name and location</i>	Washington Avenue Improvements, Miami Beach, Florida
<i>Project description</i>	Gravity drainage wells, sanitary sewer capacity improvements, water main upgrades
<i>Date of project completion</i>	2006
<i>Awarded contract amount and final contract amount</i>	\$15,300,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	Not Applicable
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain, water meter relocations, lighting, curb and gutter, ADA compliance
<i>Indicate firm's role in the project (design/build, lead designer, or lead constructor).</i>	DMSI, Lead Contractor APCTE, Lead Designer
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations.
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	Not Applicable
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Mike Alvarez Phone: (305) 673-7080 Fax: (305) 673-7073 City of Miami Beach CIP Office mikealvarez@miamibeachfl.gov

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY BEAR CUT & WEST BRIDGE MACARTHUR CAUSEWAY

The Bear Cut underground utility construction project consisted of two directional drills. One was the installation of approximately 1,400 linear feet of 20" Water main across West Bride via Horizontal Directional Drilling. The second HDD was 3,000 linear feet of 20" Water main across Bear Cut Bridge on the Rickenbacker Causeway in Key Biscayne, FL. DMSI pipe tapped into the existing allowing for this relocation of the bridge superstructures to be reconstructed. The proposed water main was fully constructed prior to decommissioning the existing system. Extensive public outreach was performed in order to maintain all operations.



DMSI was the Lead Constructor for this Design Build Project.

<i>Project name and location</i>	Bear Cut Causeway
<i>Project description</i>	Approximately 1,400 Linear feet of 20-inch watermain
<i>Date of project completion</i>	2013
<i>Awarded contract amount and final contract amount</i>	\$1,800,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	3,400LF HDD of 20-inch Water Main
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of watermain via trenchless technology (HDD)
<i>Indicate firm's role in the project (design/builder, lead designer, or lead constructor).</i>	DMSI, Lead Contractor
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water, were fully completed prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations.
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	All Open Cut and Trenchless Work Completed by DMSI
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Frank Di Cilio Phone: (954) 835-2228 Fax: (770) 487-0005 Kiewit Infrastructure South, Inc. 13680 NW 5th Street, Suite 130 Sunrise, Florida 33325

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

DMSI DESIGN-BUILD PROJECT HISTORY 63RD STREET WATER MAIN REPLACEMENT, MIAMI BEACH FL.

1000 HDD 20" HDPE Water Main, 250 LF HDPE mounted to existing bridge, 1000 LF of 20" DI open Cut, (6) connections to existing mains while keeping existing service in place, MOT and restoration. This project was performed within FDOT ROW and involved extensive coordination for vehicular traffic since it is a main thru way for beach access. HDD was performed in the intercostal waterway between Collins Ave to Allison Drive.



DMSI was Lead Contractor and DBE Performed HDD

<i>Project name and location</i>	63rd Street Water Main via HDD & Open Cut, Miami Beach, Florida
<i>Project description</i>	See above
<i>Date of project completion</i>	2016
<i>Awarded contract amount and final contract amount</i>	\$1,600,000.00
<i>Explanation of differences between awarded and final contract amounts, if difference exceeded 5%</i>	Not Applicable
<i>If HDD project, please provide number of linear feet and diameter size</i>	1,000 LF of 20-inch HDPE WM installed by Horizontal Directional Drill (HDD)
<i>If right-of-way improvement, please indicate if it included utility installations, pavement restoration, and streetscaping.</i>	Project was a right of way improvement project, which included installation of WM, and, pavement restoration,
<i>Indicate firm's role in the project (design/build, lead designer, or lead contractor).</i>	DMSI, Lead Contractor DBE, HDD Subcontractor
<i>If applicable, a brief description of how the Prime Proposer maintained operations while under construction.</i>	All water main improvements were fully complete prior to decommissioning the existing systems. Extensive public outreach was performed to maintain all operations
<i>Indicate if trenchless/shaft construction and open cut installation was performed</i>	HDD
<i>The names of the key project managers, highlighting any individuals who also worked on this project</i>	David Mancini, Principal/ Senior Project Manager Nelson Liberti, Construction Superintendent
<i>Reference contact information (including name, address, telephone number and e-mail address)</i>	Bruce Mowry, P.E. Phone: (305) 673-7080 ext. 6565 Fax: (305)673-7073 City of Miami Beach 1700 Convention Center Dr. Miami Beach, FL 33139 BruceMowry@miamibeachfl.gov

TEAM KEY PERSONNEL RESUMES

On the following pages you will find the resumes depicting the qualifications of the key personnel assigned to this project.

**Highlights:**

34 Years of Infrastructure Construction experience with an emphasis on large diameter PCCP and DIP transmission mains.

10 Years of Design/Build experience

Member of the Engineering Contractors Association (ECA)

Registration / Certifications:

State of Florida Underground Utility License
CUC0442220

Broward County License #00-1650-W
Qualified Business Organization—
QB0008454

Experience:

President and Qualifier
October 2010 - Present
David Mancini & Sons, Inc. (DMSI)

President 1985-2010
Qualifier 1988-2010
Ric-Man International, Inc. (RMI)

DAVID MANCINI, C.U.C.**DESIGN BUILD PROJECT MANAGER**

David A. Mancini has over 34 years construction experience in South Florida and over 7 years of experience in Michigan where he worked under his father Mr. Richard Mancini the founder of Mancini Equipment, Ric-Man Construction, and Ric-Man International. As president, David Mancini administers all construction, maintenance and accounting operations; 'a hands-on type of person', has constructed and/or design built a variety of projects consisting of; water mains, sanitary sewers, drainage, pump stations, jack and bores, micro tunnels, directional drilling, roadways, and multiple neighborhood improvement projects. Many of these projects have included sub-aqueous crossings of highly sensitive and protected estuaries and water bodies.

PROJECT EXPERIENCE**54" WATER MAIN SUBAQUEOUS CROSSING AT REDROAD (HIALEAH, FL)**

This deep subaqueous crossing was constructed alongside a bridge where 2 canals intersect to facilitate roadway widening by FDOT. The minimal tolerances of this pipeline and the deep complex installation within the canal were major challenges to this project.

INSTALLATION OF 36" HDD FM UNDER MIAMI RIVER (MDWSD DEPT)

Partial Design Build. Over 1400 feet of new 36" FM designed as open cut but converted to Design Build Directional Drill, saving the County time and money and resolving easement issues. Project consisted of directional drilling water main under river, sidewalks and curb & gutters, and roadway restoration.

20-IN FM AT THE MIAMI INTERNATIONAL AIRPORT (MIA), MIAMI-DADE COUNTY, FLORIDA.

Role: Project Manager. The main transmission line at MIA was a 20" cast iron force main (FM); running along NW 21 Street. Due to various factors, the most important of which was age, the force main failed, causing sewage overflows in and around MIA. The nature of the project required an emergency response with an expedited schedule. It was decided by MDWASD and MIA that a trenchless option would be used to install the new force main; thereby mitigating the risk of complications and prolonged downtime. The scope of services for this project included the design and construction of 800 LF of 20" HDPE force main by horizontal directional drilling (HDD). The purpose of the project was to replace a failed section of an existing force main, servicing the Miami International Airport (MIA). Client: MD WASD (Victor Fernandez-Cuervo, P.E. 786-268-5310).

12-INCH HDD FORCE MAIN REPLACEMENT IN BISCAYNE BAY, CITY OF NORTH BAY VILLAGE, FL.

Manager for this time-sensitive force main replacement. Damaged section of force main was replaced with new HDPE force main installed via Horizontal Directional Drill and connected underwater to existing force main in Biscayne Bay. Design Build of directional drill design path and was involved with field operations including under water inspections.

DAVID MANCINI, C.G.C.
DESIGN-BUILD PROJECT MANAGER

DESIGN/BUILD 54" HDD FORCE MAIN, CITY OF MAIMI BEACH

Two directional drills, one 3,330 LF of HDD 54" ID and one 1,500 LF HDD of 54" ID HDPE. First HDD went from 11th street and Euclid to 4th Street. Second HDD went from 4th street to 1st street and Washington Ave.

DESIGN/BUILD FOR REPLACEMENT OF 48-INCH FORCE MAIN (BROWARD CW&WWD)

Over 5,000' of 48" PCCP removal in FDOT R/W replaced with 48" DIP in 8 months including design, permits and construction. The new pipeline was constructed alongside a canal bank and residential neighborhood and included a subaqueous crossing.

REPLACEMENT OF 48" FORCE MAIN DESIGN-BUILD PROJECT, BROWARD COUNTY, FL.

Estimator and Project Manager for this \$4.4 million design/build project. Included over 5,000' of replacement of existing 48" PCCP in DOT ROW relocated and replaced with 48" Ductile Iron Pipe in Broward County ROW. Met aggressive 8 month schedule including design, permits and construction by working closely with Civil Engineering Subcontractor (Chen and Associates). Performed constructability reviews and assisted with permit acquisition. Project included a 48" subaqueous crossing.

NE 6TH AVENUE DRAINAGE IMPROVEMENTS, CITY OF OAKLAND PARK, FL.

Estimator and Project Manager for this \$3.4 million project which included the installation of over 2,630 feet of 4x6 box culvert. Original design called for the box culvert to be installed vertically which would have resulted in major utility support and massive de-watering. Worked with the Engineer to modify to a horizontal alignment and added an 8" water main as a design-build change order.

FURNISH & INSTALL (2) 20" HDPE ALONG RICKENBACKER INTRACOASTAL WATERWAY FOR THE BEAR CUT AND WEST BRIDGES, MIAMI-DADE WATER AND SEWER DEPT., FL.

Estimator and Project Manager for this \$1.7 million design/build Horizontal Directional Drill project. Oversaw and reviewed directional drill design and was present to witness all aspects of this 4222 LF directional drill across Biscayne Bay. Worked closely with permitting agencies to accommodate drilling path and methods. Project also included the pipe removal from beneath the Old Bay Bridge

TURNPIKE AND SUNRISE BOULEVARD CROSSINGS, CITY OF PLANTATION, FL.

Manager for this Design-Build Utility Relocation Project. Three horizontal directional bores were designed in-house to relocate a sewer force main and a water main across the Florida Turnpike to accommodate impeding widening project. Project also included the design and construction of a 20-inch diameter aerial canal crossing for the force main relocation. As a result of our timely design, permitting, and construction, the City was able to complete the relocations without delaying the Turnpike project.

REPLACEMENT OF 36-INCH VALVE AT 74th STREET EMERGENCY SEWER OUTFALL, CITY OF MIAMI BEACH, FL.

Manager for the Installation of a 36-Inch Gate Valve on the Miami Beach Emergency Force Main Outfall. The work required the installation of two(2) 36-in x 24-in tapping sleeves & valves on a live 36" force main for the purpose of installation 2 line stops to facilitate the valve replacement. This project was critical to both the City of Miami Beach and Miami-Dade Water and Sewer and it reactivated the ability to utilize this emergency sewer outfall if needed during any possible major failure of the existing 54-inch PCCP during the replacement project across Government Cut.

**Highlights:**

Over 15 years of Contractor experience and Project Management of Infrastructure Construction.

Underground Utility Construction from 4" to 84" Pipelines

Education:

Civil Engineer

Experience:

Project Manager
2013 to Present
David Mancini & Sons, Inc.

Project Manager
2007 to 2013
Southeastern Engineering Contractors, Inc.

Project Manager
2006 to 2007
Development and Communications Group of Florida, Inc.

Project Manager
2004 to 2006
Petro Hydro Inc.

Co-owner / Project Manager
1999-2002
GDC Ltda (Colombia)

FABIO ANGARITA

DESIGN BUILD CONSTRUCTION MANAGER

Fabio Angarita has successfully completed a over \$60 million of municipal projects in highly urban environments throughout Dade County, Florida including storm sewer projects, storm sewer pump stations, force mains (PCCP & DIP), sub-aqueous crossings, roadway, and neighborhood improvement projects over the past decade.

PROJECT MANAGER EXPERIENCE:

54" WATER MAIN SUBAQUOUS CROSSING AT REDROAD (HIALEAH, FL)

This deep subaqueous crossing was constructed alongside a bridge where 2 canals intersect to facilitate roadway widening by FDOT. The minimal tolerances of this pipeline and the deep complex installation within the canal were major challenges to this project.

DESIGN/BUILD 54" HDD FORCE MAIN, CITY OF MAIMI BEACH

Two directional drills, one 3,330 LF of HDD 54" ID and one 1,500 LF HDD of 54" ID HDPE. First HDD went from 11th street and Euclid to 4th Street. Second HDD went from 4th street to 1st street and Washington Ave.

CRESPI BLVD WATER MAIN, STORM SEWER COLLECTION SYSTEM AND STORM SEWER PUMP STATION, MIAMI DADE COUNTY, FL 2015

Role: Project Manager: Installation of Water Main and Storm Sewer System along Crespi Blvd between 85TH street and 79TH Street. The project includes the installations of over 2500 LF of Water Main, over 2800 LF of Storm Sewer collection system, Installations of pollution Control Structure, Installations of (1) Storm Sewer Pump Station, construction of seawall and landscaping along a residential neighborhood. Client: City of Miami Beach (Eugene Egemba, P.E. (305) 781-0391)

SWEETWATER STORM SEWER IMPROVEMENTS PHASE IIB 2013, 2014

Role: Project Manager: Installation of about 6000 LF of storm sewer collection system and two (2) storm sewer pump stations with capacity of 5500 GPM along a residential neighborhood. Client: City of Sweetwater (Eric Gomez, P.E.(305)-553-5457)

FDOT T6278, FDOT 2014

Role: Project Manager: Installation of 54" Water Main subaqueous crossing along NW 57TH Avenue between W46TH Street and W 53RD Street. Client: MDWASD (Nelson Cespedes (305) 439-8959)

FABIO ANGARITA — DESIGN-BUILD CONSTRUCTION MANAGER**FDOT E6G98-RO —PUSH BUTTON PROJECT****2012**

Role: Project Manager: Performance of several drainage and roadway project in FDOT District 6. Project included an emergency drainage project in Downtown Miami and US1, Drainage Improvements in Haulover Bridge and drainage Improvements on 163TH Street.

INSTALLATION OF SIX (6) 48" PLUG VALVES IN THE EXISTING PCCP FORCE MAIN ALONG OPA LOCKA BLVD**2012**

Role: Project Manager: Installation of 48" plug valves in different locations in the existing PCCP Force Main along Opa Locka Blvd. The project included the installation of six (6) plug valves, the installation of twelve (12) line stops, implementation of extensive MOT, shoring and dewatering. Client: MDWASD (Nelson Cespedes (305) 439-8959)

SAN MARCO ISLAND DRAINAGE IMPROVEMENTS**2012**

Role: Project Manager: Installations of storm sewer collection system and a pump station in San Marco Island. The project Included about 2000 LF of storm sewer collection system, installation of four (4) deep wells, emergency bypass and storm sewer pump station. Client: City of Miami (Valentin Onuigbo, P.E. (786)447-9817)

SWEETWATER STORM SEWER IMPROVEMENTS PHASE IV**2011**

Role: Project Manager: Installation of about 8000 LF of storm sewer collection system and **two (2) storm sewer pump stations with capacity of 5500 GPM** along a residential neighborhood. Client: City of Sweetwater (Eric Gomez, P.E.(305)-553-5457)

FAIRLAWN STORM SEWER PHASE III**2011**

Role: Project Manager: Installations of about 10,000 LF of exfiltration storm sewer system along a residential neighborhood.

Client: City of Miami (Genady Beylin.(786)972-5048)

E 4TH AVENUE IMPROVEMENTS, HIALEAH, FL**2010**

Role: Project Manager: Installation of storm sewer exfiltration system and full roadway reconstruction along E 4TH Avenue between 25TH Street and 32ND Street. Client: City of Hialeah/FDOT (Ignacio Serralta, P.E. (305) 662-8887)

TOWN OF GOLDEN BEACH, CAPITAL IMPROVEMENTS PROJECT, MIAMI DADE, FL**2009,2010**

Role: Project Manager: Installation of new water main system along Golden Beach Drive, North, Center and South Island Dr, installations of water tight storm sewer collection system, **two (2) storm sewer pump stations**, utility conversions for ATT, Atlantic Broadband and FPL, full roadway reconstruction, landscaping and beautification.

Client: Town of Golden Beach (Alex Diaz, Town Manager (786) 236-4211)

CENTRAL ISLAND DRAINAGE IMPROVEMENTS, CITY OF SUNNY ISLES**2008,2009**

Role: Project Manager: Installation of water tight storm sewer collection system discharging to storm drainage wells and Improvements to Gwen Margolis Park. The project included the installation of more than 10,000 LF of storm sewer collection system, the construction of 22 deep wells, the construction of a football field, landscaping and beautification.

Client: City of Sunny Isles (Bill Evans, Assistant City Manager (786) 586-7533)

CANAL 13 IMPROVEMENTS, SOUTH BROWARD DRAINAGE DISTRICT**2008**

Role: Project Manager: Installation of 84" and 72" RCP culverts connecting the Canal 13 to two (2) different water bodies with the corresponding automatic control valves and endwalls. Client: South Broward Drainage District (Luis Ochoa (954) 275-1757)

**Highlights:**

Pipeline, Roadway and Infrastructure construction experience since 1993

Design Build experience since 2005 with an emphasis on large diameter PCCP and DIP transmission mains.

Registration / Certifications:

OSHA 10 Hour Training Certification # 001909709

OSHA Permit-Required Confined Space Entry

OSHA 29 CFR 1910.146

Hydrogen Sulfide Safety Course

OSHA 29 CFR 1910.1000

Fall Protection Course

OSHA Subpart M 1926.500-503

Experience:

Pipeline Superintendent:

2011 to Present

David Mancini & Sons, Inc.

Pipeline Superintendent: 2003 to 2011

Ric-Man International, Inc.

Pipeline Foreman: 2001 to 2003

Ric-Man International

NELSON LIBERTI**HDD PIPELINE SUPERINTENDENT**

Mr. Liberti, Pipeline Superintendent for David Mancini & Sons, Inc., has experience in large diameter pipeline installations, roadway and infrastructure since 1993. Nelson oversees as pipeline superintendent for David Mancini & Sons, Inc. approximately \$25 Million Dollars of projects per year. These projects include Construction/ design build, neighborhood improvements, sanitary sewers, water mains, force mains, drainage, pump stations, directional drilling, jack and bores, and micro tunnels. Serving as Pipeline Superintendent, Nelson Liberti II has successfully completed a long list of projects within an urban environment throughout South Florida that include the installation of transmission water mains (PCCP & DIP), transmission force mains (PCCP & DIP), sanitary sewers, storm sewers, pump stations, jack and bores, micro tunnels, directional drills, roadways, sub-aqueous crossings, and neighborhood improvement projects over the past two decades.

EXPERIENCE:**INSTALLATION OF 36" HDD FM UNDER MIAMI RIVER (MDWSD DEPT)**

Partial Design Build. Over 1400 feet of new 36" FM designed as open cut but converted to Design Build Directional Drill, saving the County time and money and resolving easement issues. Project consisted of directional drilling water main under river, sidewalks and curb & gutters, and roadway restoration.

DESIGN/BUILD 54" HDD FORCE MAIN, CITY OF MAIMI BEACH

2016 \$10.4 Million ,Two directional drills, one 3,330 LF of HDD 54" ID and one 1,500 LF HDD of 54" ID HDPE. First HDD went from 11th street and Euclid to 4th Street. Second HDD went From 4th street to 1st street and Washington Ave.

DESIGN/BUILD— FURNISH & INSTALL (2) 20" HDPE ALONG RICKENBACKER INTRACOASTAL WATERWAY FOR THE BEAR CUT AND WEST BRIDGES, MIAMI-DADE WATER AND SEWER DEPT., FL. 2015

\$1.7 million design/build Horizontal Directional Drill project. Oversaw and reviewed directional drill design and was present to supervise all aspects of this 4222 LF directional drill across Biscayne Bay. Worked closely with permitting agencies to accommodate drilling path and methods. Project also included the pipe removal from beneath the Old Bay Bridge

BISCAYNE POINT NEIGHBORHOOD IMPROVEMENT , MIAMI BEACH, FL 2012

Role: Pipeline Superintendent: Project consisted of installing 17,000 LF of a new Water Main and connecting homes in front and rear, drainage improvements including 150 +/--structures, 8,000 LF of drainage pipe, and 2 Pump Stations. lighting, landscaping, and hardscape improvements throughout. Construction had to contend with accommodating the needs of the residents and working around a school.

Client: City of Miami Beach (Carla Dixon (305) 673-7071)

SUNSET ISLANDS I & II**2011**

Role: Pipeline Superintendent: Neighborhood improvement project consisted of installing 10,800 LF of 8" water main, 215 drainage structures and 9578 LF of drainage pipe ranging in size from 15" -24" in diameter. In addition DMSI had to relocate the services from rear to front and connect to new main. Road were reconstructed with new limerock, curb and asphalt.

NELSON LIBERTI - PIPELINE SUPERINTENDENT

Extensive coordination with homeowners had to transpire in order to facilitate the relocation of water services from rear to front.

