ORIGINAL

CITY OF KEY WEST

REQUEST FOR QUALIFICATIONS
GENERAL ENGINEERING SERVICES
RFQ #12-005

Submitted by Metric Engineering, Inc.

August 1, 2012
3:00 p.m.

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AVERY® READY INDEX® 600077

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COMPLETE COMPANY PROFILE

METRIC ENGINEERING, INC.

Metric Engineering, Inc. was incorporated on July 27, 1976 in Miami, Florida as a local minority owned engineering firm specializing in Civil Engineering and Land Surveying. Today, we are a firm of over 500 strong employees throughout the State of Florida, extending into the east coast of the U.S. as well as Texas and Latin America. Metric has been ranked number 50 in the nation by ENR for Construction Management. Metric has specialized in municipal engineering, transportation planning/traffic engineering, and land development for over 30 years. We have worked with several state and local agencies such as City of Key West, Monroe County, FDOT (Districts I thru VI), City of Miami, Miami-Dade Transit, City of Coral Gables and City of Homestead on numerous Continuing Services contracts. This includes being reselected numerous times for the same contract. Although we are considered a large engineering firm, our responsiveness to our clients is handled as if we were a small firm. Metric is authorized by the State of Florida Department of Professional Regulation for Engineering Services and is permitted to do business in the State of Florida. Our projects range in size from minor roadway renovations and enhancements to leading complex highway designs. The firm has completed over 100 miles of limited access facilities, over 300 miles of urban and rural highways, and over 100 bridge structures.

The firm leads the way in new and emerging technologies such as Network and Systems Integration, I.T.S. (Intelligent Transportation Systems), and G.I.S. (Geographical Information Systems). The most up-to-date techniques are utilized where applicable to provide our clients with efficient, reliable, and quality services.

All of this experience is synthesized through the framework of Metric Engineering, which provides the corporate structure, financial security, depth of staff, project history, technical resources and quality assurance that will facilitate the team's successful completion of all of the requested services under this contract.

Following is an overview of our services:

CIVIL ENGINEERING

- Streets & Highway Design
- Structural Design
- Traffic Operations Design
- Master Planning
- Site Engineering
- Municipal Engineering
- Site Development Plans
- Pavement Marking & Signage Design
- Street Lighting Design
- Grading & Drainage Design
- Water & Sewer Design & Permitting
- Pump Station Design & Permitting
- Hydrological Studies
- Water Management Design & Permitting
- Cost Estimating
- Earthwork Calculations
- Floodplain Analysis
- Environmental Analysis
- Engineering Reports & Evaluations
- Contract Administration
- Plans Review

TRANSPORTATION ENGINEERING & PLANNING

- Traffic Impact Analysis
- Traffic Operation Analysis & Design
- Arterial Intersection Operation Analysis
- Highway Planning & Design
- Master Planning
- Conceptual Design & Alternatives Analysis
- Transportation Control Measures Evaluation
- Site Evaluation/Due Diligence Analysis
- Traffic Signal & Street Light Design
- Intersection/Interchange Planning & Design
- Highway Right-of-Way Mapping
- Access Management Evaluation
- Corridor Planning Analysis
- Pedestrian/Bicycle Pathways
- Regional Modeling
- Neighborhood Traffic Control
- Parking Studies

CONSTRUCTION ENGINEERING & INSPECTION (CEI)

- Contract Management
- Quality Control Management
- Design/Build Project Delivery
- Scheduling
- Cost Estimating
- Claims Analysis & Management
- Testing Services
- Constructability Review
- Construction Monitoring
- Construction Management Services
- Storm Recovery Management
- Transit Systems
- FDOT Procedure Expertise
- Environmental Monitoring & Inspections

ENVIRONMENTAL ANALYSIS & DOCUMENTATION

- Categorical Exclusions, Environmental Assessments & EIS Documents
- Air Quality Analysis & Reports
- Noise Analysis & Reports
- Wetland Delineation & Reports
- Contamination Assessments
- Protected Species Surveys & Permitting
- Permit Coordination
- NPDES Compliance
- Wetland Mitigation Design
- Tree Removal Permitting

INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

- Systems Design
- Advance Traffic Management Systems
- ITS Policy and Planning
- Systems Management & Integration
- Telecommunications Planning & Design
- Construction Management
- Traffic Signal Control
- Extremeware CLI Switch Layer 2/Layer 3 Management and Configuration
- Extremeware's EPICenter Management
- NTS-200c Network Troubleshooting
- Fiber Optic Cable Installation Management