Client: City of Miami Beach (Maria Hernandez (786) 371-3168)

HARDING AVENUE SANITARY FORCE MAIN REPLACEMENT, CITY OF MIAMI BEACH 2011

Role: Pipeline Superintendent: Project include the Design/Permit/Build of Over 1300 LF of 36" and 30" DIP Force main replacement, Live taps and Line stops with multiple connection on Municipal and State Roads.

Client: City of Miami Beach (Mike Alvarez (786)367-6109)

NAUTILUS NEIGHBORHOOD NO. 7 IMPROVEMENTS, CITY OF MIAMI BEACH 2007

Role: Pipeline Superintendent: Project consisted of installing a new Water Main and connecting homes in front and rear, drainage improvements including 250+ structures, 18,000 LF of drainage pipe, and 6 Pump Stations. lighting, landscaping, and hardscape improvements throughout. Construction had to contend with accommodating the needs of the 772 residents and working around 2 schools and a hospital.

Client: City of Miami Beach (Jose Perez (305) 673-7071)

WASHINGTON AVENUE IMPROVEMENTS PROGRAM, CITY OF MIAMI BEACH, FL 2005

Role: Pipeline Superintendent: Project consisted of refurbishing Washington Avenue from 5th Street thru 16th Street with over 11,000 LF of Water Main, Sanitary and Drainage pipe, from store front to store front. Construction had to contend with heavy pedestrian traffic on side of the busiest street in Miami Beach. Close coordination with 200 business owners, public transportation, shopper and 500 residents.

Client: City of Miami Beach Saul Gross (305) 321-0599)

LUMMUS NEIGHBORHOOD IMPROVEMENTS, CITY OF MIAMI BEACH, FL 2007

Role: Pipeline Superintendent: Project consisted of refurbishing 10 urban streets (6th St. – Espanola Way) with over 13,000 LF of Water Main, and Drainage pipe. Close coordination with 119 business owners, 485 residents, public transportation, schools, restaurants, valet parking and night clubs. The project also included the conversion of two streets to one-way pair conversion.

Client: City of Miami Beach (Jose Perez (305) 673-7071)

NORTH BAY VILLAGE 12-INCH FM REPLACEMENT VIA HDD, NORTH BAY 2008

Role: Pipeline Superintendent: Village Public Works Completed 2007, Approximately 900 LF 12-inch DR-11 HDPE into Biscayne Bay Client: North Bay Village (David Hernandez (786) 447-8145)

48-INCH FORCE MAIN (BROWARD CW&WWD) BROWARD COUNTY, FL 2007

Role: Pipeline Superintendent: Over 5,000' of 48" Force Main within the FDOT Turnpike right-of-way, completed in 8 months including design, permits and construction. The new pipeline was constructed alongside a canal bank and residential neighborhood and included a subaqueous crossing. Client: Broward County Water & Wastewater (Pat Macgregor (954) 831-0904)

DERM01-WASD-NLE-WEST 54" Force Main (Opa-locka, FL) MIAMI, FL 2005

Role: Pipeline Superintendent: Design Build Project with Nova Engineering, consisting of 9,240 LF of 54" PCCP Force Main complete with restoration, infrastructure and beautification improvements along 57th Ave and the Opa-locka Airport. Client: MDWASD (Nelson Cespedes (305) 439-8959)

54" WATER MAIN SUBAQUOUS CROSSING AT RED ROAD, MIAMI, FL 2014

Role: Pipeline Superintendent: This deep subaqueous crossing appx. 300 LF of 54" DIP, was constructed alongside a bridge where (2) canals intersect to facilitate widening by the FDOT. The minimal tolerances of this pipeline and the deep complex installation within the canal were major challenges to this project. Client: MCM for MDWASD (Nelson Cespedes (305) 439-8959)

OLETA RIVER 54" FORCE MAIN EMERGENCY REPAIR, MIAMI, FL 2008

Role: Pipeline Superintendent: As an emergency contractor for Miami-Dade Water & Sewer, DMSI had to remove and replace a 20 LF section of 54" PCCP Force Main. Client: MDWASD (Rod Lovett (305) 254-5871)

**Highlights:**

30 years of contractor experience in Infrastructure Construction with an emphasis on water pipelines, sanitary sewer, shaft construction, storm water, treatment plants pump stations Design Build and Safety

Registration / Certifications:

AA Degree—Business Admin
OSHA 10 Hour, Confined Space, Trench Safety, First Aid, Maintenance of Traffic ATSSA

Experience:

Safety Manager, Pipeline Superintendent
2015 to Present
David Mancini & Sons, Inc.

Safety Manager, Pipeline Superintendent
2000 to 2015
Lanzo Construction Company

Pipeline Foreman
1986-1990
Ric-Man International

JACK "BRUNO" ROTH**DESIGN-BUILD SAFETY MANAGER**

Mr. Roth (Bruno) has over 30 years experience in the construction industry specializing in OSHA safety and construction disciplines for major civil infrastructure projects including water main, storm water, wastewater, solid waste pipelines and treatment plant projects. He has experience at the local and regional level for large scale projects requiring the coordination of various construction disciplines and is knowledgeable in both private and public sector construction and OSHA safety requirements. Mr. Roth has been responsible for capital improvement development projects for treatment plants, shaft construction and potable water distributions. Projects included sanitary sewer, storm water and water systems for Miami Dade, Monroe, Broward and Palm Beach Counties

EXPERIENCE:**NORRIS CUT, VIRGINIA KEY, FLORIDA****2015**

Role: Safety Manager. Design-Build project included (1) deep shaft excavation over 95', installation of ring beam, topper slab, leveling slab, thrust wall and seal wall. In addition project included installation of approximately 2,100 LF of 60" PCCP force main and 1,000 LF of HDPE directional drill on Fisher Island Client: Nicholson Construction Company (MDWSD)(Eloy Ramos (412) 715-3265

FM 13—GRAVITY INTERCEPTORS FOR MASTER PUMP STATION #3, M-D COUNTY, FLORIDA**2014**

Role: Safety Manager. Design-Build project included (1) deep shaft excavation over 40', installation of seacant piles, topper slab, leveling slab, thrust wall and seal wall. Client: (MDWSD)(Peter Vilgil (786) 395-2106

HOLLYWOOD WATER MAIN REPLACEMENT PROGRAM PHASE III, HOLLYWOOD, FL**2015**

Role: Pipeline Superintendent: Project consists of installing 3,330 LF of 16" PVC Water Pipe, 60,000 LF of 8" PVC Water Main, 2000 Connections to meters, 1,000 rear service meter relocations, full lane reconstruction and paving, and 1" asphalt overlay of projects limits. Construction had to contend with accommodating the needs of the residents obtaining easement agreements and scheduling with residences to access private property to relocate the water services from rear to front. Client: City of Hollywood (Bob Wertz (954) 730-7824)

CITY OF OAKLAND PARK- WATER MAIN REPLACEMENT- OPBWMR92010, OAKLAND PARK, FL**2011**

Role: Pipeline Superintendent: This contract was in preparation for a FDOT lighting project. The existing 6" ACP water main behind the sidewalk was in conflict with the new installation needed to be relocated into the road by the city. To accommodate the heaviest traveled road in Broward County, night time installation of a new 8" cement lined ductile iron water main was necessary. The total 8" DIP INSTALLED IS 6,000 LF along with 33 service connections and 13 new fire hydrants. Surface restoration includes fill lane milling and paving, thermoplastic striping, and replacing some sidewalk and curbing impacted by the installation. Non rush hour lane closures were used to perform some of this work. Client: City of Oakland Park

JACK "BRUNO" ROTH—DESIGN-BUILD SAFETY MANAGER**CENTRAL BAYSHORE NEIGHBORHOOD IMPROVEMENT PROJECT, MIAMI BEACH, FL 2011**

Role: Project Superintendent. This project is located in a residential neighborhood in the bustling Miami Beach Area. The challenges of this project are accommodating the residences needs while Maintaining traffic and material delivery coordination which are vital to this project. Work included 31,000 LF of 8" DIP water main, 14,000 LF of drainage 15" to 48" in diameter, 217 drainage inlet structures, 6 drainage pump stations, and 12 drainage wells. Client City of Miami Beach (Jose Perez)

CITY OF MARATHON- AREA 5, MARATHON, FL 2011

Role: Superintendent: This project was located in the City of Marathon in the Florida Keys. The scope of work included excavation in cap rock formation throughout the project for the installation of a new AirVac Vacuum sewage collection system and an onsite drainage collection system. The vacuum mains are installed in similar fashion as gravity mains in that they have a design slope. The AirVac installation included PVC DR21 Vacuum mains -51,315 LF of 4", 21,475 LF of 8", 4,100 LF of 10" main, and 460 EA vacuum valve pits. The drainage system included the installation of 306 EA 30" diameter Nyloplast catch basins feeding 43,232 LF of Perforated 18" HDPE Drainage pipe installed in exfiltration trenches. Also, 19 EA gravity drainage wells of various diameters from 8" up to 24" with concrete control structures. 1,800 LF of custom curb was installed to control surface water. Maintenance of traffic was critical to the success of this project; 10,000 LF of the vacuum main was installed in the travel lane of US1, the only road in or out of the Keys. All this work was installed.

VILLAGE OF WELLINGTON- WATER TRANSMISSION MAIN EXT. 3, WELLINGTON, FL 2008

Role: Pipeline Superintendent : This Project consisted of the installation of a Water Transmission Main extension for the Village of Wellington. The scope consisted of the installation of 15,600 LF of 16" PVC Pipe, 3,800 LF of 16" DI Pipe, 100 LF of 12" DI Pipe, 1,160 LF of 18" DR 11 HPDE, driveway restoration, curb and sidewalk installation, roadway restoration, landscaping, tree placement and 4,550 SY of horse trail. Client: City of Oakland Park

MDWASDS S-828 SITE PREPARATION BLACKPOINT, MIAMI DADE COUNTY, FL 2008

Role: Superintendent: This civil site construction project consisted of clearing and grubbing of organic material from the existing asphalt lined drying beds of the plant, excavation of existing fill material in various locations and replacing it with compacted select fill material. The installation of new parking areas with curbing and pavement, large retaining wall, drainage works, install dewatering pipes to the N&S pond areas for future dewatering operations, installation of electrical duct banks for future service, relocate existing utilities, and renovate existing parking areas. Remove existing structures & piping (demo) abandon existing sludge bed piping including capping and plugging of said lines. Furnish long lead Ductile iron fittings construction management trailers. Install new mains such as 793LF 20" DIP, 900 LF 8" PVC, 1,760 LF 8" DIP FM , 800 LF 12' WM (Potable) 780 LF 12" DIP Filtrate FM, 1950 LF 15" CMP. Client: MDWSD

S.S. COLLECTION SMALL DIA- LIMESTONE CREEK PHASE II-B #2002055 , PALM BEACH COUNTY, FL 2008

Role: Superintendent: This contract facilitated the installation of a new wastewater collection system for the subdivision. Work consisted of clearing and grubbing, installation of a new lift station, 1,780 LF of 6" PVC FM, 1,300 LF of 8" PVC Water Main, 284 LF of 8" DIP WM, 60 LF of 24" PVC, the installation of 6,731 LF 8" PVC sewer at various depths, fire hydrant assemblies, landscaping & roadway restoration.

PALM BEACH COUNTY- NORTHERN REGION WUD 05-061 , PALM BEACH, FL 2007

Role: Superintendent: This scope of work included the Installation of approximately 66,500 LF of a double barrel 24" FM and 20" FM, along the C-18 canal, Bee Line Hwy and Innovation Dr in Royal Palm Beach, West Jupiter. Also included in the scope of work were 2 directional drills (one 24" and one 30" HDPE, totaling 1,960 LF), 8 jack and bore crossings (casings ranging from 30" to 42" crossing railroad tracks and the Bee Line Hwy for a total of 1,400 LF) and in the industrial are at the end of Innovation Dr a Master Pump Station was also installed. In the SFWMD right of way several 60" CMP drainage out falls needed to be removed and replaced. Some pavement and surface restoration was performed such as pavement restoration and seeding and mulching of the right way. Client: PBCWUD

**Highlights:**

25 years of contractor experience in Infrastructure Construction with an emphasis on Estimating, Project Management, Design Build and QA/QC Management.

Design Build experience since 2011

Registration / Certifications:

B.S.—Accounting
OSHA 10 Hour, Confined Space, Trench Safety

Experience:

Estimator, Project Manager, Design Build
QA/QC Manager
2011 to Present
David Mancini & Sons, Inc.

Chief Estimator, QA/QC Manager—FL / TX / NY
2008 to 2011
Felix Associates of Florida

Chief Estimator, QA/QC Manager
2006—2008
Mora Engineering

Senior Estimator / Senior Project Manager
2000-2006
Sonic Engineering, Inc.

Senior Estimator / Cost Accountant
1997-2000
Smith & Company, Inc.

Senior Estimator / Senior Project Manager
1994-1997
Sullivan Bros. Inc.

Estimator / Cost Accountant
1990-1994
W. Jackson & Sons, Inc.

CHRISTOPHER LAZZARI

DESIGN BUILDER QA/QC MANAGER

Mr. Lazzari has over 25 years' experience in accounting, construction management and cost estimating in the field of underground utility, roadwork and all facets of civil construction. In addition since 2011 Mr. Lazzari has overseen the Design Build & Project Management practices for DMSI. As Project Manager, Chief Estimator and Design Build manager, Mr. Lazzari's experience developed around projects involving the installation of water mains, drainage improvements, roadwork, sanitary sewer and bridge construction. He has obtained further specialization in directional drilling, PCCP, box culvert construction, pump stations, treatment plants and sewer force mains for various publicly bid Design Build projects for municipalities throughout Florida, New York and Texas.

EXPERIENCE:

DESIGN/BUILD 54" HDD FORCE MAIN, CITY OF MAIMI BEACH 2016

\$10.4 Million ,Two directional drills, one 3,330 LF of HDD 54" ID and one 1,500 LF HDD of 54" ID HDPE. First HDD went from 11th street and Euclid to 4th Street. Second HDD went From 4th street to 1st street and Washington Ave.

DESIGN/BUILD—FURNISH & INSTALL (2) 20" HDPE ALONG RICKENBACKER INTRACOASTAL WATERWAY FOR THE BEAR CUT AND WEST BRIDGES, MIAMI-DADE WATER AND SEWER DEPT., FL. 2015

\$1.7 million design/build Horizontal Directional Drill project. Oversaw and reviewed directional drill design and was present to supervise all aspects of this 4222 LF directional drill across Biscayne Bay. Worked closely with permitting agencies to accommodate drilling path and methods. Project also included the pipe removal from beneath the Old Bay Bridge

ALTON ROAD 5TH STREET TO MICHIGAN AVE (FDOT T6290) 2013

MIAMI BEACH, FLORIDA

Project included construction of approximately 15,000 LF of water main ranging in sizes from 6"-20"; Storm Sewer ranging in sizes of 12" to 72"; (3) storm water pump stations; 36" Storm Water force main, removal of contaminated material; restoration of FDOT roadway; Outfall connection to Biscayne Bay; box culverts and multiple deep excavations exceeding 20' in depth.

Client Bergeron Land Development (FDOT) (Enrique Tamayo (786)999-9671)

NORIS CUT VIRGINIAKEY, FLORIDA

2014

Design-Build project included deep shaft excavation over 95', installation of ring beam, topper slab, leveling slab, thrust wall and seal wall. In addition project included installation of approximately 2,100 LF of 60" PCCP force

CHRISTOPHER LAZZARI
DESIGN - BUILDER QA/QC MANAGER

main and 1,000 LF of HDPE directional drill on Fisher Island.

Client: Nicholson Construction Company (MDWSD)(Eloy Ramos (412) 715-3265

42" WATER MAIN REPAIR ON SW 2ND AVE / MIAMI DADE COUNTY, FL**2012**

As an emergency contractor for Miami-Dade Water & Sewer for over 10 years, David Mancini was as called upon to remove 60 LF of existing PCCP and replace with 60 LF section of 42" DIP which was located in the center of SW 2nd Ave entailed extensive MOT, shoring and dewatering. Client: MDWASD (Nelson Cespedes (305) 439-8959)

HARDING AVENUE SANITARY FORCE MAIN REPLACEMENT, CITY OF MAIMI BEACH**2011**

Project include the Design/Permit/Build of Over 1300 LF of 36" and 30" DIP Force main replacement, Live taps and Line stops with multiple connection on Municipal and State Roads.

Client: City of Miami Beach (Mike Alvarez (786)367-6109)

CENTRAL REGIONAL RECLAIMED PIPELINE
WEST PALM BEACH, FL.**2009 –2010**

Project included construction of a pipeline that transports reclaimed water from the Palm Beach County WWTP to the Florida Power & Light power plant. The pipeline consisted of two sections, eastern and west-ern. Mr. Lazzari was the PM on the eastern section which parallels State Road 704 and ends at the FP&L power plant near State Road 80. The pipeline consisted of 37,000 LF of 36" ductile iron pipe along SR 704 and over 9,000 LF of HDPE Directional Drilling thru a highly environmental sensitive area and a Jack and Bore under the Florida Turnpike. The project included multiple directional drills, jack & bore under Florida Turnpike including a horizontal directional drill using 36" HDPE to cross a wetland. The right-of-way included a number of road, canal, and wetland crossings. Well pointing and sock were used to dewater the pipe route.

Client: Florida Power & Light (David Xavier, 561-904-2297)

Water Main - Force Main Las Olas Boulevard

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

3: QUALIFICATIONS OF TEAM

A&P CONSULTING TRANSPORTATION ENGINEERS, CORP. (APCTE) (LEAD DESIGNER)

10305 N.W. 41st Street, Doral, Florida 33178

Phone: (305) 592-7283; Fax: (305) 593-12594; Email: info@apcte.com

Florida Engineers License # 7797

APCTE has grown to a full multi-disciplinary consulting practice with more than 95 staff. During the last 15 years APCTE has expanded and developed a highly specialized expertise in the field of water and sewer, particular in the design of water and sewer pipeline projects. Our mission is to embody design excellence in the fields of transportation, civil, water resources, water and wastewater pipeline design, environmental, structural, lighting, electrical, traffic engineering, construction management and construction engineering and inspection (CEI). Our primary objective is to guarantee that the owner's best interests are served. We strive to maintain the highest standards of integrity while ensuring successful completion of our client's work/capital programs, with our fundamental doctrine being to exceed client expectations.

APCTE aims to be at the forefront of our industry by concentrating on the technical aspects of our field and keeping a team of highly certified and experienced professionals. APCTE prides itself in serving a wide variety of clients and attending their individual needs. Our firm is unparalleled in client satisfaction providing our clients with focused and innovative solutions that yield cost effective results. Since it's establishment APCTE has completed a myriad of projects ranging in scale and complexity. The broad spectrum of award-winning projects in our portfolio provides the diverse foundation necessary to triumph over any challenge that may arise. It is this diversity, innately found in our firm, which enables APCTE to guarantee effective project execution for large-scale state and local projects while simultaneously delivering to our private and government clients the delicacy that is indispensable to their particular needs.

APCTE's main philosophy is to provide our clients with a product that far exceeds the technical and abstract requirements imposed over the years. We have established an excellent working relationship with all of our clients, which among many others includes the Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE), Miami-Dade Expressway Authority (MDX), Miami-Dade Water and Sewer Department (M-D WASD), City of Fort Lauderdale Public Works Department, City of Miami, City of Miami Beach, City of Doral, City of Hialeah, Town of Miami Lakes, Village of Palmetto Bay, and Village of Biscayne Park. Our primary objective is to guarantee that the client's best interests are served.

DBE UTILITY SERVICES (DBE) (DIRECTIONAL BORING SERVICES)

15893 77th Place, Loxahatchee, Florida 33470

Phone: (561) 508-3708; email: dertle@dbeutilityservices.com

Florida Underground Contracting License CUC #1224256

DBE is a thriving, growing construction firm with projects ranging in size from \$50,000 to as large as \$3 million dollars in value. We have a bonding capacity presently set at \$7-10 million dollars. We have completed projects in the many areas of underground utilities, including but not limited to horizontal directional drilling, force main, water & sewer main, low pressure systems, grinder stations both commercial and residential, and much, much more. DBE is not only one of the top Horizontal Directional Drilling Companies in South Florida but we have been recognized statewide for high-quality results, at fair competitive prices. We have an excellent reputation for dependability, efficiency, safety, and completing projects on time and within budget. Founded in 2004, quickly gained a reputation for dependability, efficiency, and safety. Reliably meet deadlines within budgets and with superior results. Frequently tasked with jobs that other contractors have failed to complete and successfully fulfilled contracts. Proudly hold record of safe worksite operations, including workers, the public, vehicles, and heavy equipment. Continually train staff in safety measures to achieve an accident-free workplace. Voluntarily identify and avoid other utility lines, well beyond the 2' obligation. Offer a wide range of jobs from steel pipe and HDPE to 100% turn-key gas, sewer, and water installation. Provide sophisticated boring services, including wire line guid-

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

ance, ground-penetrating radar, and walkover guidance. Demonstrate commitment to the environment. Highly regarded by clients and their customers for going the extra mile to get the job done to all parties' satisfaction.

Areas of Specialty: Ground-Penetrating Radar Municipal Contractor Water, Sewer, & Gas: Subaqueous Wire Line Guidance Underground Power Partnership Building; Collaborative Team Approach Industrial & Commercial Complete Build-Out; New, Upgrade, & Replacement All Underground Conduits Slip Line Construction; Paving Striping Lift Stations; Underground Power Large Manhole Installations Cable, Fiber, Power Line Pulling

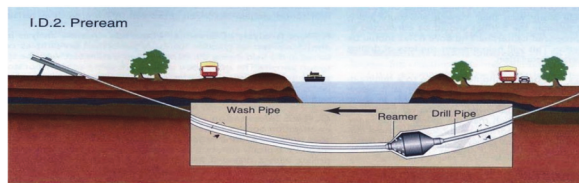
KEY DESIGN STAFF

Arnelio Alfonso, P.E. (APCTE), Lead Designer—Design Manager; Phone: (305) 592-7283; Fax: (305) 593-1594; email: aalfonso@apcte.com

Mr. Alfonso, APCTE's Director of Water Resources, has over 28 years of experience in the design of Sanitary Sewer Collection Systems and Water Distribution Systems. He has lead the APCTE design team in designing numerous M-D WASD water and sewer facilities; including: several water mains, gravity sewers and force mains. Mr. Alfonso has been involved in every aspect of the design of M-D WASD facilities and has an intimate knowledge of the entire process; including all facets of design, permitting, and construction. Among his most relevant projects are: 4,450 L.F. of 54-inch HDPE, HDD installation along Euclid Avenue, City of Miami Beach, 800 L.F. of 20-inch HDPE Forcemain, HDD installation at Miami International Airport, 4,500 LF of 54-inch DIP WM along NW 57 Ave from W. 53rd St. to W. 65th St.; 3,000 LF of 48-inch FM along Milan Dairy Road from NW 7th St. to NW 12th St.; 5,300 LF of 54-inch DIP WM along NW 57th Ave from W. 65th St. to W. 84th St.; Miami Intermodal Center (MIC) Water & Sewer Improvements for Rental Car Facility, Sanitary Sewer Improvements for SR-860 (Miami Gardens Drive), Water & Sewer Improvements for Perrine Cutler-Ridge (Basins A, B, and C), and the Sanitary Sewer for Lummus Island Port of Miami. *Mr. Alfonso will be one of the State of Florida Registered Professional Engineers who will sign and seal the construction plans and specifications for this project.*



ASCE PIPELINES 2012 CONFERENCE



Emergency Relocation of 20-Inch Sewer Force Main (HDD)

4,450 L.F. of 54-inch HDPE, HDD installation along Euclid Avenue, City of Miami Beach

INNOVATIONS IN DESIGN, CONSTRUCTION, OPERATIONS AND MAINTENANCE *Doing More with Less*



Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public



Eithel M. Sierra, P.E. (APCTE), Lead Pipeline Engineer; Phone: (305) 592-7283; Fax: (305) 593-1594; email: emsierra@apcte.com

Mr. Sierra graduated from Florida International University with a Bachelor's degree in Civil Engineering in 1995. He has over 20 years' experience in the design of highway facilities and pipeline design. He has designed and managed several (water & sewer) projects for Miami-Dade Water and Sewer Department and the City of Miami Beach, including water and sewer pipeline design, technical special provisions, utilities and permits coordination. He is highly experienced, and is currently working as Senior Project Manager in urban and rural new construction, total reconstruction and resurfacing, restoration, and rehabilitation projects, as well as Water & Sewer Main design, and Permits. *Mr. Sierra will be one of the State of Florida Registered Professional Engineers who will sign and seal the construction plans and specifications for this project.*



Carlos M. Gil-Mera, P.E., C.G.C. (APCTE), QA/QC Design Lead; Phone: (305) 592-7283; Fax: (305) 593-1594; email: cmgil@apcte.com

Mr. Gil-Mera brings over 29 years of experience in the design of highway and pipeline projects. He spent 13 years of his career working for the Florida Department of Transportation (FDOT) District VI internal design office on the production of roadway plans including minor design and major reconstruction projects. During the last two years of his career at FDOT, he worked as District VI Roadway Design Project Manager where he was head of an Internal Design Team working on a large number of milling and resurfacing and reconstruction projects.



Ivonne Planas, P.E. (APCTE), Permitting / Compliance Manager; Phone: (305) 592-7283; Fax: (305) 593-1594; email: iplanas@apcte.com

Ms. Planas has been involved in the design and permitting of several water main, sewer gravity, and force main for multiple M-D WASD projects, as well as paving and drainage systems for residential and commercial projects in South Florida. Some of Ivonne's construction assignments have included management of post-design services, shop drawing review, and response to Request for Information (RFI's).

KEY CONSTRUCTION SUBCONSULTANT STAFF

John Grant (DBE), Project Manager; Ph: (561) 389-7066; email: jgrant@dbeutilityservices.com

25 years in all phases of municipal and pipeline construction some of the major projects he has been involved with include. Ramadi, Iraq 30" transmission main Khandahar, airfield 24" water main and 18" sanitary project Melbourne, Melbourne Tillman 24" water main and canal crossing Cocoa beach 24" A1A water main replacement NASA OPF security upgrade and observation tower force main and lift station replacement multiple utility upgrades include 18" force main replacement, multiple lift station rehabs, remove fuel lines on crawler way to pads A and B and construct them underground Stuart, Florida install 8 way FPL 6" conduits by HDD into Indian river received the Meritorious civilian service award for projects in Qualat Afghanistan, FOB Apache for the construction multiple HLZs and fuel pipelines.

Michael Taggart (DBE), Directional Drilling Superintendent (Phone: (561) 389-7066; email: mtaggart@dbeutilityservices.com

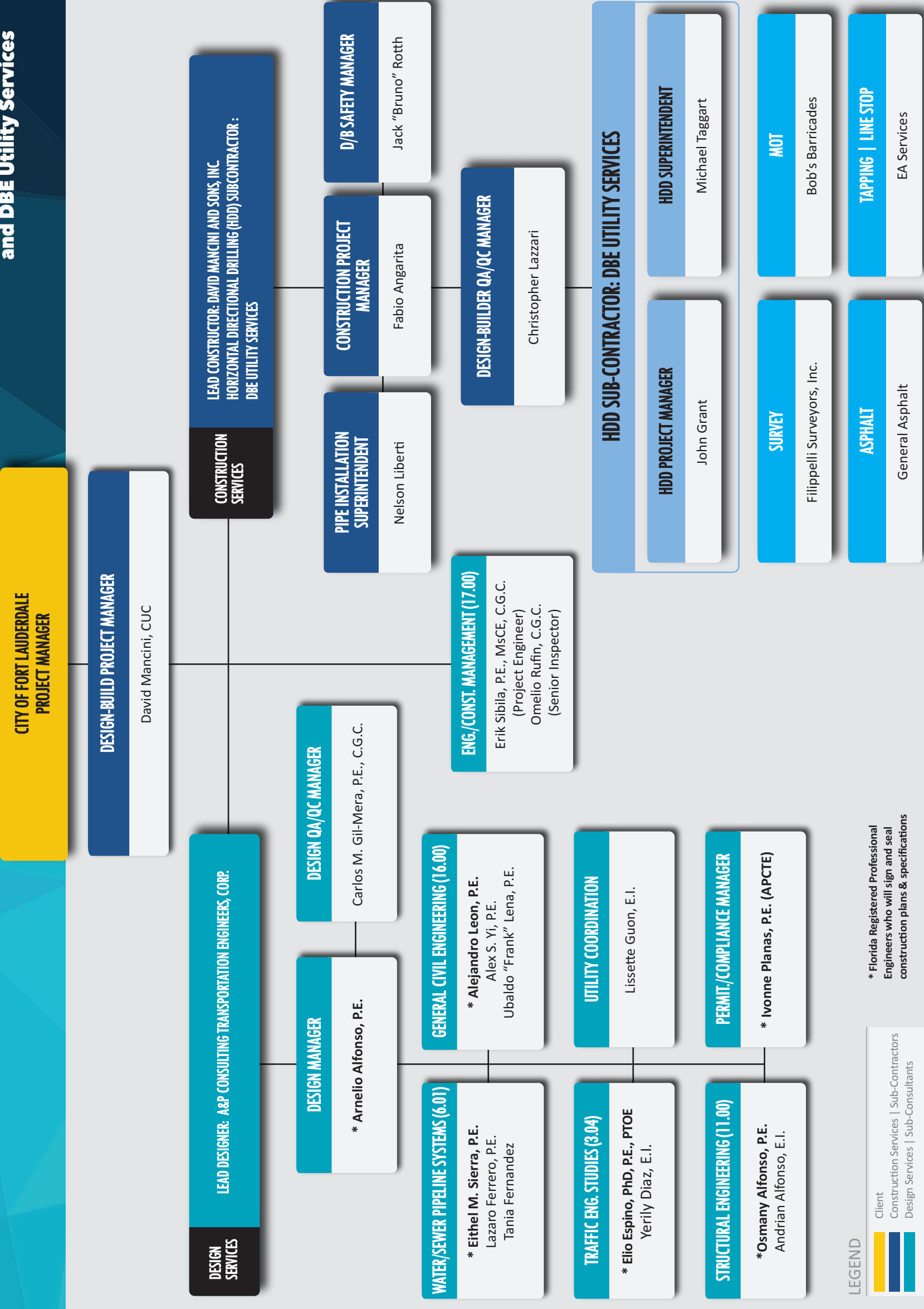
20 plus years of dynamic, results-oriented leader with a strong track record of performance and visible achievements in business development/start up in the underground utilities industry. Utilize keen analysis and insights and team approach to drive organizational improvements and implementation of best practices. Superior interpersonal skills, capable of resolving multiple and complex (sales, financial, operational) issues and motivating staff to peak performance. Out-of-box thinker with visionary leadership strengths; resourceful team player characterized by innovative entrepreneurial spirit.

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765

David Mancini & Sons, Inc.
in association with
A&P Consulting Transportation Engineers, Corp.
and **DBE Utility Services**

NAME	ROLE	EXP. (Years)
David Mancini, CUC	Principal-in-Charge	34
Fabio Angarita	Construction Project Manager	15
Nelson Liberti, II	Pipeline Superintendent	23
Jack "Bruno" Roth	Shaft Const. Super.	30
Christopher Lazari	D/B QA/QC Man.	26
John Grant	HDD Project Manager	25
Michael Taggart	HDD Superintendent	20
* Arnelio Alfonso, P.E.	Design Manager	30
Carlos M. Gil-Mera, P.E., C.G.C.	QA/QC Engineer	30
* Eithel M. Sierra, P.E.	Pipe-Line Designer	20
Lazaro Ferrero, P.E.	Pipe-Line Designer	29
Tania Fernandez	Pipe-Line Designer	9
* Alex Yi, P.E.	General Civil Eng.	17
Frank Lena, P.E.	General Civil Eng.	31
Alejandro Leon, P.E.	General Civil Eng.	8
* Elio Espino, PhD, P.E., PTOE	Traffic Studies	16
Yerily Diaz, E.I.	Traffic Studies	8
Osmany Alfonso, P.E.	Structural Engineer	18
Lisette Guon, E.I.	Utility Coordination	12
* Ivonne Planas, P.E.	Perm./Compl.Man.	20
Erik Sibila, P.E., MsCE, C.G.C.	Eng.Const.Manag.	10
Omelio Rufin, C.G.C.	Eng.Const.Manag.	20



LEGEND

- Client
- Construction Services | Sub-Contractors
- Design Services | Sub-Consultants

* Florida Registered Professional Engineers who will sign and seal construction plans & specifications



Tenure as Project Manager: 10 Years
APCTE Tenure: 13 Years
Industry Experience: 28 Years
Office Location: Doral, FL

Registration / Certifications:
 1998, Florida Professional Engineer No. 52566

Education:

Bachelor of Science in Civil Engineering,
 IPSJAE Havana, Cuba, 1985
 Hydrology Course
 1988 University of Madrid, Spain

Experience:

Senior Project Manager
 November 2001 - Present
 APCTE Corp.

Project Manager:
 August 1996 - October 2001
 HNTB Corporation

Project Engineer:
 April 1995 - July 1996
 Biscayne Engineering

Professor:
 July 1985 - March 1995
 Polytechnic University of Havana
 As a professor teaching subjects related to Hydraulic Engineering such as: Hydrology, Hydrogeology, Drainage, Irrigation, Hydraulic Systems and Fluid Mechanic.

ARNELIO ALFONSO, P. E. LEAD DESIGNER | DESIGN MANAGER

Mr. Alfonso, APCTE's Director of Water Resources, has over 28 years of experience in the design of Sanitary Sewer Collection Systems and Water Distribution Systems. He has lead the APCTE design team in designing a numerous of MDWASD water and sewer facilities; including: several water mains, gravity sewers and force mains. Mr. Alfonso has been involved in every aspect of the design of MDWASD facilities and has an intimate knowledge of the entire process; including all facets of design, permitting, and construction. Among his most relevant projects are: Miami Intermodal Center (MIC) Water & Sewer Improvements for Rental Car Facility, Sanitary Sewer Improvements for SR-860 (Miami Gardens Drive), Water & Sewer Improvements for Perrine Cutler-Ridge (Basin A), Water & Sewer Improvements for Perrine Cutler-Ridge (Basin B), and the Sanitary Sewer for Lummus Island Port of Miami.

DESIGN-BUILD EXPERIENCE

54-IN FM – EUCLID AVE – MIAMI BEACH, MIAMI-DADE COUNTY, FL.

Role: Project Manager. The installation of 54" PCCP FM for the City of Miami Beach (CMB) was implemented along Euclid Avenue. The force main (FM) was a crucial component of the CMB Wastewater Transmission System to improve the quality of service in this touristic area. The project covered three different phases: Along Washington Ave from Commerce St to Commerce Ct (191 LF of 54-in PCCP, Open Cut installation); Along 11th St from Meridian Ave to Meridian Ct (405 LF of 54-in PCCP, Open Cut installation); Along Euclid Ave from 11th St to Commerce Ct. (4,450 LF of 54-in HDPE, Horizontal Directional Drill (HDD) installation). The project's expedited schedule was met; both in the design and construction phase. A well-executed design and close coordination with the contractor allowed construction to take place within a week's time, with no major setbacks. Client: City of Miami Beach (Bruce A. Mowry, Ph.D., P.E. 305-673-7080).

20-IN FM AT THE MIAMI INT. AIRPORT (MIA), DADE COUNTY, FL.

Role: Project Manager. The main transmission line at MIA was a 20" cast iron force main (FM); running along NW 21 Street. Due to various factors, the most important of which was age, the force main failed, causing sewage overflows in and around MIA. The nature of the project required an emergency response with an expedited schedule. It was decided by MDWASD and MIA that a trenchless option would be used to install the new force main; thereby mitigating the risk of complications and prolonged downtime. The scope of services for this project included the design and construction of 800 LF of 20" HDPE force main by horizontal directional drilling (HDD). The purpose of the project was to replace a failed section of an existing force main, servicing the Miami International Airport (MIA). Client: MD WASD (Victor Fernandez-Cuervo, P.E. 786-268-5310).

24-IN FM AND 24-IN WM – SUBAQUEOUS CROSSING OF BISCAYNE CANAL, CITY OF NORTH MIAMI, FLORIDA.

Role: Project Manager. The existing water and sewer mains that cross the Biscayne Canal were attached to an existing pedestrian bridge. These lines were in conflict with a proposed storm-sewer pump station that will be built in the northeast corner of the intersection of NE 131st ST and Griffin Blvd. therefore, these two lines will be replaced. The project included the

ARNELIO ALFONSO, P.E. - LEAD DESIGNER | DESIGN MANAGER

installation of 450 LF of 24-in FM installed by HDD under the Biscayne Canal from Griffin Blvd to NE 2nd Ave. The new 24-in FM will be interconnected to the existing force mains on both side of the canal. The project also encompasses 450 LF of 24-in WM installed also by HDD, which also crosses the Biscayne Canal. The proposed WM has been permitted by FDEP an includes isolation valves, leak testing assemblies and interconnections to the existing water mains. Client: City of North Miami (Hasan A. Rizvi, P.E. 305-895-9838).

MIAMI INTERMODAL CENTER WATER AND SEWER IMPROVEMENTS, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Manager. This project provided upgrades to meet the needs of the MIC area and the new rental car facility (RCF). The sanitary sewer scope of work for the project included the design of the relocation/upgrade of the regional lift station (PS #101), 1,580 LF of 12" DIP gravity sewer system, and 1,400 LF of 12" force main. The water main scope of work consisted of 2500 LF of 24" DI WM along NW 21st St. and along NW 38th Ct. Additionally, 2100 LF of 16" WM was installed along SR 953 / Le Jeune from NW 25th St. to NW 30th St. The project included a crossing of the CSX Railroad right-of-way with a 30" casing (Microtunneling). Coordination was a crucial component of the project; requiring extensive permitting and utility relocation efforts. Client: FDOT / MD WASD (Carl Filer, P.E. 305-470-5137).

PROPOSED 54" WATER TRANSMISSION MAIN ALONG NW 57TH AVENUE, FROM W 53RD STREET TO W 84TH STREET, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Manager. The scope of work was comprised of the installation of 8,900 LF of a proposed 54" Water Main along SR 823 / NW 57th Avenue, from W 53rd Street to W 84th Street. The project include: Installation of a sub-aqueous crossing; installation of 54-in Butterfly Valves at the locations indicated in plans; installation of access manholes as per MD WASD Standards on each side of the proposed Butterfly Valves; installation of Blow-off Assemblies as per MD WASD Standards upstream of the Butterfly valves; installation of Stub-out for future connections as required by MD WASD. Client: M-D WASD; Reference: Carlos Benavides (786)-268-5285.

WATER AND SEWER IMPROVEMENTS FOR PERRINE-CUTLER RIDGE - MIAMI, FL

Role: Project Manager. The scope of work consisted of an upgrade to the existing water and sewer system in the area to better meet the aggregate demand of several large scale future developments. The project was divided into three Basins and it served an area of approximately 181 acres. Overall the project included approximately 20,000 LF of water main, 23,000 LF of sanitary sewer, 8,000 LF of force main, and 3 sanitary lift stations. Project was completed under budget and within the schedule; overhauling the water and sewer system in the area, and providing public water and sewer services to many properties. The new Pump Station PS# 1142 was nominated as "Project of the Year" by the CAACE in 2013. Client: M-D WASD; Reference: Eduardo M. Luis 786-268-5374.

PROPOSED 48" PCCP FORCE MAINS ALONG MILAM DAIRY ROAD (SR 826/SR 836 INTERCHANGE), MIAMI-DADE COUNTY, FLORIDA

Role: Project Manager. The scope of this project was to design a 48" PCCP Force Main along Milam Dairy Road as part of the SR 826/SR 836 Interchange Improvements. The project included relocation of an existing 48" P.C.C.P. Force Main, plug valves for sewage force mains; making connection to existing force mains with field welded closures; air release assemblies; furnishing and installing castings. The project also included cleaning and testing the mains; line stop with bypass; temporary and permanent repairs; curb and gutter restoration; sidewalk restoration; furnishing additional suitable backfill materials; and all other appurtenant and miscellaneous items for a complete and fully functional installation. Client: FDOT District 6; Reference: Tony Soto (305) 470-5380.

WATER MAIN IMPROVEMENTS FOR NAUTILUS NEIGHBORHOOD, MIAMI BEACH- FL

Role: Project Manager. The scope of work for this project included approximately 34,000 LF of new 8" ductile iron water main; which was prioritized according to the CMB Water & Sewer Master Plan. The first phase of the WM included 17500 LF of 8" DIP WM, while the second phase included 16,500 LF of 8" DIP WM. The design included multiple tie-ins of the proposed 8" DIP water lines to the existing water mains at various locations. New Fire Hydrants were installed at a myriad of locations in the Nautilus neighborhood. Additionally, the scope of work included the relocation of approximately 177 water meters. Many of these water meters were installed from rear easements to public sidewalks by trenchless technologies. Client: City of Miami Beach (Jose Rivas, P.E. 305-673-7080)



Tenure as Project Manager: 10 Years

APCTE Tenure: 15 Years

Industry Experience: 18 Years

Office Location: Doral, FL

Registration:

2000, Florida Professional Engineer No. 55401

Education:

Bachelor Science in Civil Engineering April 1995, Honored Magna Cum Laude, Honor Student and Dean's List. Florida International University, Miami Fl.

Continuing Education:

Ductile Iron Pipe Certified honored by the Ductile Iron Pipe Research Association November 2006

FDOT Specification Training March 2005

Advance Work Zone Traffic Control Certified April 2004

FDOT Electronic Delivery Production Training October 2004

Experience:

Senior Project Engineer / Project Manager
May 1999 - Present
APCTE

Project Engineer
Jul. 1987 – Jul. 1993
APCTE

EITHEL M. SIERRA, P.E.
LEAD PIPELINE ENGINEER

Mr. Sierra graduated from Florida International University with a Bachelor's degree in Civil Engineering in 1995. He has over 18 years' experience in the design of highway facilities and pipeline design. He is highly experienced, and is currently working as Senior Project Manager in (urban and rural new construction, total reconstruction and resurfacing, restoration, and rehabilitation) (RRR) projects including Roadway, Signing & Pavement Markings, Signalization, Lighting components, Intelligent Transportation System components, Water & Sewer Main design, intersection layouts, Specifications, Technical Special Provisions, and Utilities Coordination & Permits. He is certified by FDOT to design Traffic Control Plans. He has designed and managed several (water & sewer) projects for Miami-Dade Water and Sewer Department and the City of Miami Beach, including water and sewer, pipeline design, Technical Special Provisions, Utilities and Permits Coordination.