PLANNING

- Project Development and Environment (PD&E) Studies
- Preliminary/Final Engineering Reports
- Access Management Reports
- Traffic Analysis & Data Collection
- Corridor Analysis Reports
- Hydrologic/Drainage Reports
- Interchange Modification/ Justification Reports
- Site Planning Design & Processing
- Comprehensive Planning
- Development of Regional Impact Studies
- Community Planning
- Land Planning
- Development Plans Review
- Plat Preparation & Processing
- Concurrency Studies
- Due Diligence Studies

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

- Web-Based GIS Service (GISLite)
- Desktop and Mobile Service
- Consulting Design & Implementation
- GIS/GPS Database Design
- Feasibility & Implementation Studies
- Map Production
- Environmental Modeling
- Wetland Delineation & Modeling

EMERGENCY MANAGEMENT SERVICES

- Debris Monitoring & Inspection
- Disaster Recovery Planning
- Damage Assessment
- Automated Debris Management Solution™
- Hazardous Site Remediation
- Canal Dredging
- Contractor Payment Processing
- Documentation for FEMA/FHWA
- Mobile Command & Control Center

MANUEL G. VERA & ASSOCIATES, INC.

Manuel G. Vera & Associates, Inc. (MGV) has over 35 years of experience in surveying. We were here when there were no electronic instruments and no computers; they have evolved with the profession and its resources. MGV has been able to blend all of today's technologies with basic surveying principles that must be followed regardless of how high tech one gets. In addition, when they say that their company or experience has evolved, they mean the people behind the company not the entity. MGV currently has 27 employees. Their key personnel experience ranges from 10 years to over 25 years of experience in surveying and more importantly with the firm. MGV's staff has hands on experience, they were trained there and they have stayed there. Their clients have the security that when dealing with the firm they will always have a direct contact with the principals of the firm as well as project managers that are Licensed Surveyors and Mappers. When dealing with MGV, you can have the security and the assurance that Mr. Vera Sr., or Mr. Vera Jr. will always be readily available; assuring prompt service will always be attained at a moments notice. MGV is a unique firm in that it has the capability of any big surveying firm but its principles are patterned by a family business, good service and quality assurance ideology. MGV is a DBE firm and qualified in 8.1 Control Surveying, 8.2 Design, Right of Way, and Construction Surveying, and 8.4 Right of Way Mapping.

MGV has been working for the Florida Department of Transportation (Miami Dade & Monroe County) for over 15 years; they have completed many Design Surveys, Right of Way Control Surveys as well as Right of Way Maps on time and within their allotted budgets. They have and will always complete a job to their client's satisfaction. In addition to working for FDOT, MGV has worked with Miami Dade Expressway Authority, City of Miami Gardens, Miami Dade County and numerous Engineering and Design firms on Boundary surveys, Topographic surveys, Single Family Home Subdivisions, Surveys for Marinas, Utilities, and preparation of Condominium drawings. Their goal is not only to complete the project at hand on time and within the allotted budget, but to ensure that the project manager and survey department are comfortable and approve of not only the work that is being done but also the methodologies that are being used.

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KEY PERSONNEL EXPERTISE

Manuel Sauleda, PE - Manny has more than 24 years of highway experience in the technical execution of complex civil engineering projects, particularly in roadway geometrics, drainage design and permitting. His project management experience includes plans production, maintenance of traffic, right-of-way marking, utility relocation, wet pond design, signing and pavement marking plans, lighting plans, cost estimating, QA/QC reviews and corridor transit studies.

Charles Alfaro, PE – Charles has over 10 years of experience in the preparation of the design and production of roadway, drainage, signing and pavement markings, signal, and lighting plans for projects from FDOT, Miami-Dade County, and other municipalities. He also has extensive experience in preparing drainage reports to be submitted to DERM for approval on Miami-Dade County. He is intimately familiar with roadway design and drainage requirements for Miami-Dade County Public Works Department's and FDOT plans preparation criteria. He also has broad experience preparing construction cost estimates and schedules for a wide variety of projects

Alejandro Jaureguy, PE - Alejandro has over 9 years of highway design experience in various transportation projects particularly in roadway geometric design, signing and pavement marking design and plans/production. His skills include complex roadway geometric interchange design, open road tolling design and performing technical reviews of roadway and signing and pavement marking design for the Florida Department of Transportation (Florida's Turnpike Enterprise) and the Miami-Dade Expressway Authority (MDX).

Michael McCoy - As Director of Environmental Services for Metric Engineering, Michael focuses on environmental assessments, permitting and monitoring. His key areas of technical expertise include wetland delineation, assessment, permitting and mitigation design, wildlife habitat assessments, permitting and relocations, construction monitoring, planning assessments including NEPA/PD&E studies, marine benthic assessments and permitting, marine biology, wildlife, wetlands, trees/landscaping, contamination, construction compliance and urban forestry. Michael is a skilled communicator and regularly personally coordinates with clients and regulatory staff. Mr. McCoy's technology skills include advanced use of GPS, ArcGIS, MS Acess, Microstation CAD, ETDM and a wide variety of other tools.

Oscar Cruz, PE - Oscar's experience includes the Structural design of new and replacement bridges including steel plate girder bridges, pre-stressed beam bridges, and cast-in-place concrete flat slab bridges. Oscar has prepared and performed quality control checks to proposed construction documents. Oscar's structural experience includes the design and construction documents preparation of multiple bridge replacement projects including canal crossings. In addition Oscar's experience includes retaining walls, critical temporary sheet pile walls, sign structures, mast arms, strain poles and miscellaneous steel structures and traffic railing retrofits. Oscars experience includes responses to RFI's, shop drawing approval, as well as construction observations and inspections for plan's compliance.

Douglas Ruggiano, PE - Doug has over 20 years of engineering design experience as a structural engineer. He has design experience with a variety of structures, including the design of conventional, high level and movable bridges. He has been responsible for the design and supervision from preliminary design phases through final construction as well as the production of engineering reports on numerous projects.

Sergio Gonzalez, PE – Sergio has over fifteen years of combined civil engineering design, limited access facility construction, urban roadway construction and airport construction management experience. Participating in major projects serving in roles from Resident Engineer to office engineer he has excelled in claims analysis, multiple-project construction management, scheduling techniques, constructability reviews, contract management, public information engagements, traffic control plan revisions and enhancements and value engineering. This has given him in depth experience necessary for all aspects of heavy construction, from Major Highway Interchange Reconstruction to Airport Runway construction. His current project is serving as Project Engineer for the $84M widening and reconstruction of SR 826 from SW 32 St to SW 4 St including the interchanges at SW 24 St (Coral Way) and SW 8 St.

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RELEVANT EXPERIENCE

Project Name:
NORTH ROOSEVELT BOULEVARD
Location:
Key West, Florida
Description:
Lighting and signal design for 3 miles of SR-A1A North Roosevelt Blvd. from Truman Avenue to US-1.
Client:
FDOT – District 6
Owner's Representative:
Ali Toghiani, PE
1000 N.W. 111 Avenue
Miami, FL 33172
(305)470-5343
Design Cost: $91,163
Estimated Construction Cost: $2,122,463
Project Status: Begin and End dates: August 2006 – On-going
Key Personnel: Enrique Antelo

Project Name:
SOUTH ROOSEVELT BOULEVARD (US-1) FROM BERTHA STREET TO STA. 41+10
Location:
Key West, Florida
Description: Preparation of the roadway and signing and pavement markings plans for this 0.9 -mile project which includes a complete roadway reconstruction with new drainage and lighting for a major four lane facility in the City of Key West. This project also includes the design of a new shared used path. Environmental Scope: Obtaining environmental permit authorizations including, SFWMD, USACE and FKNMS, for new seawall construction along South Roosevelt Boulevard. Work includes coordinating conservation measures with design engineers and coordinating with regulatory agencies, coordinating standards and approach for lighting replacement to minimize effects on hatchling sea turtles.
Client:
City of Key West
Owner's Representative:
Birchard Ohlinger
(305) 809-3747
Project Status: Begin/End Dates: April 2005-On-going
Key Personnel: Charles Alfaro, PE, Manuel Sauleda, PE

Project Name:
MONROE COUNTY ON-CALL ENGINEERING
Location:
Key West, Florida
Description:
Provide transportation engineering design services for road and bridge construction and rehabilitation projects, including design, traffic studies, lighting and signalization, permitting, drainage engineering, assisting with review of contractor bids, environmental engineering including environmental assessments water quality studies and structural engineering services including facility inspections and assessments and rehabilitation and/or retrofit of County facilities and buildings
Client:
Monroe County
Owner's Representative:
Clark Briggs
(305) 295-4306
Design Cost: TBD – Task Work Orders
Project Status: Begin and End dates: January 2010 – On-going