DESIGN-BUILD EXPERIENCE

LUMMUS NEIGHBORHOOD IMPROVEMENTS, M-D COUNTY, FL FEB. 2007 - AUG. 2008

Role: Senior Project Engineer. The Lummus Neighborhood includes all of the area from Washington Avenue on the West, Ocean Drive on the East, 6th Street on the South, and 16th Street on the North. The total area of the project was 25 Acres. The proposed improvements include new catch basins, new collection systems and 16 gravity wells. *Client: City of Miami Beach (Jose A. Perez, P.E. (305) 673-7080).*

WATER MAIN IMPROVEMENTS FOR NAUTILUS NEIGHBORHOOD

MIAMI BEACH- FL

APR. 2007 - OCT. 2008

Role: Senior Project Engineer. The scope of work for this project included approximately 34,000 LF of new 8" ductile iron water main; which was prioritized according to the CMB Water & Sewer Master Plan. The first phase of the WM included 17500 LF of 8" DIP WM, while the second phase included 16,500 LF of 8" DIP WM. The design included multiple tie-ins of the proposed 8" DIP water lines to the existing water mains at various locations. New Fire Hydrants were installed at a myriad of locations in the Nautilus neighborhood. Additionally, the scope of work included the relocation of approximately 177 water meters. Many of these water meters were installed from rear easements to public sidewalks by trenchless technologies. *Client: City of Miami Beach (Jose Rivas, P.E. 305-673-7080)*

PROJECT EXPERIENCE

4,500 LF OF 54-IN WATER MAIN, ALONG SR 823 (NW 57TH AVENUE / W 4TH AVE. / RED RD.) FROM W 53RD ST TO W 65TH ST., M-D COUNTY, FL MAR. 2013 - JUNE 2014

Role: Senior Project Engineer. The scope of work of this project included the Installation of a new 54-inch ductile iron water main (pipe and fittings) along SR 823 / NW 57th Avenue, from south of W 53rd Street to W 65th Street. Project includes the interconnection of the proposed 54-inch water main to the existing 54-inch PCCP water main just north of W 53rd Street. The project also includes: Installation of Butterfly Valves; Installation of access manholes at each side of the proposed Butterfly Valves; Installation of Blow-off Assemblies upstream of the Butterfly valves; Installation of Stub-out for future connections as required by MD WASD. The project also includes cleaning, testing and disinfecting the main; demolition and legal disposal of debris; temporary and permanent repairs; constructing line stops; obtaining the services of tapping specialist; and all other appurtenant and miscellaneous items and work for a complete and fully functional installation. *Client: FDOT / MD WASD (Danny Iglesias, P.E., 305-470-5289)*

5,300 LF OF 54-IN WATER MAIN ALONG SR 823 (NW 57TH AVENUE / W 4TH AVENUE / RED ROAD) FROM W 65TH ST TO W 84TH ST., M-D COUNTY, FL MAR. 2013 - JUNE 2014

Role: Senior Project Engineer. The scope of work of this project included the installation of a new 54-inch (pipe and fittings) along SR 823 / NW 57th Avenue, from W 65th Street to W

EITHEL M. SIERRA, P.E. - LEAD PIPELINE ENGINEER

84th Street. The project includes: Installation of 54-in Butterfly Valves at the locations indicated in plans; Installation of access manholes as per MD WASD Standards on each side of the proposed Butterfly Valves; Installation of Blow-off Assemblies as per MD WASD Standards upstream of the Butterfly valves; Installation of Stub-out for future connections as required by MD WASD. The project also includes cleaning, testing and disinfecting the main; demolition and legal disposal of debris; temporary and permanent repairs; and all other appurtenant and miscellaneous items and work for a complete and fully functional installation. The project is located in the City of Hialeah, Miami-Dade County Florida. *Client: FDOT / MD WASD (Danny Iglesias, P.E., 305-470-5289)*

**54" DI WATER MAIN ALONG NW 57TH AVE (W 4TH AVE)
M-D COUNTY, FL**
JAN. 2013 - JAN. 2014

Role: Senior Project Engineer. The 54 " ductile iron water main along W 57th Ave. is a first of its kind project in South Florida. The scope of work for this project is comprised of the installation of 380 LF of 54" DI WM across the Little River (C-7) Canal, via a sub-aqueous crossing. From conception, the project was intrinsically complex require extensive coordination between all project stakeholders. However, due to a change in the design of the adjacent roadway construction; an elaborate post-design effort was required to ensure that MDWASD receives a quality product. The APCTE Team worked around the clock coordinating with the contractor, pipe manufacturer, and owner to mitigate the risk of possible construction delays. After evaluating the scenario a specialty contractor was brought on-board to assist with the sub-aqueous crossing; turning the project into a hybrid between a design-build and conventional hard bid project. During the entire process APCTE coordinated closely with MDWASD to ensure that their best interests are met at all times. This included contract negotiations with the contractor and implementing innovative solutions to limit manufacturer related production delays. APCTE, provided production plans & specifications, secured all required permits, and provided construction management services as required. Additional efforts by APCTE included a buoyancy analysis of the pipe, due to its large diameter, and 3D modeling to provide QA/QC during the pipe's construction. *Client: MD WASD (Carlos Benavides, P.E., 786-268-5285)*

**SR- 5/US-1 / BISCAYNE BLVD. FROM NE 15TH STREET TO NE 35TH TERRACE – 24-INCH DUCTILE IRON WATER MAIN
M-D COUNTY, FL**
MAY. 2008 - FEB. 2009

Role: Engineer of Record. The scope of this project was to design 8,000 LF of 24-inch Ductile Iron Water Main along the project corridor, including 16-inch, 12-inch and 8-inch Ductile Iron Pipe stub-out at each side street intersection, new fire hydrants, fire lines in full compliance of the latest Fire Department Codes, and relocation of water meters and backflow preventer to the new main. Scope also included coordination with all utility companies within the corridor, obtaining all related permits (City of Miami Public Works Dept., Health Department and DERM) and developing technical special provisions. This project was part of Joint Participation Agreement (JPA) between the Miami Dade Water and Sewer Department and FDOT. *Client: FDOT District 6 (Jose Barrera, P.E. 305-470-5270)*

**3,000 LF OF 48-IN F.M. ALONG MILAN DAIRY ROAD FROM W 65TH ST TO W 84TH ST.
M-D COUNTY, FL**
FEB. 2007 - MAR. 2008

Role: Senior Project Engineer. The Water & Sewer Improvements along Milan Dairy Road was part of the SR826/SR836 Interchange Project . Due to the adjacent project, approximately 3,000 LF of 16-inch W.M and 3,000 of 48-inch FM were required to be relocated. This project was intrinsically complex, requiring extensive coordination with the adjacent construction and extensive post design services. Unique expertise in the design of concrete pressure pipes was required for this project, due to the material used for the 48-inch force main. *Client: FDOT / MD WASD (Ali Toghiani, P.E., 305-470-5343)*

**SR- 826 / PALMETTO EXPRESSWAY AT SR-90 – 30" DUCTILE IRON WATER MAIN SUBAQUEOUS CANAL CROSSING
M-D COUNTY, FL**
MAR. 2003 - JUN. 2004

Role: Engineer of Record. The scope of this project was to design the relocation of 985 LF 30-inch Ductile Iron Water Main, including 160 LF of a subaqueous canal crossing along the Coral Gables Canal. Scope also included coordination with all utility companies within the corridor, obtaining all related permits (Health Department and DERM), and developing technical special provisions. This project was part of Joint Participation Agreement (JPA) between the Miami Dade Water and Sewer Department and FDOT. *Client: FDOT District 6 (Ali Toghiani, PE. 305-470-5547).*

SR- 826 / PALMETTO EPRESSWAY AT SR-948 / NW 25TH ST. INTERCHANGE - 16" DUCTILE IRON WATER MAIN AND 12" DUCTILE IRON FORCE MAIN SUBAQUEOUS CANAL CROSSINGS , M-D COUNTY, FL
JUL. 2002 - MAR. 2003

Role: Engineer of Record. The scope of this project was to design 250 LF of 16-inch Ductile Iron Water Main and 12-inch Ductile Iron Force Main Subaqueous Canal Crossing along the Dressel's Dairy Canal at NW 36th Street. Scope also includes coordination with all utility companies within the corridor, obtaining all related permits (DERM, South Florida Water Management District, and Health Department), and developing technical special provisions. This project was part of Joint Participation Agreement (JPA) between the Miami Dade Water and Sewer Department and FDOT. *Client: FDOT District 6 (Ali Toghiani, P.E. 305-470-5547).*



APCTE Tenure: 12 Years
Industry Experience: 31 Years
Office Location: Doral, FL

Registration / Certifications:
 2001, Florida Professional Engineer No. 58025

Education:
 Bachelor of Science - Civil Engineering,
 1985. Polytechnic University of Havana,
 Cuba

Experience:
 Senior Project Engineer
 March 2004 - Present APCTE
 Senior Project Engineer, in charge of water
 and sewer system design.

Project Engineer
 Nov. 2000 - March 2004
 HNTB Corporation
 Project Engineer for the Miami office

Project Engineer
 Jul 2000 - Nov. 2000
 EAC Consulting Engineer
 Drainage Engineer for the Miami office, in
 charge of Drainage design.

LAZARO FERRERO, P.E.

PROJECT ENGINEER

Mr. Ferrero has over 31 years of engineering experience in pumping stations, water and sewer systems, drainage systems, hydraulic, and structural design, and computer programming for engineering. Mr. Ferrero has been responsible for the design of several storm water management systems in Miami-Dade and Broward Counties. Among his most relevant projects are: MIC Drainage master Plan; SR 826/SR 836 Drainage Master Plan and the Nautilus Neighborhood Drainage Improvements. Mr. Ferrero is currently a member of the Florida Engineering Society (FES).

PROJECT EXPERIENCE

54-IN FM – EUCLID AVE – MIAMI BEACH, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Engineer. The installation of 54" PCCP FM for the City of Miami Beach (CMB) was implemented along Euclid Avenue in the City of Miami Beach. The force main (FM) was a crucial component of the CMB Wastewater Transmission System to improve the quality of service in this touristic area. The project covered three different phases: Along Washington Ave from Commerce St to Commerce Ct (191 LF of 54-in PCCP, Open Cut installation); Along 11th St from Meridian Ave to Meridian Ct (405 LF of 54-in PCCP, Open Cut installation); Along Euclid Ave from 11th St to Commerce Ct. (4,450 LF of 54-in HDPE, Horizontal Directional Drill (HDD) installation). The project's expedited schedule was met; both in the design and construction phase. A well-executed design and close coordination with the contractor allowed construction to take place within a week's time, with no major setbacks. Client: City of Miami Beach (Bruce A. Mowry, Ph.D, P.E. 305-673-7080).

PROPOSED 54" WATER TRANSMISSION MAIN ALONG NW 57TH AVENUE, FROM W 53RD STREET TO W 84TH STREET, DADE COUNTY, FLORIDA.

Role: Project Engineer. The scope of work was comprised of the installation of 8,900 LF of a proposed 54" Water Main along SR 823 / NW 57th Avenue, from W 53rd Street to W 84th Street. The project includes: Installation of a sub-aqueous crossing; installation of 54-in Butterfly Valves at the locations indicated in plans; installation of access manholes as per MD WASD Standards on each side of the proposed Butterfly Valves; installation of Blow-off Assemblies as per MD WASD Standards upstream of the Butterfly valves; installation of Stub-out for future connections as required by MD WASD. Client: M-D WASD; Reference: Carlos Benavides (786)-268-5285.

PROPOSED 48" PCCP FORCE MAINS ALONG MILAM DAIRY ROAD (SR 826/SR 836 INTERCHANGE), MIAMI-DADE COUNTY, FLORIDA

Role: Project Engineer. The scope of this project was to design a 48" PCCP Force Main along Milam Dairy Road as part of the SR 826/SR 836 Interchange Improvements. The project includes relocation of an existing 48" P.C.C.P. Force Main, plug valves for sewage force mains; making connection to existing force mains with field welded closures; air release assemblies; furnishing and installing castings. The project also includes cleaning and testing the mains; line stop with bypass; temporary and permanent repairs; curb and gutter restoration; sidewalk restoration; furnishing additional suitable backfill materials; and all other appurtenant and miscellaneous items and work for a complete and fully functional

LAZARO FERRERO P.E. – PROJECT ENGINEER

installation. Client: FDOT District 6; Reference: Tony Soto (305) 470-5380.

PROPOSED 42" WATER REUSE TRANSMISSION PIPELINE, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Engineer. The scope of work included the design of a 42" reclaimed water transmission line from the SDWWTP Water Reclamation Facility to the Metro Zoo that extends approximately 5.0 miles. M-D County has evaluated ways to comply with water reuse requirements and has identified reliable cost-effective alternative sources of water to meet future demands. As part of the reclaimed water requirement of the 20 Year Water Use Permit granted to M-D WASD from SFWMD, APCTE has been assigned the task of designing a 42" reclaimed water main, with design flow 23 MGD, to discharge in the Miami Metro Zoo area. A Basis of Design Report was prepared to provide an analysis of the best pipe material and route for this reclaimed water main. A set of twenty-six (26) possible combinations of alternatives for the route of the pipe alignment was developed and cost estimated, to later make the appropriate selection. Client: M-D WASD; Reference: Eduardo M. Luis. (786) 552-8948.

MIAMI INTERMODAL CENTER WATER AND SEWER IMPROVEMENTS, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Engineer. This project provided upgrades to meet the needs of the MIC area and the new rental car facility (RCF). The sanitary sewer scope of work for the project included the design of the relocation/upgrade of the regional lift station (PS #101), 1,580 LF of 12" DIP gravity sewer system, and 1,400 LF of 12" force main. The water main scope of work consisted of 2500 LF of 24" DI WM along NW 21st St. and along NW 38th Ct. Additionally, 2100 LF of 16" WM was installed along SR 953 / Le Jeune from NW 25th St. to NW 30th St. The project included a crossing of the CSX Railroad right-of-way with a 30" casing (Microtunneling). Coordination was a crucial component of the project; requiring extensive permitting and utility relocation efforts. Client: FDOT / MD WASD (Carl Filer, P.E. 305-470-5137).

WATER AND SEWER IMPROVEMENTS FOR PERRINE-CUTLER RIDGE - MIAMI, FL

Role: Project Engineer. The scope of work consisted of an upgrade to the existing water and sewer system in the area to better meet the aggregate demand of several large scale future developments. The project was divided into three Basins and it served an area of approximately 181 acres. Overall the project included approximately 20,000 LF of water main, 23,000 LF of sanitary sewer, 8,000 LF of force main, and 3 sanitary lift stations. MDWASD completed the project in a cost and time effective manner; overhauling the water and sewer system in the area, and providing public water and sewer services to many properties. The new Pump Station PS# 1142 was nominated as "Project of the Year" by the CAACE in 2013. Client: M-D WASD; Reference: Eduardo M. Luis 786-268-5374.

PROPOSED 24" FORCE MAIN ALONG SR-5 (N. ROOSEVELT BLVD.) FROM GEORGIA ST TO KENNEDY DR., MONROE COUNTY, FLORIDA

Role: Project Engineer. The scope of this project was to design Utility Work by Highway Contractor Agreement Plans for the proposed 24" and 12" force mains along N. Roosevelt Blvd. from Georgia St to Kennedy Dr. The project included: Installation of approximately 630 LF of 12" Force Main from north of MacMillan Dr. to Seventh Street. This new line replaced an existing 6" Force Main; Installation of approximately 8450 LF of 24" C-905 Force Main from Georgia St. to Kennedy Dr. The new line replaced an existing 16" Force Main. Stub-outs at: Georgia St, with connection to the existing 16" PVC force main, 7th St, with a 90 or a Tee Kennedy Dr. for future connection of Pump Station F. Replacing the existing 16" force main crossing Salt Run Canal by a 24" steel pipe attached to the existing bridge. Perform full survey along Truman Ave., from Georgia St. To Eisenhower Dr. Perform 3 core boring to obtain geotechnical information along Truman Avenue, from Georgia Street to Eisenhower Drive. Client: FDOT District 6; Reference: Ali Toghiani, P.E. (305) 470-5343; Duration: 1/2010 to 12/2011

WATER MAIN IMPROVEMENTS FOR NAUTILUS NEIGHBORHOOD – MIAMI BEACH, FL

Role: Project Engineer. The scope of work for this project included approximately 34,000 LF of new 8" ductile iron watermain; which was prioritized according to the CMB Water & Sewer Master Plan. The first phase of the WM included 17500 LF of 8" DIP WM, while the second phase included 16,500 LF of 8" DIP WM. The design included multiple tie-ins for the proposed 8" DIP water lines into the existing water mains at various locations. New Fire Hydrants were installed at a myriad of locations in the Nautilus neighborhood. Additional work included the relocation of approximately 177 water meters. Many of these water meters were installed from rear easements to public sidewalks by trenchless technologies. Client: City of Miami Beach (Jose Rivas, P.E. 305-673-7080).



APCTE Tenure: 9 Years
Industry Experience: 15 Years
Office Location: Doral, FL

Education:

Bachelors of Science in Civil Engineering,
 IPSJAE Havana, Cuba, 2001

Experience:

Project Engineer
 2007-Present
 APCTE Corp.

Hydraulic Specialist
 2003 - 2006
 Copextel Corporation

Hydraulic Specialist
 2001 - 2003
 Grupo Cubanacan

TANIA FERNANDEZ
PROJECT ENGINEER

Ms. Fernandez has over 15 years of experience as Civil Engineer in the production of construction sets of plans, permitting process, and design of water and sewer projects, including Water Mains, Gravity Sewer, Force Mains and Pump Stations using the M-D WASD Standards, and other Municipalities Standards. She is experienced in design and drafting pipelines projects, including Plans and Profiles, Cross Sections, As-Built Plans using Microstation and Autocad Civil 3D. Several of these water and sewer facilities have been installed by Horizontal Directional Drill (HDD). Ms Fernandez has been the responsible engineer for the design of Water Main and Force Mains Projects. She also well experienced in the revision of shop drawings and responses to RFI's.

PROJECT EXPERIENCE

54-IN FM – EUCLID AVE – MIAMI BEACH, MIAMI-DADE COUNTY, FLORIDA.

Role: Project Engineer. The installation of 54" PCCP FM for the City of Miami Beach (CMB) was implemented along Euclid Avenue in the City of Miami Beach. The force main (FM) was a crucial component of the CMB Wastewater Transmission System to improve the quality of service in this touristic area. The project covered three different phases: Along Washington Ave from Commerce St to Commerce Ct (191 LF of 54-in PCCP, Open Cut installation); Along 11th St from Meridian Ave to Meridian Ct (405 LF of 54-in PCCP, Open Cut installation); Along Euclid Ave from 11th St to Commerce Ct. (4,450 LF of 54-in HDPE, Horizontal Directional Drill (HDD) installation). The project's expedited schedule was met; both in the design and construction phase. A well-executed design and close coordination with the contractor allowed construction to take place within a week's time, with no major setbacks. Client: City of Miami Beach (Bruce A. Mowry, Ph.D, P.E. 305-673-7080).

20-IN FM AT THE MIAMI INTERNATIONAL AIRPORT (MIA), MIAMI-DADE COUNTY, FLORIDA.

Role: Project Engineer. The main transmission line at MIA was a 20" cast iron force main (FM); running along NW 21 Street. Due to various factors, the most important of which was age, the force main failed, causing sewage overflows in and around MIA. The nature of the project required an emergency response with an expedited schedule. It was decided by MDWASD and MIA that a trenchless option would be used to install the new force main; thereby mitigating the risk of complications and prolonged downtime. The scope of services for this project included the design and construction of 800 LF of 20" HDPE force main by horizontal directional drilling (HDD). The purpose of the project was to replace a failed section of an existing force main, servicing the Miami International Airport (MIA). Client: MD WASD (Victor Fernandez-Cuervo, P.E. 786-268-5310).

DESIGN OF 42-INCH WASTEWATER TRANSMISSION PIPELINE

Role: Project Engineer; The scope of this project included the design and construction of 10,365 LF of a 42-inch P.C.C.P. Wastewater Transmission Main, connecting to the existing MD WASD 30" force main at NE 62nd Street and NE 4th Avenue to the north, and the proposed 48" Force Main at N. Miami Avenue and NE 36th Street to the south. The scope also includes

TANIA FERNANDEZ - PROJECT ENGINEER

investigations, utility coordination, engineering design, develop construction documents (plans & specifications), permitting process and post design services during procurement and construction.

24-IN FM AND 24-IN WM – SUBAQUEOUS CROSSING OF BISCAYNE CANAL, CITY OF NORTH MIAMI, FLORIDA.

Role: Project Manager. The existing water and sewer mains that cross the Biscayne Canal are attached to an existing pedestrian bridge. These lines are in conflict with a proposed storm-sewer pump station that will be built in the northeast corner of the intersection of NE 131st ST and Griffin Blvd. therefore, these two lines will be replaced. The project includes the installation of 450 LF of 24-in FM installed by HDD under the Biscayne Canal from Griffin Blvd to NE 2nd Ave. The proposed 24-in FM will be interconnected to the existing force mains on both side of the canal. The project also encompasses 450 LF of 24-in WM installed also by HDD, which also crosses the Biscayne Canal. The proposed WM has been permitted by FDEP an includes isolation valves, leak testing assemblies and interconnections to the existing water mains. Client: City of North Miami (Hasan A. Rizvi, P.E. 305-895-9838).

PROPOSED 54” DUCTILE IRON WATER TRANSMISSION MAIN ALONG SR 823 / NW 57TH AVENUE FROM W 53RD ST TO W 65TH ST

Role: Project Engineer; The scope of this project included the design and construction of 3,500 LF of a 54-inch ductile iron water main (pipe and fittings) interconnection of the proposed 54-inch water main to the existing 54-inch PCCP water main just north of W 53rd Street. The project also includes: Installation of Butterfly Valves; Installation of access manholes at each side of the proposed Butterfly Valves; Installation of Blow-off Assemblies upstream of the Butterfly valves; Installation of Stub-out for future connections as required by MD WASD. The scopes of work also included obtain permits from DRER and DOH.

PROPOSED 54” DUCTILE IRON WATER TRANSMISSION MAIN ALONG NW 57TH AVENUE FROM W 65TH ST TO W 84TH ST

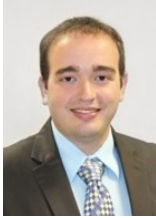
Role: Project Engineer; The scope of this project included the design and construction of 5,300 LF of a 54-inch ductile iron water main (pipe and fittings), Butterfly Valves; access manholes as per MD WASD Standards on each side of the proposed butterfly Valves; blow-off assemblies as per MD WASD Standards upstream of the butterfly valves; installation of stub-out for future connections as required by MD WASD. The scopes of work also included obtaining permits from DRER and DOH.

PROPOSED 54” PCCP & HDPE FORCE MAIN FROM COMMERCE STREET ALONG WASHINGTON AND EUCLID AVENUE S TO PS. 1 ON THE 11 STREET.

Role: Project Engineer; The scope of work of this project was to provide engineering, design, permitting, construction, testing and commissioning services for the construction of approximately 5,300 linear Force Main with a minimum internal diameter of 54-inches that included a 3,300 LF of Horizontal Directional Drilling and 2,000 LF of open cut. The initial connection was to the existing 48-inch plug valve located at the intersection of Washington Avenue and Commerce Street, extending northerly within the ROW of Washington and Euclid Avenues, and easterly within the ROW of 11th Street; the final connection was to the existing 30-inch FM in the vicinity of Pump Station No. 1.

SR 826/ SR 836 WATER AND SEWER IMPROVEMENTS ALONG MILAM DAIRY ROAD

Role: Project Engineer; The Section 5 Water and Sewer Improvements along Milam Dairy Road were part of the SR 826 / SR 836 Interchange project. The Scope of Work for this project included the design and construction of a 48” Pre-stressed Concrete Cylinder Pipe (PCCP) force main and a 16” ductile iron water main along Milam Dairy Road from NW 7th Street to NW 12th Street. Due to the adjacent SR 826 / SR 836 Interchange project, approximately 3,000 LF of 16” water main and 3,000 LF of 48” force main were required to be relocated.



APCTE Tenure: 5 yrs.
Industry Experience: 12 yrs.
Office Location: Doral, FL

Education:

Florida International University, Master of Science in Engineering Management, Miami, FL, 2012.

University of Florida, Bachelor of Science in Civil Engineering, Gainesville, FL, 2007.

Registration:

2012, Florida Professional Engineer No. 74675

Experience:

2012-Current
 Senior Project Engineer, APCTE

2007-2012
 Project Engineer, C3TS

2006
 Summer Internship, C3TS

2005
 Summer Internship, PBS&J

ALEJANDRO LEON, P.E.
LEAD CIVIL ENGINEER

Mr. Leon has over 12 years of experience in the design of Highway Facilities. He has worked with the Florida Department of Transportation (FDOT), Districts I, VI, V, VI, and Turnpike as well as with the Miami-Dade Expressway Authority and the Broward Metropolitan Planning Organization. Mr. Leon has also worked with several municipal and county agencies on roadways off of the state highway system. As a Senior Project Engineer, Mr. Leon has been the lead Roadway Engineer on several projects including Major Interchange Reconstruction, Roadway Reconstruction, RRR Projects, as well as bicycle/pedestrian mobility and ADA compliance projects. Mr. Leon also specializes in Maintenance of Traffic plans, having completed the Advanced Maintenance of Traffic course approved by FDOT, and having several years' experience in MOT Design including major interchange reconstructions. Mr. Leon has experience in projects with the conventional Design-Bid-Build procurement process as well as in Design-Build procurement process.

PROJECT EXPERIENCE

NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836

MIAMI, FLORIDA.

OCT. 2011 - JUNE 2015

Scope of Work - The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system-to-system connections for the western portion of SR-836 connecting to SR-826 and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR-836 and improving operations on NW 87th Avenue and NW 12th Street. Improving interchange operations is also a key factor, which include providing ramp sequencing at the interchange, providing lane continuity and balance, and eliminating the weaving condition within the interchange. Client: Miami-Dade Expressway Authority. Project Manager: Gil Portela, P.E. -MDX GEC Project Manager. Phone No.: (305) 551-8100. Fax No.: (305) 551-2800. Email: gportelal@hntb.com. Project Role: Sr. Project Engineer, Initial/Final Contract Value: \$5.5 M. Initial/Final Construction Cost: N/A.

BROWARD MPO-MOBILITY PROJECT-PHASE1

JAN. 2013 - FEB. 2014

Scope of Work: The Florida Department of Transportation (FDOT), together with the Metropolitan Planning Organization (MPO) proposed improvements to transportation options for pedestrians and cyclist in Broward County. The intent of this project was to provide sidewalks, multi-use paths, and bicycle facilities in several locations throughout Broward County to provide enhanced connect ability between existing transit along Broward Boulevard and the surrounding communities, with the goal that this project will encourage the use of transit in Broward County. Client: FDOT District IV. Project Manager: Sabrina Aubery, PE. Phone No.: (954) 777-4324. Email: Sabrina.aubery@dot.state.fl.us. Project Role: Deputy Project Manager/Sr. Project Engineer Initial/Final Contract Value: \$145,672.00. Initial/Final Construction Cost: \$14 M.

ALEJANDRO LEON P.E. – LEAD CIVIL ENGINEER**SR-A1A / SOUTH OCEAN DRIVE FROM MIAMI-DADE/BROWARD COUNTY LINE TO SEACREST PARKWAY****MIAMI, FL****JAN. 2012 - JAN. 2014**

Scope of Work: This was a milling and resurfacing project including the installation of video detection at signalized intersections, installation of pedestrian signal countdown, signal upgrades from concrete poles to mast arms, signing and pavement markings, ADA improvements which consisted of replacing damaged sidewalk and replacing noncompliant curb ramps where needed, and implementation of bicycle lanes, where possible. In addition, the City of Hallandale Beach, Public Works Department entered into a Joint Participation Agreement (JPA) with the Department to install decorative pedestrian lighting and sidewalk. Client Name: FDOT District IV. Project Reference: Fausto Gomez, P.E. (954) 777-4466. Project Length: 0.90 miles. Project Role: Sr. Project Engineer.

FPID# 432021-1-52-01 SW 1ST ST BRIDGE OVER MIAMI RIVER, BRIDGE NO. 870660**MIAMI, FL****JAN. 2008 - SEP. 2012**

Scope of Work: This project included the emergency maintenance of a Bascule Bridge in the Heart of Downtown Miami, FL that is both over US Significant Waters and a US. Coast Guard recognized Navigable Water-way. Maintenance of Traffic plan included a clear plan to guide pedestrian, and traffic to other roadways in phases where bridge needed to be closed to perform necessary repairs. FDOT Project Manager Luis D. Amigo; Phone Number: (305) 470-5436. Project Role: Project Engineer.

FPID# 418414-1-52-01: STATE ROAD 112 RAMP Z HOV FLYOVER BRIDGE NO'S: 870713, 870775, 870776, 870777**MIAMI, FL****MAR. 2008 - MAY 2009**

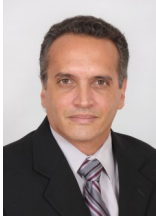
Scope of Work: This project included the painting and rehabilitation of 4 bridges that together make the HOV flyover from SR 112 to I-95. This project included dividing maintenance operations into 10 distinct areas to maintain the Golden Glades Interchange, one of Miami's Major interchanges open during maintenance operations. This also included a Maintenance of Traffic plan to Close I-95 express lanes during some maintenance operations, and taking special measures to ensure that pedestrian traffic through the interchange could continue during maintenance. FDOT Project Manager Luis D. Amigo; Phone Number: (305) 470-5436. Project Role: Project Engineer.

FDOT DISTRICT VI, SR-826/SR-836 INTERCHANGE**MIAMI-DADE COUNTY, FLORIDA****JUL. 2010 - DEC. 2012**

This \$500 million project included the complete reconstruction of the existing interchange. The new five-level interchange included the reconstruction of approximately 2 miles of SR 826 (Palmetto Expressway), approximately 3 miles of SR 836 (Dolphin Expressway) and 52 new bridges ranging in type from AASHTO beams to segmental. As project engineer, Mr. Leon was responsible for the design of maintenance of traffic plans to maintain the interchange open to traffic during construction. Several modifications were made during construction to account for contractor needs. The project received an award from FDOT for partnership between FDOT and the Design-Build team for responsiveness to FDOT/contractor requested changes. FDOT Project Manager Ali Toghiani, P.E.; Phone Number: (305) 470-5343. Project Role: Project Engineer.

SR-5 (US-I) DESIGN-BUILD-FINANCE C-111 CANAL BRIDGE REPLACEMENT**KEY LARGO, FL.****JUL. 2009 - NOV. 2011**

Scope of Work: Preparation of construction documents of a 10.5 mile section of roadway, responsible for the design of Maintenance of Traffic Plans, developed plans for the construction of a boat ramp for service and recreational use of the C-111 Canal, and project included major soil reinforcement to contain muck and maintaining the existing ITS poles.). FDOT Project Manager Jose Barrera, P.E. Phone Number: (305) 470-5260. Project Role: Project Engineer, Contract Amount: \$112 Million.



Tenure as Project Manager: 12 Years

APCTE Tenure: 10 Years

Industry Experience: 16 Years

Office Location: Doral, FL

Registration / Certifications:

2000, Florida Professional Engineer No. 55401

Education:

Master of Science in Engineering Management, Florida International University, Miami, FL, 2012.

Bachelor of Science in Civil Engineering, University of Florida, Gainesville, FL, 2007

Experience:

Senior Project Engineer / Project Manager
APCT Engineers
October 2012 - Present

**ALEXANDER S. YI, P.E.
PROJECT ENGINEER**

Mr. Yi is a Civil Engineering Graduate and a Professional Engineer Registered in the State of Florida, which has over seventeen years of professional experience in the fields of Design and Management of all types of Rural and Urban Roadways. Six of the seventeen years were with the Florida Department of Transportation District Six as a Professional Engineer Trainee (4 years) and as a Project Engineer in the Internal Design Office (2 years). As a Senior Project Engineer, Mr. Yi has been in charge of the design, quality assurance/quality control, and management of all types of roadway projects including control access highway/freeway projects, urban widening and reconstruction projects, and urban and rural RRR projects. Mr. Yi is experienced in designing, producing, and directing the development of all phases of roadway contract plan sets, including roadway plans and related design studies. For the last six and a half years, Mr. Yi has been providing in-house support services to the Florida Department of Transportation District Six Internal Design Office. Support services have included reviews of Contract Plans, Typical Section Packages, Design Variations, and Design Exceptions. As an in-house consultant, Mr. Yi has been assisting the District Design Engineer with several special assignments including the implementation of Project Suite Enterprise Edition at the District 6, development of the District's Project Suite Design Approval Request (DAR) Guidelines and development of the Design Variation Memorandum Guidelines. Mr. Yi has also provided design guidance to external consultants and internal project managers.

PROJECT EXPERIENCE

**NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836
MIAMI-DADE COUNTY, FL**

NOV. 2011 - On-Going

Role: Senior Project Engineer. The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system to system connections for the western portion of SR-836 connecting to SR-826 and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR-836 and improving operations on NW 87th Avenue and NW 12th Street. *Client: Miami-Dade Expressway Authority (Gil Portela, P.E. 305-551-8100)*

**MISCELLANEOUS PLANS REVIEW & DESIGN SUPPORT SERVICES, - IN-HOUSE
CONSULTANT, M-D COUNTY, FL**

AN. 2015 - On-Going

Role: Senior Project Engineer. As a sub-consultant to Jacobs Engineering, Mr. Yi is responsible to provide in-house support services to the Internal Design Office. Services include review of the Roadway Component of Contract Plans for all scheduled submittals to verify adherence to FDOT criteria and guidelines. Review of Typical Section Packages, Design Exception and Variation package for the District Design Engineer are also included. Scope of services also included support for the internal design unit for all types of roadway projects. Mr. Yi's duties also included working with the internal project engineers and designers to bring to completion a wide variety of roadway design projects. *Client: FDOT District 6 (Tim Albury 305-470-5262)*

**FDOT DISTRICT 6, DISTRICTWIDE GENERAL ENGINEERING CONSULTANT— IN-
HOUSE CONSULTANT, M-D COUNTY, FL**

JUN. 2010 - DEC. 2014

Role: Senior Project Engineer. As a sub-consultant to HDR, Mr. Yi was responsible for the support to the Department of a wide range of engineering, management, administrative and

ALEXANDER S. YI, P.E. – PROJECT ENGINEER

technical services to assist in bringing to completion, as expeditiously as possible, numerous projects within the Work Program for District 6 Design and Consultant Management Office. Scope of services includes complex highway and bridge design, plans review, production and program management support, post design services and extensive in-house staffing support for several areas within the District. Review of Typical Section Packages, Design Exception and Variation package for the District Design Engineer are also included. *Client: FDOT District 6 (Tim Albury 305-470-5262)*

MIC RENTAL CAR CENTER MIAMI, FLORIDA , M-D COUNTY, FL**MAR. 2000 - MAY. 2010**

Role: Senior Project Engineer. Design and development of the Site Civil Construction Plan for the proposed Rental Car Facility This 3.4 million square foot “rental car shopping mall” will provide customers arriving through MIA convenient access to participating rental car companies. It features the first multilevel fueling system designed in the U.S. At full build-out, it will have a total capacity of approximately 6,500 vehicles and include a Ready/Return garage, quick turnaround fuel and wash areas, and a customer service lobby. Initially, rental car buses that now circle the airport will be replaced by a common shuttle. Later, when the MIC-MIA Connector opens and connects the RCC to the airport terminals, MIA curbside traffic will be reduced by 30% *Client: FDOT District 6 (Carl Filler, P.E. 305-470-5145)*

MIC-EARLINGTON HEIGHTS CONNECTOR MIAMI-DADE COUNTY, FL**JUN. 2010 - DEC. 2014**

Role: Senior Project Engineer. Mr. Yi was the Engineer of Record for the Miami Intermodal Center – Earlington Heights Station. The Miami Intermodal Center – Earlington Heights projects runs from the existing Earlington Heights Station locate next to SR-112 and approximately east of NW 27th Avenue west to the new MIC Core Facility locate next to the Miami International Airport. The project included the site civil design, geometric design, line-at-grade, horizontal/vertical alignments, quantity take-off, cross sections layout, drainage, permitting, complex maintenance of traffic (including SR-112 & NW 41st Street), detour plans for the MIC-Earlington (crossing), Signing and Pavement Marking (including SR-112 and NW 41st Street), signalization design, temporary signal, and substation design. Our site civil department, as part of the design team, has been involved in monthly coordination meetings with Miami-Dade Transit Agency representatives, architects/engineers and system consultants. *Client: Miami-Dade Transit / URS Corp. (Carlos Garcia, P.E. 305-264-7466)*

SR 821 / SW 8 STREET INTERCHANGE MODIFICATIONS AT THE FLORIDA TURNPIKE DADE COUNTY, FL**APR. 2004 - JAN. 2007**

Role: Deputy Project Manager/Roadway Project Engineer. Prepared Construction Documents (Plans and Specifications) for a new southbound HEFT exit ramp that extends approximately 1 mile to westbound SW 8th Street in order to alleviate the mainline weave condition that results from the heavy movement between the southbound HEFT entry from westbound SR-836 traffic crossing the southbound HEFT existing to SW 8th street. The new ramp will be built from the southbound collector-distributor roadway that is now under construction on the HEFT between NW 12th Street and SR-836, and then loops around the new MDX westbound SR-836 ramp and then connects to the existing toll plaza just south of Flagler Street, which is also under construction (widened to two lanes). The proposed consists of a single 15 feet lane ramp facility with 6 feet shoulders, 2 feet paved on the left and 4 feet paved on the right. The scope of services included the design of the vertical and horizontal controls of the new ramp, new drainage features, new FDOT lighting, modification of the existing MDX lighting, maintenance of traffic, and modification of the existing ITS system. The design of the project also included earthwork and grading of dry retention ponds. Some of the key project elements included Preliminary Engineering Report, project schedule, analyze traffic data, geometric design, line-at-grade, horizontal/vertical alignments, quantity take-off, cross sections typical section package, pedestrian and bicycle considerations, layout, drainage, permitting, complex maintenance of traffic, lighting, ITS, interchange re-design. *Client: Florida Turnpike (Cheryl Doherty 407-532-3999)*

SR-112 TOLL PLAZA CONVERSION, MIAMI-DADE COUNTY, FLORIDA MIAMI-DADE COUNTY, FL**APR. 2005 - MAY 2006**

Role: Deputy Project Manager / Engineer of Record, Project Scope: Project consisted of three primary elements: roadway, toll plaza, and employee parking area. The roadway portion consisted of expanding the merging and diverging areas, correcting roadway cross slope, drainage, signing & pavement markings, maintenance of traffic and roadway lighting. The toll plaza portion consisted of the conversion of two dedicated SunPass lanes to express SunPass lanes, the removal of an automatic coin machine lane, and the conversion of an automatic coin machine lane to a manual booth lane. The removal of the automatic coin machine lane provided the needed space for the proposed express SunPass shoulders. The existing high canopy was replaced with a gantry over the proposed express SunPass lanes. The existing employee parking was reconfigured as part of the project. The scope of services included the design of the vertical and horizontal controls of the converted SunPass lanes, Preliminary Engineering Report, project schedule, analyze traffic data, geometric design, line-at-grade, horizontal/vertical alignments, quantity take-off, cross sections typical section package, modifications to the existing drainage, modification to the existing lighting, maintenance of traffic, and modification to the existing toll plaza. Since the design speed of the proposed Express SunPass lanes were higher, the design of the vertical and horizontal alignment of lanes before and after the existing toll plaza needed to be adjusted. Some of the key project elements included geometric design, drainage, permitting, complex maintenance of traffic, lighting. *Client: Miami-Dade Expressway Authority (Gil Portela, P.E. 305-551-8100)*



Tenure as Project Manager: 23 Years

APCTE Tenure: 2 Years

Industry Experience: 29 Years

Office Location: Doral, FL

Registration / Certifications:

1988, Florida Professional Engineer No. 40167

Education:

Bachelor of Science in Civil Engineering,
University of Florida, Gainesville, FL.
Fall 1983

Experience:

Senior Engineer

APCT Engineers – 2013 to Current

Corradino Group – 2012 to 2013

Parsons Brinckerhoff – 2009 to 2012

EAC Consulting – 2006 to 2009

URS Corporation – 1997 to 2006

Biscayne Engineering Company – 1994 to 1997

FDOT District VI – 1988 to 1994

Beiswenger, Hoch. And Associates – 1984 to 1988

UBALDO "FRANK" LENA, P.E.
PROJECT ENGINEER

Mr. Lena has more than 30 years of experience in the overall management of engineering operations and has a wealth of expertise in highways and urban roadways. He also worked for six years with the Florida Department of Transportation (FDOT) District Six office as an internal design project manager directing a multi-disciplined design team. He has been the project manager, designer, and engineer of record for several high profile projects including the SR-826/NW 58th St interchange (FDOT), SR-836/ NW 17th Ave interchange which included the SR-836 eastbound toll plaza (MDX), the MIC/MIA (Lejeune Rd/NW 21st St) interchange, the original design of the SR-826/SR-836 interchange (FDOT), and several projects for the City of Miami and the City of Hialeah. Additionally, he was the designer of the horizontal and vertical alignments for the Earlington Heights leg of the Metrorail (MDT)

DESIGN-BUILD EXPERIENCE

SR-821/HEFT widening from sw 72 street to sw 40 ST.