Task No. 1 - Truman Bridge Widening, Duck Key, Florida - Widening of the Truman Bridge to allow safe access for pedestrian traffic. Develop a preliminary design of the proposed widening and determine if the existing bridge is capable of supporting additional load without the modification/strengthening of the existing foundation. **Client:** Monroe County, FL, **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates:** November 2011 – March 2012

Task No. 2 – Pigeon Key Ramp Bridge Rehabilitation Study, Pigeon Key, Florida - Prepare a feasibility study for the rehabilitation of the existing timber ramp bridge that connects the Old Seven Mile Bridge to Pigeon Key. Perform an in depth inspection of existing structural conditions and determine required repairs for maintaining serviceability over the next 25 years. **Client:** Monroe County, FL, **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates:** January 2012 – April 2012

Key Personnel: Oscar Cruz, PE, Doug Ruggiano, PE, Charles Alfaro, PE, Manuel Sauleda, PE

Project Name:
US-1 BAYSIDE SHARED USE PATH
Location:
Monroe County, Florida
Description:
Design of a shared use path adjacent to the north side of US 1 from approximately mile marker106 to mile marker 99.5. Services also include drainage, surveying, impacts to wetlands, permitting and MOT as well as conducting environmental assessments and obtaining environmental permits for the development of a new six-mile pedestrian and bicycle path including a bridge over a navigable waterway in Key Largo. Permits being obtained include SFWMD, USACE and USCG.
Client:
Monroe County

Owner's Representative:
Judith Clarke, PE
(305) 292-4329
Design Cost: $243,740
Project Status: Begin and End dates: October 2011 – On-going
Key Personnel: Manuel Sauleda, PE, Charles Alfaro, PE

Project Name: **DISTRICTWIDE DESIGN SERVICES CONTRACT**
Location: Key Largo, FL
Description: Roadway Improvements to US-1/Overseas Highway in Key Largo from MM 100 to MM 103 (Project Completed as part of Districtwide Design Services Contract with FDOT). Project consisted of roadway rehabilitation and resurfacing of US-1 from Laguna Avenue (MM 100) to Hialeah Lane (MM 103). The scope of this project also include the reconstruction of the shared use path along the ocean side within the project limits. This project also included the design of several pedestrian crossings and sections of sidewalk along the bayside. This project included minor drainage improvements to address the additional impervious areas.
Client:
FDOT – District 6
Owner's Representative:
Chris Tavella, PE
1000 NW 111th Avenue
Miami, Florida 33172
305-470-5551
Project Status: Begin and End dates: February 2008 – Present
Key Personnel: Charles Alfaro, PE

Project Name:
FLORIDA KEYS CEI RESIDENCY
Location:
Key West, Florida
Description:
3-year contract with FDOT in the management and inspection of 15 contracts in the Florida Keys. Many of these contracts will run concurrently and include roadway reconstruction, drainage, signalization, milling and resurfacing, bridge rehabilitations including metallizing and tendon repair and replacement. Also included are push button contracts.
Client:
FDOT – District 6
Owner's Representative:
Charlie Phinizy, PE
1000 N.W. 111 Avenue
Miami, FL 33172
(305)481-0064

CEI Fee: $6,500,000
Estimated Construction Cost: $70,000,000
Project Status: Begin and End dates: March 2007 – June 2012
Key Personnel: Antonio Diaz, PE

Project Name:
SR-5/US-1/OVERSEAS HIGHWAY INTERCHANGE IMPROVEMENTS AT BOCA CHICA NAVAL BASE
Location:
Boca Chica, Florida
Description:
The scope of this project consisted of RRR improvements for the southernmost **0.7 miles** of SR-5 prior to entering the island of Key West. The project included cross slope corrections, shoulder improvements, new shoulder construction, drainage improvements, new signing and pavement markings and new signalization upgrades.
Client:
FDOT District 6
Owner's Representative:
Jose Barrera, PE
(305) 470-5260
Project Status: Begin and End dates: September 2007 – December 2008
Key Personnel: Charles Alfaro, PE