M-D County, FL

NOV. 2014 - On-Going

Role: Engineer of Record. The overall goal of corridor improvements defined in the Project includes improving capacity, operations and safety along SR 821 (HEFT) from North of Sunset Drive (SW 72nd Street), Station 1655+00 (Milepost 21.949) to North of Bird Road, Station 1765+00 (MP 24.033), a distance of approximately 2.1 miles. The work required under 427146-1-56-01 includes installation of a new 8" ductile iron water main along SW 117th Avenue within Miami Dade County Right of Way due to conflicts with an existing 8" and 6" water mains that the Design Build Firm will need to place out of services. Refer to Reference Document No. 28 for additional details. To the south, the project will connect to the Design-Build project from South of Killian Drive (FPID 415051-1-52-01) to North of Sunset Drive that is scheduled to begin construction in late Fall or Winter 2014. To the north, the project will connect to a Design-Build project that will begin construction approximately six to twelve months following the start of this project. FPID 415051-4-52-01 connects with this project on the north end and continues to the SR 836 (Dolphin Expressway) interchange. All of the aforementioned projects will be under construction at the same time. Client: FDOT Turnpike / Gannett Fleming (Naldo Gonzalez, P.E. 786-845-9540)

N.W. 36TH BRIDGE REPLACEMENT, M-D County, FL

DEC. 2012 - On-Going

Role: Engineer of Record. This contract included two distinct projects. Project 425979-1-52-01 includes milling & resurfacing, median modifications, sidewalk, and ADA ramp construction along NW 36th Street. The limits of this project go from about 120 ft. west of Lee Drive to just east of Coolidge Drive. Project 418065-2-52-01 include major reconstruction including the replacement of the N.W. 36th Street bascular bridge over the Miami Canal, as well as milling and resurfacing, drainage, lighting, signalization, and minor intersection modifications of NW 36th Street at N.W. South River Drive and NW North River Drive. This project entails replacing a functionally obsolete Hanover Bascule Bridge crossing the Miami Canal C-6 with two fixed concrete bridges.

Client: FDOT District 6. (Ali Toghiani 305-470-5343)

PROJECT EXPERIENCE

NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836

M-D County, FL

NOV. 2011 - On-Going

Role: Quality/Control Engineer. The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system to system connections for the western portion of SR-836 connecting to SR-826

UBALDO "FRANK" LENA, P.E. – PROJECT ENGINEER

and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR-836 and improving operations on NW 87th Avenue and NW 12th Street. Client: Miami-Dade Expressway Authority (Gil Portela, P.E. 305-551-8100)

**SR-821/HEFT/MIRAMAR TOLL PLAZA DEDICATED LANES, FLORIDA'S TURNPIKE ENTERPRISE
BROWARD County, FL****JUN. 2006 - MAY. 2008**

Role: Project Manager responsible for highway engineering services for widening the SR-821 mainline and the addition of a Sunpass lane in each direction. Client: FDOT Turnpike (Cheryl Doherty, P.E. 407-532-3999)

**FDOT DISTRICT VI, SR 5/US-1/OVERSEAS HIGHWAY TURN LANE, GRASSY KEY, MONROE COUNTY FROM MM57.4 TO MM59.9
(2.5 MILES), FLORIDA:****JUN. 2006 - JUL. 2009**

Role: Project Manager responsible for roadway improvements. Scope of services included roadway plans, drainage plans and services, traffic control plans, utilities, signing and pavement markings. Client: FDOT District 6 (Harold Desdunes, P.E. 305-470-5464)

SR-826/SR-836 INTERCHANGE RECONSTRUCTION (SECTION 5), M-D County, FL**NOV. 2003 - AUG 2006**

Role: Senior Project Engineer for this \$500 million project that includes the complete reconstruction of the existing interchange. The new five - level interchange included the reconstruction of approximately 2 miles (3.2 kilometers) of SR 826 (Palmetto Expressway), approximately 3 miles (4.8 kilometers) of SR 836 (Dolphin Expressway) and 52 new bridges ranging in type from AASHTO beams to segmentals. As project engineer, Mr. Lena was responsible for the design of all the vertical alignments, typical sections, ramp terminals and superelevation transitions. Client: FDOT District 6 (Ali Toghiani, P.E. 305-470-5343)

SR 836 WESTBOUND AUXILIARY LANE, M-D County, FL**NOV. 2002 - AUG 2004**

Role: Project Manager in charge of design and plans production for the construction of a portion of the SR 836 Westbound C-D. The project included a new bridge over railroads, retaining walls and the construction of 1.5 miles (2.4 kilometers) of the new SR 836 Westbound C-D. Client: Miami-Dade Expressway Authority (Alfred Lurigados. P.E. 305-637-3277) (2002-2004).

SR 953/NW 21ST STREET INTERCHANGE (MIC/MIA INTERCHANGE), M-D County, FL**JUN. 2000 - AUG 2004**

Role: Project Manager for this \$72 million project that included the reconstruction of 1.0 mile of SR 953 (LeJeune Road) and 0.5 mile of NW 21st Street, the realignment/reconstruction of all the ramps of the interchange, the replacement of seven bridges and the construction of 3 new bridges. Client: FDOT District 6 (Harold Desdunes, P.E. 305-470-5464)

SR 826/NW 58TH STREET INTERCHANGE, M-D County, FL**NOV. 2002 - AUG 2004**

Role: Project Manager responsible for the widening of 1.0 mile of SR 826, realignment of all the ramps, and reconstruction of 0.25 mile of NW 58th Street, including widening of the bridge over SR 826. Client: FDOT District 6 (Ali Toghiani, P.E. 305-470-5343) (1998-2000).

NW 17TH AVENUE/SR 836 INTERCHANGE AND NEW TOLL PLAZA, M-D County, FL**NOV. 1999 - AUG 2000**

Role: Project Manager for this \$32 million project that included reconstruction of 0.5 mile of SR 836 between NW 27th and 17th Avenues, including a toll plaza equipped with SunPass, an electronic toll collection system, five bridges, construction of a satellite toll plaza on the NW 17th Avenue ramps, reconstruction of the 17th Avenue eastbound ramps and provisions for the proposed rail line to the airport and seaport. Client: Miami-Dade Expressway Authority (Alfred Lurigados. P.E. 305-637-3277)

OPA-LOCKA BOULEVARD AND NW 135TH STREET (NW 27TH AVENUE TO I-95), M-D County, FL**MAY 1990 - SEP. 1993**

Role: Project Manager for the reconstruction of a 3-mile (4.8-kilometer) corridor of this two-way pair with major design constraints due to the presence of a canal parallel to the corridor. Work included a complete drainage design, signalization and lighting. Client: FDOT District 6 (Harold Desdunes, P.E. 305-470-5464)

ROAD/SW 40TH STREET (H.E.F.T. TO S.W. 87TH AVENUE), M-D County, FL**APR. 1991 - SEP. 1994**

Role: Project Manager for the reconstruction of a 3-mile (4.8 kilometer) corridor of this major arterial. The project included a complete drainage design using French drains, signalization and lighting. Client: FDOT District 6 (Harold Desdunes, P.E. 305-470-5464)



Tenure as Project Manager: 12 Years
APCTE Tenure: 2 Years
Industry Experience: 18 Years
Office Location: Doral, FL

Registration / Certifications:
 2002, Florida Professional Engineer No. 58341

Georgia PE No. 27463, March, 2002

PTOE No. 1100, April, 2003

Education:

Doctor of Philosophy in Civil Engineering April, 2005
 Florida International University
 Master of Science in Civil Engineering August, 1999
 Florida International University
 Bachelor of Science in Civil Engineering August, 1997
 Florida International University

Experience:

ATEC (2005 - Present)
 FDOT, D6 (1997 - 2005)

ELIO ESPINO, PHD, P.E., PTOE
LEAD TRAFFIC ENGINEER

Mr. Elio R. Espino, PhD, P.E., PTOE is the Head of APCTE's Traffic Engineering and Transportation Planning Department. Elio has over 18 years of experience including seven years with the District Six of the Florida Department of Transportation where he graduated from the Department's PE training program. During the last three years of his seven year tenure with the Department he served as District Safety Engineer and was responsible for the District's Highway Safety Improvement Program (HSIP) and the implementation of the Department's Strategic Highway Safety Program which focused on the implementation of Engineering, Education, Enforcement and Emergency Services, the four E's to reduce the rate of fatality and serious injuries districtwide. He currently serves as an adjunct professor at the Civil Engineering Department at Florida International University. For the last eight years Mr. Espino developed a successful engineering practice focused in the areas of traffic engineering and transportation planning and successfully completed three Districtwide Traffic Operations and Safety contracts and one Planning and Environmental Management Contract for the District Six of the Florida Department of Transportation. Through his work as a consultant for FDOT, Mr. Espino has developed a reputation as a hand on project manager who takes ownership of project and delivers high quality engineering work.

PROJECT EXPERIENCE

MDT PEDESTRIAN SAFETY STUDY

MIAMI-DADE, FL.

APR. 2006 - JUL. 2006

Scope of Work: Evaluation of the need for pedestrian overpasses at several Metrorail stations. As part of this project Mr. Espino coordinated the pedestrian data collection and also performed field review to assess pedestrian safety at the Dadeland North and Dadeland South stations. Role: Project Engineer. Contract Amount: \$35,000.

DISTRICTWIDE PLANNING & ENVIRONMENTAL MANAGEMENT SERVICES, FDOT DISTRICT 6, MIAMI-DADE, FL.

MAR. 2009 - MAR. 2012

Begin-End Date: On-going three-year (March 2009 – March 2012). Contract Amount: \$1.5 Million. Scope of Work: Task work order driven contract which includes traffic data collection; general planning, and corridor / project planning; preliminary design and engineering; project development and environmental; traffic operations analysis; interchange analysis reports; systems planning, and travel demand forecasting; and public involvement. Mr. Espino provided support as part of the Traffic Calming / Traffic Safety Evaluation on SR 933/SW 12 Avenue between Coral Way and SW 13th Street. FDOT Contact: Mr. Phil Steinmiller (305) 470-5825. Role: Project Manager.

CITY OF MIAMI / ROADWAY PROJECTS.

MIAMI, FL.

MAY 2009 - FEB. 2010

Begin-End Date: May/2009 – February/2010. Contract Amount: \$75,000. Scope of Work: Task order driven contract to provide civil engineering services as a sub-consultant to Metric Engineering, Inc. which include, but are not limited to, completion of planning and design services, programming, pavement analysis surveying, geotechnical, options evaluations, public meetings, detailed assessments and recommendations, cost estimates, etc. As part of this contract Mr. Espino performed a Traffic Calming Study at SW 28th Street between SW 32nd Avenue and SW 37th Avenue. The objective of this study was to evaluate if traffic-calming devices are necessary on SW 28th Street to discourage intrusion and to reduce speed which are the major concerns of this area's residents. MEI Contact: Mr. Robert Linares, P.E. (305) 235-5098. Role: Senior Traffic Engineer.

ELIO ESPINO, PHD, P.E., PTOE - LEAD TRAFFIC ENGINEER**DISTRICTWIDE TRAFFIC OPERATIONS AND SAFETY STUDIES CONTRACT, FDOT DISTRICT 6****MIAMI-DADE, FL.****JUN. 2008 - JUN. 2013**

Begin-End Date: June/2008- June/2013. Contract Amount: \$1.5million Scope of Work: Task work order driven contract which includes the investigation of fatal crashes and high crash locations district-wide. As part of this contract Mr. Espino completed over 850 fatal crash reviews to determine roadway contributory causes. FDOT Contact: Ms. Ivette Funtanellas, E.I. (305) 470-5311. Role: Senior Traffic Engineer.

DISTRICTWIDE TRAFFIC OPERATIONS AND SAFETY STUDIES CONTRACT, FDOT DISTRICT 6**MIAMI-DADE, FL.****MAR. 2009 - MAR. 2012**

Task work order driven contract. Contract Amount: \$1.5millio. Scope of Work: As part of this contract Mr. Espino completed the development of guidelines for the implementation of Accessible Pedestrian Signals (APS) District-wide. This effort included a nationwide survey of current practice as well as extensive literature review. He has also provided in-house support at the District 6 Traffic Operations Office. FDOT Contact: Misleidys Leon, E.I. (305) 470-5335. Role: Senior Transportation Engineer.

MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT**MIAMI-DADE, FL.****MAY 2008 - SEP. 2008**

Role: Senior Traffic Engineer. Begin-End Date: May/2008- September,/2008. Scope of Work: This project included a traffic study and the preparation of maintenance of traffic design drawings for the installation of a 16-inch Force Main in SW 87th Avenue from SW 132nd to SW 120th Street. As part of this project, a traffic study was completed in support of a Maintenance of Traffic Plan. One of the purposes of the study was to identify problems and constraints and make appropriate recommendations so that a realistic and workable MOT Plan could be developed. This effort included field review during peak traffic periods, data collection, traffic control analysis for determining overall phase planning, lane closure analysis, detours, diversions, and creating any miscellaneous traffic control sheets. Contact Information: Carlos Benavides (305) 268-5285

STATEWIDE TOLL PLAZA PRE-CLASSIFICATION PROJECT**TURNPIKE ENTERPRISE****AUG. 2007 - DEC. 2007**

Scope of Work: This project included the development of signing and pavement markings and maintenance of traffic plans for the Coral Reef East and West ramp toll plazas on the Homestead Extension of the Florida Turnpike. Served as a sub-consultant to CH2M Hill, Inc. as part of this project. Role: Senior Transportation Engineer.

MIAMI-DADE COUNTY WATER AND SEWER DEPARTMENT**MIAMI-DADE, FL.****MAY - JUL. 2007**

Scope of Work: Perform a traffic circulation study for the future expansion and upgrade of the South Dade Waste Water Treatment Plant (SDWWTP). The purpose of this study is to develop a traffic circulation strategy that will minimize the impact of the reconstruction phase of the proposed new development to the surrounding streets. The study area defined for this analysis is located in unincorporated Miami-Dade County, Florida. It is bound by SW 216 Street on the North, SW 248 Street on the South, SW 87th Avenue on East and SR-5/US-1 on the West. Contact Information: Richard E. Cisterna, P.E. (954) 987-2949. Email: cisterna@hazenandsawyer.com Role: Senior Traffic Engineer.



Tenure as Project Manager: 4 Years

APCTE Tenure: 1 Years

Industry Experience: 8 Years

Office Location: Doral, FL

Education:

Bachelor of Science in Civil

Engineering, Cum Laude

December, 2004

Florida International University

Experience:

Project Experience:

ATEC (Feb. 2011 - Present)

FDOT, D6 (Aug. 2005 – Feb. 2011)

REGISTRATION:

Florida Engineer Intern

April, 2005

Specialized Training:

Road Safety Audit

Designing and Operating

Intersections for Safety

Designing Intersections for

Pedestrian Safety

Florida Intersection Strategic

Action Plan Workshop

Traffic Signal Timing Workshop

Introduction to Access

Management

FDOT MicroStation V8 Essentials

Synchro and Simtraffic

**YERILY DIAZ, E.I.
TRAFFIC ENGINEER**

Ms. Yerily Diaz has over eight years of experience in traffic operations and traffic safety, including five years with the FDOT District 6 Traffic Operations Office. While with the FDOT, Ms. Diaz worked as a Traffic Operations Analyst, responsible for performing required tasks to develop safety/operational improvements on the State Highway System in Miami Dade and Monroe Counties in Florida. Her experience includes the development of traffic engineering studies, fatal crash investigation, skid hazard location investigation, and review of production plans for projects in the FDOT Work Program.

PROJECT EXPERIENCE

FEB. 2011 - ON-GOING

Ms. Diaz has worked on the preparation of several traffic operations and safety studies for FDOT District 6 Traffic Operations Office. Some recent projects include:

1) Districtwide Traffic Operations/Safety Studies Contract, FDOT District 6 FDOT PM: Ms. Ivette Funtanellas, E.I. (305) 470-5311

2) Pedestrian Mobility and Safety Evaluation for SR 972/Coral Way from SW 37th Avenue to SW 27th Avenue and from SW 22nd Avenue to SW 17th Avenue, Miami Dade County (February-March 2012)

3) Signal Warrant Analysis on SR 823/NW 57th Avenue at NW 186th Street, Miami Dade County (March-April 2012)

4) Needs Assessment for Audible Pedestrian Signal Installation at SR 5/US 1 and SW 120th Street, Miami Dade County (August-September 2012)

Districtwide Traffic Operations Contract, FDOT District 6, Sub-consultant to Metric Engineering, Inc., PM: Ms. Sonia Shreffler-Bogart, P.E. (305) 235-5098

5) Need and Feasibility of Midblock Pedestrian Crossing on SR A1A/S. Roosevelt Blvd from La Brisa Residential Complex to Key West by the Sea Condominium, Key West, Monroe County (May-July 2012)

6) Pedestrian Mobility and Safety Evaluation along SR 5/Biscayne Blvd between NE 36th Street and NE 61st Street, Miami Dade County (October 2012-January 2013)

Districtwide Plans Review & Support Services, FDOT District 6, Sub-consultant to Alvarez Engineers, Inc. PM: Juan R. Alvarez, P.E. (305) 640-1345

7) Lighting Evaluation along SR 5/Overseas Highway from Atlantic Boulevard to Tarpon Basin Drive, Key Largo, Monroe County (April-July 2012)

AUG. 2005 - FEB. 2011

While with the FDOT, Ms. Diaz worked as a Traffic Operations Analyst responsible for performing required tasks to develop operational/safety improvements on the State Highway System in Miami Dade and Monroe Counties, Florida. The main responsibility was the completion of the Correspondence Tracking Program (CTP) assignments to provide response and resolution to public's requests in a timely manner. Some duties and responsibilities included the production of Technical Memorandum documenting traffic/safety related issues and proposed improvements, traffic regulations/restrictions, and Traffic Service Request (TSR) for the implementation of minor roadway modifications through the FDOT Maintenance Office. Ms. Diaz also performed plans review of production plans for projects in the Department Work Program, attended internal production scoping meetings in connection with the proposed traffic/safety improvement, and coordinated and attended Public Involvement Meetings regarding planned safety improvement projects. Ms. Diaz also served as Project Manager for various consultant contracts, including contract negotiation and scope of work preparation. Other related duties included identifying project requirements, reviewing study reports, and determining and maintaining schedules. The following are the task work order driven contracts Ms. Diaz managed and administered while with the Department:

YERILY DIAZ, E.I. – TRAFFIC ENGINEER**DISTRICTWIDE UPDATE TRAFFIC OPERATIONS STUDIES CONTRACT, FDOT DISTRICT 6 (2008-2011)**

As Department Project Manager (DPM), Ms. Diaz managed thirty one Task Work Orders including access management, accessible pedestrian signal, and pedestrian mobility and safety studies. Through this contract, Ms. Diaz conducted Fatal Crash Investigations in accordance with the Highway Safety Improvement Program Guidelines. This effort included the development of a fatal crash review system that ensured a systematic and efficient approach to dispose of fatal crashes. Ms. Diaz reviewed over 700 fatal crash locations in Miami Dade and Monroe Counties, as well as provided and implemented improvements to mitigate the crash patterns associated with the fatal crash.

DISTRICTWIDE TRAFFIC OPERATIONS/SAFETY STUDIES CONTRACT, FDOT DISTRICT 6 (2006-2011)

As DPM, Ms. Diaz was responsible for reviewing all types of study tasks outlined in the Scope of Services for this contract, e.g., Qualitative Assessment, Signal Warrant Analysis, Intersection Analysis, Left Turn Phase Warrant Analysis, and Speed Zone Studies. Through this contract, Ms. Diaz performed Skid Hazard Location Investigations consistent with the objective of the Highway Safety Improvement Program. Ms. Diaz investigated and reported possible slippery pavement sections in Miami Dade and Monroe Counties. Ms. Diaz was responsible for reviewing the data stored in the FDOT Skid Hazard Reporting System, identifying highway sections with a friction number in questionable or review categories, and updating the System documenting all activities, e.g., review of crash summaries, geometrics, surface condition, posted speed, recent projects, etc., related to the highway sections investigated.

DISTRICTWIDE PUSHBUTTON MINOR DESIGN CONTRACT, FDOT DISTRICT 6 (2005-2006)

As DPM for this work order driven contract, Ms. Diaz was responsible for reviewing roadway, signing/pavement markings, signal design plans, and construction cost estimates for the implementation of traffic safety and operational improvements, e.g., school zone, audible pedestrian signal, and traffic signal installation. Ms. Diaz was responsible for the administration of two Minor Design Pushbutton contracts and overseeing all activities related to the production of design plans at the 90% and 100% phase levels in conformance with FDOT Design Standards, FDOT Plans Preparation Manual, AASHTO Standards, and MUTCD. Other associated duties included coordination with FDOT District 6 Right of Way, Utilities, and Surveying and Mapping Offices to provide the consultant with the required data/documentation needed for the completion of work assignments.



APCTE Tenure: 13 yrs.

Industry Experience: 14 yrs.

Office Location: Doral, FL

Registration:

Florida Engineer in Training 2004

Education:

MS, Civil Engineering 2002 Florida International University

Experience:

Project Engineer 2002 - Present
A&P Consulting Transportation Engineers,
Miami, Florida

Civil Engineer Intern Camero & Associates,
Inc Miami, Florida
2001-2002

LISSETTE GUON, E.I.
PROJECT ENGINEER

Mrs. Guon has more than 14 years of experience working as a Transportation Engineer in conjunction with the Florida Department of Transportation and local agencies. As a Project Engineer, Mrs. Guon has worked on a number of projects including RRR and Roadway Reconstruction projects. Within these projects, Mrs. Guon has conducted Design and Draft Roadway Plans, Signing and Pavement Marking Plans, and Signalization Plans using CADD system and Geopak software. Created and re-viewed typical sections, horizontal and vertical alignments. Prepare review and update Roadway plans and other construction documents in accordance with the FDOT Plans Preparation Manual, FDOT Design Standards and Manual of Uniform Traffic Control Devices. Generated CADD produced quantities using Geopak for the Computation Book, compute areas, volumes and geometric data required. Prepared Cost Estimates Analysis and establish projects in the Construction Estimating System (CES).

PROJECT EXPERIENCE

**NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836
MIAMI, FLORIDA.**

OCT. 2011 - ON-GOING

Beg. Date-End Date: 10/2011- On-Going. Scope of Work: The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system to system connections for the western portion of SR-836 connecting to SR-826 and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR-836 and improving operations on NW 87th Avenue and NW 12th Street. Improving interchange operations is also a key factor, which include providing ramp sequencing at the interchange, providing lane continuity and balance, and eliminating the weaving condition within the interchange. Client: Miami-Dade Expressway Authority. Project Manager: Gil Portela, P.E., Phone No.: (305) 551-8100. Fax No.: (305) 551-2800. Email: gportela@hntb.com. Initial/Final Contract Value:\$5.5 M. Initial/Final Construction Cost: N/A. Role: Utility Coordinator.

DESIGN-BUILT OF CENTRAL BOULEVARD

JUN. 2010 - ON-GOING

Project Scope: Responsible for coordinating with all Utility Agency Owners with existing facilities within the project limits identifying and avoiding potential conflict with proposed roadway work. Survey and field verify all encountered potential utility conflict. Responsible for ensuring that MDX, MDAD and FDOT Standards policies and procedures, and design and construction criteria are followed for each utility coordination/relocation. Coordinated with FPL to identify Service Points for ITS, Signal, Lighting and Landscape Lighting. Responsible for the Design and Plans Preparation for Several Proposed Signalization along the Project Limits. Client Name: MDX / FDOT, District 6. Project Reference: Ariel Millan, PE. Contact Number: (305) 670-2350. Prime Consultant: BCC Engineering. Project Role: Utility Coordinator/Signal Project Engineer.

DESIGN-BUILD OF SR-826/SR-836 INTERCHANGE

DEC. 2009 - ON-GOING

Project Scope: Preparation of a Utility Master Plan for this \$559 million project, which includes several levels of ramps providing proper connections between both expressways. Responsible for coordinating utility relocation work within the project limits with Utility Agency Owners, identifying potential conflicts of existing facilities with proposed work, utility coordination/relocation with all different agencies having jurisdiction in the project area like MDX, Miami Dade County Public Works, City of Miami, Miami International Airport, DERM, etc. Design

LISSETTE GUON, E.I. – PROJECT ENGINEER

and plans preparation for utility corridor for affected utilities. Responsible for the development of Utility Adjustment Sheets, and the design of several proposed and temporary signalizations within the project limits. Client Name: FDOT, District 6. Project Reference: Ali Toghiani, P.E. Contact Number: (305) 470-5343. Prime Consultant: BCC Engineering. Project Role: Utility Coordinator/Signal Project Engineer.

DESIGN/BUILD OF SR-90/SW 8TH STREET AT HEFT INTERCHANGE**MAR. 2010 - FEB. 2011**

Beg. Date-End Date: 3/2010 – 02/2011. Project Scope: Roadway safety improvements along SR-90 from the HEFT SB On-Ramp intersection to the HEFT NB On-Ramp intersection. This project included median widening to accommodate dual left-turn movements entering the HEFT ramps, reconstruction of the SB On-ramp from a single lane to two-lane ramp, resurfacing on SR-90, drainage, signalization, signing & pavement markings, and utility coordination. Client Name: FDOT District 6. Project Reference: Jose Barrera, PE. Contact Number: 305-470-5260. Prime Consultant: APCTE, Corp. Project Role: Utility Coordinator.

MIAMI INTERMODAL CENTER (MIC) UTILITY MASTER PLAN**AUG. 2002 - SEP. 2009**

Project Scope: Mr. Gil-Mera was responsible for the development of the utility master plan for this \$1.3 billion dollar project for the MIC Program as well as the preparation of Utility Relocation Schedules, Reimbursable Agreements, Utility Clear Packages and Utility Design by FDOT Consultant Agreements (JPA's) for all MIC Roadway Projects. Client Name: FDOT, District 6. Project Reference: Gary Donn, P.E. Contact Number: (305) 470-5145. Project Role: Senior Utility Coordinator.

DESIGN-BUILD FOR NEIGHBORHOOD NO. 7- NAUTILUS IMPROVEMENTS, MIAMIBEACH, FL.**APR. 2007 - OCT. 2006**

Role: Engineer. Client: City of Miami Beach Florida. Contact Information: Fernando Vazquez (305) 673-7080. Project Location: Nautilus Neighborhood, "Middle Beach" from Surprise Lake south, to the south end of the 41st Street right-of-way, and from Biscayne Bay east to the Indian Creek waterway, Miami Beach, Florida. Scope of Work: The Nautilus Neighborhood included all of the area from Surprise Lakesouth, to the south end of the 41st Street right-of-way, and from Biscayne Bay east to the Indian Creek waterway, inclusive of the Orchard Park sub-neighborhood. The area is generally comprised of single-family residential streets with some pockets of multi-family uses. 1) Streetscape Improvements: Reconfiguration of W. 42nd St. from North Michigan Ave. to North Meridian Ave.; Intersection of Prairie Ave. / Chase Ave / W. 44th St.; Landscaping within the Right-Of-Way; and Lighting Upgrades 2) Storm water Improvements: 16,300 In. ft. of conveyance pipe; 92 inlets and 74 man-holes; Gravity drainage wells and 31 pressurized drainage wells; and 6 Stormwater pump-in stations. 3) Water Systems Improvements: 17,500 In. ft. (Priority 2) of New 8" DIP Water Main; 16,444 In. ft. (Priority 3) of new 8" DIP Water Main; and Relocation of 172 water meters (priority two) and 5 water meters (priority three) from rear easements to the public side-walks through trenchless technology.

DESIGN-BUILD FOR LUMMUS NEIGHBORHOOD IMPROVEMENTS, MIAMI BEACH, FL.**FEB. 2007 - AUG. 2008**

Role: Engineer. Client: City of Miami, Miami, Fl. Project Location: Project consists of the Lummus Neighborhood bounded by 5th Street to the south, 16th Street to the north, Ocean Drive to the east, and Washington Avenue to the west, in the City of Miami Beach, Florida. Scope of Work: The Lummus sub-neighborhood is generally described as that area bounded by 16th Street to the north, 5th Street to the South, Washington Avenue to the West, and Ocean Drive to the East. The area consists of multi-family structures with significant retail / commercial components, portions of which are within historically designated areas. This neighborhood is located in the heart of South Miami Beach and includes much of the National Register Architectural District. As part of this project we are to develop and prioritize streetscape and urban improvements equitably throughout the neighborhood as well as to upgrade water and Stormwater infrastructure in accordance with the recommendations. It is important to note County and State Roadways are not included within the scope of the City's Row improvements Programs. Hence, 5th Street, Collins Avenue and Ocean Drive are excluded from the scope of this Project. In addition, Washington Avenue Improvements are being addressed as a separate Bid Package 10D. Also, public facilities outside of the ROW, such as Parks, are covered by other City Capital Programs. This Project was awarded in December 2006 as a Design Build Contract.

**SR-997 / KROME AVENUE FROM US-1 TO AVOCADO DRIVE / SW 296TH STREET
MIAMI-DADE COUNTY, FLORIDA****AUG. 2008 - ON-GOING**

Client Name: FDOT, District VI. Project Reference: Adriana Manzanares. Contact Number: (305) 470-5283. Prime Consultant: APCTE, Corp. Project Role: Project Engineer. Beg. Date-End Date: 08/2010 – On going. Project Scope: Project includes the preparation of Construction Documents for the 3.78 mile segment of this urban corridor, including signing & pavement markings, upgrading seven signalized intersections from span-wire to mast-arm, a new signalized intersection, 0.5 mi of lighting, implementation of four traffic safety studies, implementation of Access Management and compliance with ADA requirements, Land-scaping & Irrigation within the City of Homestead Florida.



Tenure as Project Manager: 10 Years
APCTE Tenure: 3 Years
Industry Experience: 18 Years
Office Location: Doral, FL

Registration / Certifications:

2004, Florida Professional Engineer No. 61601

Education:

Bachelor of Science in Civil Engineering December, 1995
 Florida International University

Experience:

Bridge Design Quality Control Manager | June 2012 to Present:
 A&P Consulting Transportation Engineers, Miami, FL.

Structures Design Project Manager | March 2005 to May 2012:
 C3TS, Coral Gables, FL.

Project Engineer | November 2002 to March 2005: Sanchez, Zeinali and Associates, Miami, FL.

Bridge Engineer | August 1998 to November 2002: Beiswenger, Hoch & Associates, Miami, FL.

Transportation Engineer | July 1996 to August 1998: David Plummer & Associates, Coral Gable, FL.
 FDOT, D6 (1997 - 2005)

OSMANY ALFONSO, P.E.
STRUCTURAL ENGINEER

Mr. Osmany Alfonso, P.E. - Mr. Alfonso's 18 years of experience as project manager and project engineer have included all phases of transportation bridge projects including design, planning, and construction/post design service assignments. Mr. Alfonso's bridge design experience includes curved steel box girder bridges, curved and skewed steel plate girder bridges, Florida I-Beam (FIB) concrete bridges, cast-in-place flat slab bridges, pedestrian bridges, precast flat slab bridges, post tensioned substructures, miscellaneous roadway structures, bridge widening and rehabilitation, bridge retrofits, and bridge load ratings. Planning assignments have included preparation of Bridge Development Reports, Bridge Feasibility Studies and Bridge Analysis Reports for PD&E Studies. Construction assignments have included management of post-design services, structural field inspections, shop drawing review, and design support during construction of bridge projects. Other assignments have included the design of soil anchored steel sheet pile retaining wall, precast panel wall design for geo-foam embankments, 25-ft high counter-fort walls, tie back bulkhead wall systems. Mr. Alfonso has served as Project Engineer for the design of over 50 bridge sites for the FDOT, Expressway Authorities, and various public agencies

DESIGN-BUILD EXPERIENCE

NW 36TH STREET BRIDGE REPLACEMENT , M-D COUNTY, FL JAN. 2013 - On-Going

Role: Senior Project Engineer. This contract included two distinct projects. Project 425979-1-52-01 includes milling & resurfacing, median modifications, sidewalk, and ADA ramp construction along NW 36th Street. The limits of this project go from about 120 ft. west of Lee Drive to just east of Coolidge Drive. Project 418065-2-52-01 include major reconstruction including the replacement of the NW 36th Street bascular bridge over the Miami Canal, as well as milling and resurfacing, drainage, lighting, signalization, and minor intersection modifications of NW 36th Street at NW South River Drive and NW North River Drive. This project entails replacing a functionally obsolete Hanover Bascule Bridge crossing the Miami Canal C-6 with two fixed concrete bridges. The existing steel bridge is a single leaf bascule built in the 1950's and follows an innovative design solution for skewed crossings. Client: FDOT District 6 (Ali Toghiani, PE. 305-470-5343)

M-D TRANSIT PALMETTO SUBSTATION, M-D COUNTY, FL APR. 2012 - OCT. 2013

Role: Senior Project Engineer - Miami-Dade Transit (MDT) required a new Traction Power Substation (TPSS) to both enhance current Metrorail operations performance and to support the new Metrorail vehicles. The TPSS will be located on MDT property adjacent to the Palmetto Metrorail Station and will support all traction power requirements between the Palmetto and Okeechobee stations. Two new dedicated 13.2 kV feeders from Florida Power and Light (FP&L) will be provided to power the new TPSS and also to provide new redundant 480V AC power to the Palmetto Metrorail Station by replacing the existing FP&L 25 kV system. The Traction Power Sub Station Project at the location of the Metrorail Palmetto Passenger Station to be designed, furnished, permitted and constructed by a design-build delivery method. The Project is including all of the substation equipment, related site and off site work, furnish all services, equipment, materials and labor to construct, test and commission a fully operational facility of the scope and quality that complies with the required performance and design characteristics required by the Project. Client: Miami-Dade Transit (Malka Rodriguez 786-469-5308)

I-95 EXPRESS LANES (FROM SOUTH OF SR 112 TO NORTH OF SR 826)

M-D COUNTY, FL

JAN. 2008 - JUL. 2010

Role: Project Engineer for this Design-Build project which includes re-striping I-95 and modifying shoulders to provide two 11-foot Express Lanes and four 11-foot regular travel lanes in each direction. Responsible for the replacement of four AASHTO spans with two curved steel plate girder spans on the North-to-East and South-to-West ramps connecting I-95 to I-195 and SR-112. Responsible for the extensive substructure rehabilitation to pier

OSMANY ALFONSO, P.E. - STRUCTURAL ENGINEER

10 was necessary to accommodate the new steel superstructure which required girders of variable depth to satisfy vertical clearance. *Client: FDOT District 6 (Jason Chang 305-470-5331)*

PROJECT EXPERIENCE**NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836, M-D COUNTY, FL****NOV. 2012 - On-Going**

Role: Senior Project Engineer - The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system to system connections for the western portion of SR-836 connecting to SR-826 and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR-836 and improving operations on NW 87th Avenue. *Client: Miami-Dade Expressway Authority (Gil Portela, P.E. 305-551-8100)*

SR 826 AND SR 836 INTERCHANGE / SECTION 5, M-D COUNTY, FL**SEP. 2009 - MAY 2012**

Role: Project Engineer – Design-Build project to support the reconstruction of this \$560 million, four-level interchange in the heart of Miami-Dade County. Engineer of Record responsible for concrete and steel bridges, including a skewed and curved two-span steel plate girder bridge along the East to South Ramp (Bridge 12) and the eastbound CD (Bridge 20) utilizing FIB-72 girders on spans approaching 180 feet. The project includes the reconstruction of approximately 2 miles of SR 826 from SW 8th Street to NW 25th Street and approximately 3 miles of SR 836 from NW 87th Avenue to NW 57th Avenue to provide 5 lanes in each direction along the mainline plus the introduction of EBCD and WBCD roads along SR 836. The job includes the construction of 47 new bridges that include 7 steel bridges, 36 Florida I-beam bridges and 4 segmental bridges. Performed Bridge Load Rating Calculations during the final design phase of the project. *Client: FDOT District 6 (Ali Toghiani, P.E. 305-470-5343)*

SR-9/I-95 ST. LUCIE/INDIAN RIVER COUNTY LINE TO NORTH OF SR 60/OSCEOLA BLVD. ST. LUCIE/INDIAN RIVER COUNTY, FL**MAR. 2011 - MAR. 2014**

Role: Engineer of Record. This Design-Build project involves 6.8 miles of I-95 mainline widening from 4 to 6 lanes, the reconstruction of the SR 60 Interchange, and the replacement of existing bridges at three locations: 4th Street, 90th Avenue and SR60/Osceola Blvd. Engineer of Record for the proposed bridges at 90th Avenue & SR 60 which consist of two-span FIB-72 & FIB-45 superstructures supported on multi-column concrete frame piers respectively. Responsible for the preparation and supervision of construction plans, structural calculations and quality control. The proposed bridges required phase construction in three MOT stages using a combination of anchored temporary sheet pile walls and temporary MSE wire face walls. The I-95 Bridge Over 90th Avenue in particular, required a severe skew of 60 degrees for compatibility with the roadway alignment along 90th Avenue. The severe skew presented multiple complexities in the design and detailing of the bridge deck, the design of the bearing pads and the permanent MSE walls. Performed Bridge Load Rating Calculations during the final design phase of the project. *Client: FDOT District 4 (Anson Sonnet, P.E. 954-777-4474)*

LE JEUNE ROAD AT AIRPORT BOULEVARD INTERCHANGE, M-D COUNTY, FL

Role: Lead Structures Engineer responsible for the development of bridge construction documents for the two-unit curved twin-box steel girder bridge connecting Le Jeune Road with the new terminal as part of the MTAR. Responsibilities included developing the framing plan geometry layout for both units; preparation of bridge model for analysis using BSDI software package; stress checks of tension/compression flanges under the effects of vertical bending, torsional shears, and lateral bending moments; constructability checks of web slenderness and for local and lateral buckling of compression flanges; design of girder components such as field splices, shear connectors for fatigue/strength, lateral bracing, bearing stiffeners, transverse/longitudinal stiffeners and camber diagrams; design of end bents, sizing of pot bearings, R/C concrete deck; quality control on the design of pier diaphragms and finish grade elevations; and project quantities and cost estimates. Performed Bridge Load Rating Calculations during the final design phase of the project. *Client: FDOT District 6*

SR 874 NORTHBOUND ON-RAMP FROM KENDALL DRIVE, M-D COUNTY, FL

Role: Structures Engineer responsible for the design of a new SR 874 northbound on-ramp from Kendall Drive. The 1.25-mile Sunpass only ramp consists of approximately 2,000 feet of curved twin steel box girders supported by integral diaphragms and eccentric concrete piers. Preparation of bridge model for analysis using BSDI software package; geometric layout of tub girders. Stress checks of tension/compression flanges under the effects of vertical bending, torsional shears, and lateral bending to satisfy strength, service, constructibility and fatigue limit states. Constructability checks of web slenderness and for local and lateral buckling of compression flanges; Design of shear connectors for fatigue/strength, lateral bracing, bearing stiffeners, transverse/longitudinal stiffeners, and flange-to-web welds. Deck casting sequence analysis to obtain camber diagrams. Design of integral steel diaphragm at interior piers. Design of steel diaphragms at End bents and end of unit piers. *Client: Miami-Dade Expressway Authority*



APCTE Tenure: 2 Years
Industry Experience: 3 Years
Office Location: Doral, FL

Education:

Bachelor of Science in Mechanical
 Engineering, 2014
 Florida International University, Miami, FL.

Experience:

Project 2013-Present: APCTE
 Structural Engineer

ADRIAN ALFONSO, E.I.
PROJECT ENGINEER

Mr. Alfonso has provided support on the design of bridges and miscellaneous structures during his APCTE tenure with the Structural Department. He is experienced with Microstation, GEOPAK, and Mathcad for miscellaneous structure design. He also has experience with the LEAP Bridge Enterprise software for bridge design. Mr. Alfonso provided support to the Bridge Maintenance Office in District 6 using PONTIS and GIS for bridge inspection reports .

PROJECT EXPERIENCE

MISCELLANEOUS STRUCTURES, MIAMI, FLORIDA

Client: FDOT District VI. Role: Engineer-In-Training. Beg. Date-End Date: 8/2014 – On-going. Scope of Work: This contract includes the analysis of existing mast arms from both Miami-Dade County and FDOT. Analysis to verify structural capacity due to additional loads from new signs, signal heads, addition of back plates, and modification of signal heads as required for this project. Project Manager: Evelin Legcevic (305) 470-5156.

FDOT DISTRICT VI, BRIDGE MAINTENANCE OFFICE, MIAMI, FLORIDA

Client: FDOT District VI. Role: Engineer-In-Training for Bridge Inspection Reports. Beg. Date-End Date: 8/2014 – 10/2014. Contract Amount: \$1.5M. Scope of Work: This contract included several tasks involving the review of bridge inspection reports for Florida bridges. Bridge inspections reports were reviewed for movable bridge, canal bridges, and highway bridges. Review work required the use of PONTIS and GIS (Geo Bridge) programs. Project Manager: Dennis Fernandez (305) 470-5455.

FDOT DISTRICT VI, N.W. 36TH BRIDGE REPLACEMENT, MIAMI, FLORIDA

Client: FDOT District VI. Role: Engineer-In-Training for Bridges 871098 & 871099 (Simple Span Concrete FIB). Date-End Date: 12/2012 – On-going. Contract Amount: \$700,000. Scope of Work: This contract included two distinct projects. Project 425979-1-52-01 includes milling & resurfacing, median modifications, sidewalk, and ADA ramp construction along NW 36th Street. The limits of this project go from about 120 ft. west of Lee Drive to just east of Coolidge Drive. Project 418065-2-52-01 include major reconstruction including the replacement of the N.W. 36th Street bascule bridge over the Miami Canal, as well as milling and resurfacing, drainage, lighting, signalization, and minor intersection modifications of NW 36th Street at N.W. South River Drive and NW North River Drive. This project entails replacing a functionally obsolete Hanover Bascule Bridge crossing the Miami Canal C-6 with two fixed concrete bridges. Responsible for calculation of deck finish grade elevations and project quantities. Assisted in the preparation of End Bent and Superstructure Plans. Project Manager: Ali Toghiani (305) 470-5343.Beg.

NW 87TH AVENUE INTERCHANGE IMPROVEMENTS AT SR-836, MIAMI, FLORIDA.

Client: Miami-Dade Expressway Authority. Role: Engineer-In-Training for Bridges 1, 5, and 6 (Simple Span & Multi-Span Concrete FIB). Initial/Final Contract Value: \$5.5 M. Initial/Final Construction Cost: N/A. Beg. Date-End Date: 10/2011 - On-Going. Scope of Work - The SR-836/ NW 87th Avenue Interchange reconstruction is the final piece necessary to complete the Section 5 Master Plan. The project will complete the system-to-system connections for the western portion of SR-836 connecting to SR-826 and provide the ultimate capacity improvements along the SR-836 mainline. In addition the project will provide significant traffic operations and safety improvements for the interchange and the surrounding arterial network. The goal is to improve the access from the arterial network onto the expressway and thus relieving the arterial grid, in particular the intersection of NW 87th Avenue and NW 12th Street. Being able to accomplish this will be a win-win for all by reducing commuter travel times on SR -836 and improving operations on NW 87th Avenue and NW 12th Street. Prepared plans and calculations for Bridge 1 End Bents, performed calculations for miscellaneous structures including mast arms, overhead and cantilever structures. Project Manager: Gil Portela, P.E. - MDX GEC Project Manager. Phone No.: (305) 551-8100. Fax No.: (305) 551-2800. Email: gportelal@hntb.com.



Tenure as Project Manager: 10 Years

APCTE Tenure: 1 Years

Industry Experience: 18 Years

Office Location: Doral, FL

Registration:

2008, Florida Professional Engineer No. 67358

Education:

Bachelor in Science -, Civil Engineering, University of Havana, July 1996. Completed studies of the Specialty in Hydraulics, GPA of 4.15/5.

Professional Certifications:

Florida Stormwater Erosion & Sedimentation Control Inspector Training Program
FDOT's Maintenance of Traffic Training Program.

Experience:

A & P Consulting Transportation Engineers, Corp., Miami, FL
January 15 – Present. Project Manager

Lockwood, Andrews and Newman, Inc., Miami, FL
March 12 – January 15. Production Manager / Engineer IV

HBC Engineering, Inc. Miami, FL
October 11 - December 11. Project Engineer

BCC Engineering, Miami, FL.
December 06 – June 11. Project Manager / Utility Coordinator

FORD ENGINEERS, INC., MIAMI, FL.
March 03 – December 06. Assistant Project Manager/Project Engineer

IVONNE PLANAS, P.E.

PERMITTING | COMPLIANCE MANAGER

Ms. Planas have designed water main, sewer gravity and force main, as well as paving and drainage systems for residential and commercial projects in South Florida. Have designed water main, sewer gravity and force main systems for hotels in the Caribbean such as Santa Lucia Hotel and Resort Pansea, and Parque Central Hotel. Highly proficient in AutoCAD 2014, Microsoft Office Suite, and Internet Navigational skills. Proficient in Microstation. Exceptional skills in both writing and speaking Spanish.

PROJECT EXPERIENCE

GOVERNMENT CUT 54" SANITARY SEWAGE FORCE MAIN REPLACEMENT MIAMI-DADE COUNTY, FLORIDA

Role: Project Engineer. Scope of Work: Ms. Planas was part of the design team developing design-build criteria package for the replacement of the existing 54-inch force main that runs from Miami Beach to the Central District Wastewater Treatment Plant (CDWWTP) and for the replacement of the existing 20-inch water main from Port Island to Fisher Island. Client: M-D WASD (Victor Fernandez Cuervo 786-268-5310)

24-IN FM AND 24-IN WM – SUBAQUEOUS CROSSING OF BISCAYNE CANAL, CITY OF NORTH MIAMI, FLORIDA.

Role: Project Manager. The existing water and sewer mains that cross the Biscayne Canal were attached to an existing pedestrian bridge. These lines were in conflict with a proposed storm-sewer pump station that will be built in the northeast corner of the intersection of NE 131st ST and Griffin Blvd. therefore, these two lines will be replaced. The project included the installation of 450 LF of 24-in FM installed by HDD under the Biscayne Canal from Griffin Blvd to NE 2nd Ave. The new 24-in FM will be interconnected to the existing force mains on both side of the canal. The project also encompasses 450 LF of 24-in WM installed also by HDD, which also crosses the Biscayne Canal. The proposed WM has been permitted by FDEP an includes isolation valves, leak testing assemblies and interconnections to the existing water mains. Client: City of North Miami (Hasan A. Rizvi, P.E. 305-895-9838).

DESIGN CRITERIA PACKAGE FOR THE REPLACEMENT/REHABILITATION OF A 72" SANITARY SEWAGE FORCE MAIN ALONG NW/NE 159TH STREET BETWEEN NW 17TH AVENUE AND NE 10TH AVENUE MIAMI-DADE COUNTY, FLORIDA

Role: Project Manager. Scope of Work: Production Manager responsible for create all the exhibits showing the replacement/rehabilitation analysis, Specifications, permitting requirements, typical sections and MOT typical sections to show constructability issues and possible utility conflicts. Also, responsible for the preliminary Maintenance of Traffic analysis, preliminary Cost Estimates and continuous coordination with the client/owner and sub-consultants. Project consisted in preparing the design criteria package for the replacement/rehabilitation of approximately 3.5 miles of an existing 72" force main. Client: M-D WASD (Rod Lovet 305-254-5871)

BODR OF A 36" RECLAIMED WATER MAIN MIAMI-DADE COUNTY, FL.

Role: Project Engineer. Scope of Work: The project consists of analyzing the alternate routes to design a proposed 36-inch RWM that goes from SDWWTP to a recharge facility located in the vicinity of Metro Zoo. Responsibilities include contact with utility companies to determine whether

IVONNE PLANAS, P.E. - PERMITTING | COMPLIANCE MANAGER

they have facilities in the proposed project area and obtain As-Built information from these companies in order to select the best route. Also, develop conceptual MOT plans for four (4) major intersections. Client: M-D WASD (Eduardo Luis 786-268-5374)

42" RECLAIMED WATER MAIN (PHASE I & II) MIAMI-DADE COUNTY, FLORIDA

Role: Project Engineer. Scope of Work: Engineering services included the design and post design services for a 42-inch Reclaimed Water Transmission Pipeline from SDWWTP to a recharge facility located in the vicinity of Metro Zoo. Length of pipe was approximately 38,000 LF. Discharge system at the Metro Zoo is not included in this task. Responsibilities included develop of MOT plans and meet with the agencies. Client: M-D WASD (Eduardo Luis 786-268-5374)

BODR OF A 42" FORCE MAIN ALONG NORTH MIAMI AVENUE FROM NE 36 STREET TO NE 62 STREET MIAMI-DADE COUNTY, FLORIDA

Role: Project Manager. Scope of Work: Provide consulting engineering services to prepare the Basis of Design Report for the construction of approximately 10,365 LF of a 42-inch Force Main for the Biscayne Basin. North connection point: 30-inch Force Main at NE 4th Avenue and NE 62 Street. South connection point: Proposed 48-inch Force Main at North Miami Avenue and NW 36 Street. Design Consultant is responsible for conducting a route analysis and recommends the best alternative for the proposed 42-inch Force Main. Also, preparation of typical sections for the pipe installation, MOT typical sections, opinion of probable construction cost for all the alternative routes, pipe material analysis and recommendations. Client: M-D WASD (Eduardo Luis 786-268-5374)

DESIGN PHASE OF A 42" FORCE MAIN ALONG NORTH MIAMI AVENUE FROM NE 36 STREET TO NE 62 STREET MIAMI-DADE COUNTY, FLORIDA

Role: Senior Project Engineer. Scope of Work: Provide consulting engineering services to prepare the construction documents for the installation of approximately 10,365 LF of a 42-inch Force Main for the Biscayne Basin. North connection point: 30-inch Force Main at NE 4th Avenue and NE 62 Street. South connection point: Proposed 48-inch Force Main at North Miami Avenue and NW 36 Street. Responsibilities include preparation of construction drawings, project specifications, opinion of probable construction cost, MOT analysis and pavement restoration plans. Client: M-D WASD (Eduardo Luis 786-268-5374)

10" FORCE MAIN ALONG NW 7TH AVENUE BETWEEN NW 11TH STREET AND NW 14TH STREET AND ALONG NW 14TH STREET BETWEEN 7TH AVENUE AND PUMP STATION NO. 7 MIAMI-DADE COUNTY, FLORIDA

Role: Project Manager. Scope of Work: Engineering services included Surveying, geotechnical, and design limited construction management for approximately 1900 L.F. of 10" Force Main. Primary role: Project Manager responsible for the plans preparation and design of the 10" force main. Responsibilities also included continuous coordination with the client/owner, sub-consultants and permitting agencies from the onset of a project through its completion. Client: M-D WASD (Reynaldo Abreu 786-268-5252)

NORMANDY DRIVE PHASE II- MARSEILLE DRIVE DRAINAGE IMPROVEMENTS CITY OF MIAMI BEACH, FLORIDA

Role: Project Engineer. The scope of services requires Drainage Improvements, Lighting Improvements, Crosswalk and Sidewalk Paver Improvements, as well as a Paver Walk Extension. The project limits for drainage improvements consists of a section of Marseille Drive, from just east of the intersection with Trouville Esplanade to east of Rue Notre Dame, for a distance of approximately 1,800 linear feet. Proposed improvements will include: pump stations, a storm water conveyance system, drainage inlets and/or manhole structures, or other drainage structures as may be required. Sidewalk improvements include installation of pavers at three intersecting streets with Marseilles Drive. Lighting improvements include either replacement of existing cobra heads light bulbs from 200 watts to 400 watts or include decorative pedestrian Acorn light fixtures; upgrades to meet current City standards. Ms. Planas is coordinating the design plans and technical specifications, permitting, and construction inspection assistance. She is responsible as well for the project management and coordination with sub-consultants.

John Grant

5275 Shadwell ave
Cocoa, Florida, 32926
561-389-7066
jgrant@dbeutilityservices.com

WORK EXPERIENCE

DBE UTILITY SERVICES, Loxahatchee, FL

estimator/project manager, Nov 2013 – present

- Analyze blueprints and other documentation to prepare time, cost, materials, and labor estimates.
- Prepare estimates for use in selecting vendors or subcontractors.
- Confer with engineers, architects, owners, contractors and subcontractors on changes and adjustments to cost estimates.
- Prepare estimates used by management for purposes such as planning, organizing, and scheduling work.
- Set up cost monitoring and reporting systems and procedures.
- Prepare and maintain a directory of suppliers, contractors and subcontractors.

EDUCATION

Cocoa high school, cocoaFL

High School Diploma, Jul 1983

- general studies

Brevard community college, CocoaFL

Completed coursework towards High School Diploma, Feb 1986

- Began studies toward a BS in engineering

ADDITIONAL SKILLS

- Florida certified underground utility contractor license # CUC1224256 Florida certified class v fire line contractor license #892639-0001-2007 Midwest energy association certified examiner/trainer
- NCCCO certified crane operator #101261240 OSHA 510 and 512 certifications NASP certified pipeline safety manager NASP certified trenching and excavations safety technician (TET) Private pilot twin IFR #3079926
- NCCCO certified crane operator #101261240 OSHA 510 and 512 certifications NASP certified pipeline safety manager NASP certified trenching and excavations safety technician (TET) Private pilot twin IFR #3079926

WORK HISTORY

INFRA SOURCE, Raytown, MO

Safety manager, Feb 2011 – Nov 2013

DYNACORP, Houston, TX

project manager, Mar 2007 – Dec 2011

HALIBURTON, Dallas, TX

project manager, Jun 2006 – Mar 2007

SONECO INC., Cocoa, FL
President-Ceo, Oct 1997 – Jul 2006

MUELLER DIST., Rockledge, FL
superintendent, Apr 1993 – Sep 1997

QUALIFICATIONS SUMMARY

- 25 years in all phases of municipal and pipeline construction some of the major projects I have been involved with include. Ramadi, Iraq 30" transmission main Khandahar, airfield 24" water main and 18" sanitary project Melbourne, Melbourne Tillman 24" water main and canal crossing Cocoa beach 24" A1A water main replacement NASA OPF security upgrade and observation tower force main and lift station replacement multiple utility upgrades include 18" force main replacement, multiple lift station rehabs , remove fuel lines on crawler way to pads A and B and construct them underground Stuart, Florida install 8 way FPL 6" conduits by HDD into Indian river received the Meritorious civilian service award for projects in Qualat Afghanistan, FOB Apache for the construction multiple HLZs and fuel pipelines.



MICHAEL TAGGART

4823 NW 9th Ave, Pompano Beach, FL. 33064 | mtaggart@dbeutilityservices.com |
Phone: 954-793-8009

SKILLS & ABILITIES | Complete large complex drill jobs on time and under budget. Drilling for 20+ years has given me the opportunity to see many changes in the drilling industry. I have ran machines ranging from 9,000 lb rigs to 440,000 pound machines. I have done bore lengths in excess of 4,000' and have installed pipe up to 54" in diameter. Directional drilling is all I have ever done and was one of the first people to run a drill in south Florida in the early 90's. In August 2012 we won bore of the year for a bore I did in Sarasota, FL. It was a 3,000' bore with a double compound turn in which we pulled a 16" HDPE Force main back.

EXPERIENCE | **DIRECTIONAL DRILLING SUPERINTENDENT, DBE UTILITY SERVICES**
NOVEMBER 2013 - PRESENT

As a Directional drilling superintendent I often times run the larger drills and the bigger jobs. I aid in laying out bore jobs so they run quickly, smoothly and safely. I'm on a job from start to finish and make sure I keep the company reputation solid by delivering a high quality product in a timely manner.

DIRECTIONAL DRILLING OPERATOR, ARROW DIRECTIONAL
SEPTEMBER 1993 – NOVEMBER 2013

At Arrow Directional I was the only operator for the company. I managed all the jobs and ran all the drills from Ditch Witch 2720, 7020, and the American Augers dd210. We were the go to company in South Florida for many years.

EDUCATION | **POULTNEY HIGH SCHOOL, POULTNEY, VERMONT**
GRADUATED IN 1990 WITH HIGH SCHOOL DIPLOMA
U.S. ARMY 1990-1993

COMMUNICATION | I work the best when I'm around people who want to learn. I have a wealth of knowledge in this industry but can't say I don't learn something new every day as we all should. I work well with inspectors and project managers and only have the best interest for the successful completion of a job.

LEADERSHIP | I have been in charge of Directional Drilling crews for 20 years and helped create a very successful business. I have many qualities that I would like to pass down to the younger generation of drillers and to the guys that help support our drills.

REFERENCES | **MATT O'ROURKE, PROJECT MANAGER**
LAYNE HEAVY CIVIL
Phone: 561-379-4959

SCOTT BLOOM,
DITCH WITCH
Phone: 954-914-3367

Water Main - Force Main Las Olas Boulevard



Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

4: PROJECT METHODOLOGY & APPROACH

PROJECT UNDERSTANDING: The City owns and operates a 16-inch diameter subaqueous water main located on the north side of the Las Olas Boulevard Bridge crossing the Intracoastal Waterway. The Intracoastal Waterway Deepening Project currently being implemented by Florida Inland Navigation District (F.I.N.D.) (FDEP Permit No. 06-0283683-002) is expected to perform dredging in the vicinity of the Las Olas Boulevard Bridge in late 2016. This existing water main is located at an elevation in conflict with the proposed dredging. Consequently, it is critical to construct a new subaqueous water main crossing of the ICW on the south side of the Las Olas Boulevard 20-inch diameter Bridge (along with 16-inch diameter upland piping to interconnect with existing water mains) and place it into service in advance of the dredging of the ICW in the vicinity of the existing water main. In addition, the City intends to install a new 16-inch diameter subaqueous force main on the south side of Las Olas Boulevard Bridge to provide additional redundancy to the Las Olas area. The City has selected the horizontal directional drilling (HDD) method for construction of the proposed subaqueous crossings; 16-inch diameter on-shore piping would be constructed via traditional open cut methods.

The Project scope of work consists in the design, permitting, construction, startup and testing of the following elements:

- One new 20-inch nominal diameter water main crossing of the Intracoastal Waterway (ICW) utilizing high density polyethylene pipe installed via horizontal directional drilling (HDD).
- One new 16-inch nominal diameter force main crossing of the ICW utilizing high density polyethylene pipe installed via HDD.
- Cut and capping of the existing 16-inch water main on the north side of Lass Olas Boulevard Bridge at both sides of the ICW.
- Connect all proposed piping to the existing piping on-shore utilizing 16-inch PVC pressure pipe meeting AWWA C905 standard.
- Also, construction management services, inspection, construction certification and all associated work delineated or determined by the Design Build Firm as required to meet the project intent.

The DMSI/APCTE Design-Build Team understands the importance of relocating this new 20-inch water main in anticipation of the dredging project. In addition, a new 16-inch force main has the long term objective of increasing the transmission capacity in this service area. With advance permit acquisition through the use of a permit expediter tied to an aggressive construction schedule will allow to implement this project ahead of the schedule by **49 days**.

The following is our proposed work plan to execute this project on schedule, safely, and within the quality standards required by the City of Fort Lauderdale.

Horizontal Directional Drilling Work Plan: The Directional bores that are proposed on the Las Olas Blvd Water main and Force Main relocation will be completed using a 2014 Ditch Witch JT100. This machine has a pullback capacity of 100,000 pounds. It can drill bores in excess of 2,000' and install products up to 30" in diameter. The products to be installed on these bores is a 16" HDPE Force main and a 20" HDPE Water main. The products will be installed at a depth range at elevation -57.5 to -60.0 with an average ground elevation of 3.5. The Water Main will begin at Sta. 100+00 and end at Sta. 112+50 (1,250') and the Force main will begin at Sta. 2+00 and end at Sta. 14+25 (1,225'). Other equipment to be used on this project are 2014 American Auger mcm 4000 recycling unit, freightliner 5000 gallon vac truck, and a McElroy T500 fusing machine. All of these machines will be explained later in this bore plan.

Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

Directional Drill Machine to be used: 2014 Ditch Witch JTI OO



1.0 Information on Drilling Fluid Generation and Management

Drilling fluids are used to aid the drilling process, the fluid phase can be water, or a bentonite component. Muds are circulated through the drill bit to lubricate and cool the bit, control the formation fluid pressures and to aid in carrying the drill cuttings to the surface, where the muds and cuttings are separated by mechanical means. The drilling fluid allow for good drilling performance. On this project an American Augers mcm4000 recycler will be used to separate the bentonite from the cuttings. This unit can recycle up to 400 gallons per minute. The cuttings will be tailed off the sides of the recycler in a dry state where they can be scooped up by an excavator and loaded in a dump truck for disposal. The remaining bentonite will be checked for the proper viscosity and pumped back to the drill where it will be pumped downhole.



Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

2.0 Use of Drill Bit Directing and Tracking Equipment to Confirm the Drill Path While Avoiding the No-Drill Zone

Walk-over locating system - The first system a sonde, or transmitter, behind the bore head registers angle, rotation, direction, and temperature data. This information is encoded into an electro-magnetic signal and transmitted through the ground to the surface in a walk-over system. At the surface a receiver (usually a hand-held locator) is manually positioned over the sonde, the signal is decoded and steering directions are relayed to the bore machine operator. This system is accurate to 1' left or right and within 2% depth measurement at a depth of 50'.

Wire-line locating system - The wire-line system is a Magnetic Guidance System. With a Magnetic Guidance System (MGS), the tool reads Inclination and Azimuth. The MGS, also has a secondary means of location verification utilizing wire grids laid on the ground surface. It is the only system that has the capability of verifying the location. This information is transmitted through the wire-line fitted within the drill string. At the surface, the Navigator in the drill cab performs the necessary calculations to confirm the parameters have been met. **This system is accurate to less than 1' left or right and less than 2% depth measurement at a depth of 100'.**

3.0 Guidance System

The Guidance System shall be of a proven type and shall be setup and operated by personnel trained and experienced with this system. The Operator shall be aware of any magnetic anomalies and shall consider such influences in the operation of the guidance system if using a magnetic system. On the Las Olas Bridge Project a Tru Tracker wireline guidance system will be used.

4.0 Method to Continuously Monitor and Record Product Pipe Tensile Installation Forces and Down Bore Fluid Pressures

HDPE has allowable pullback pressures that will not damage or stretch the product. The JTIOO is equipped with pressure gauges on both the pull back and the rotary pressures at which the machine is applying down hole. The drill operator may increase or decrease the amount of bentonite they are pumping down hole or adjust the speed in which they are pulling the product in at. An experienced operator rarely encounters high pullback pressures if they properly prepare the hole before installing the product. On the left is the pullback pressure gauge and the right is the rotary torque gauge.



Water Main - Force Main Las Olas Boulevard

Solicitation 465-11765 | Bid Designation: Public

5.0 Workspace Requirements for Equipment Entry and Exit Points

Entry: An area 40' x 120' will be used on the entry side leaving the entrance to Venetian condos accessible to homeowners.

Exit: An area 40' x 200' will be needed to store pipe, fuse pipe, and to construct the storage pit for mud.

6.0 Workspace Requirements to construct and lay out the pipe drag section

Both the 20-inch HDPE Water Main and the 16-inch HDPE Force Main will be pulled in on the west side of the bridge.