Project Name:
SR-5/US-1 FROM SOUTH ROOSEVELT BLVD. TO CROSS STREET
Location:
Key West, Florida
Description:
The scope of this project consisted of **0.52 miles** of RRR improvements for all the ramps connecting the Naval Base to SR-5/US-1. The project included cross slope corrections, shoulder improvements, guardrail upgrades and new signing and pavement markings. Mr. Panellas was the Project Manager and the Engineer of Record for the roadway and signing and pavement markings for this project
Client:
FDOT District 6
Owner's Representative:
Jose Barrera, PE
(305) 470-5260
Project Status: Begin and End dates: April 2006 – May 2008
Key Personnel: Charles Alfaro, PE

Project Name:
SR-A1A SOUTH ROOSEVELT BOULEVARD
Location:
Key West, Florida
Description:
Reconstruction of three miles of an urban arterial for FDOT District 6. Project involved complete reconstruction of seawall, pavement, sidewalk, and drainage systems as well as significant project permitting.
Client:
FDOT – District 6
Owner's Representative:
Ali Toghiani, PE
1000 N.W. 111 Avenue
Miami, FL 33172
(305)470-5343
Design Cost: $655,288
Estimated Construction Cost: $5, 466, 029
Project Status: Begin and End dates: April 2006 – February 2007
Key Personnel: Manuel Sauleda, PE, Enrique Antelo

Project Name:
LOWER MATACUMBE KEY FIRE STATION
Location:
Islamorada, Florida
Description:
New emergency service facility on 0.36-acre site on Marlin Boulevard. Project consisted of the design of conceptual site plan to incorporate 3420 square foot facility, preliminary design of closed drainage system, wetland delineation, and securing "No-Notice" General Permit from SFWMD. Project also included geotechnical investigations and vegetation survey of the site.
Client:
Village of Islands
Owner's Representative:
Zully Hemeyer
87000 Overseas Highway
Islamorada, FL 33036
(305) 664-2345
Design Cost: $10,345
Estimated Construction Cost: N/A
Project Status: Begin and End dates: November 2004 – March 2006
Key Personnel: Manuel Sauleda, PE, Enrique Antelo

Project Name:
OLD HIGHWAY
Location:
Islamorada, Florida
Description:
Roadway improvements and stormwater management systems to mitigate minor flooding conditions on approximately 1.6 miles of urban minor collector from US-1 to Blackwood Road on Upper Matecumbe Key. The project also involved incorporation of a new public bike path, mitigation of private encroachments into the clear zone, and construction phase services.
Client:
Village of Islands
Owner's Representative:
Zully Hemeyer
87000 Overseas Highway
Islamorada, FL 33036
(305) 664-2345
Design Cost: $61,070
Estimated Construction Cost: $1.5 million
Project Status: Begin and End dates: October 2005 – May 2008
Key Personnel: Manuel Sauleda, PE, Enrique Antelo

Contract Type: **CITY OF MIAMI**
CIVIL ENGINEERING SERVICES FOR ROADWAY PROJECTS
Project Name:
TRAFFIC STUDY – BRIDGEPORT AVE AND SW 30 CT - B-30662B
Location:
Miami, Florida
Description:
Traffic Study to resolve traffic cut through, speeding and other concerns reported at Bridgeport Ave and SW 30 CT between US1 and Bird Ave within the City of Miami. The study will include such issues as traffic circulation, geometry, crash analysis (years 2005 to 2007), trip generation and attraction, etc. In addition, a pre-meeting with FDOT to properly coordinate the objectives and procedures of the study will be conducted as the initial study task. The study area is bounded by NW 27th Ave. on the east, Bird Ave. on the south and US-1 along the north and west.
Client:
City of Miami
Owner's Representative:
Tatiana Acosta
444 SW 2nd Avenue, 8th Floor, Miami, FL 33130
(305) 416-1263
Study Fee: $43,974
Begin/End Dates: February 2009 – April 2010
Key Personnel: Carlos Rodriguez, PE

Contract Type: **CITY OF MIAMI**
CIVIL ENGINEERING SERVICES FOR ROADWAY PROJECTS

Project Name:
TRAFFIC STUDY AT LA PASTORITA (BETWEEN SW 8 ST., SW 16 ST., SW 32 AVE., & SW 37 AVE.) - B-30664A

Location:
Miami, Florida

Description:
Traffic Study to address numerous complaints previously received from residents of SW 36th Ave. regarding potential traffic cut through along this avenue between SW 8th St. and SW 16th St. Apparently, a large volume of traffic uses this residential segment to avoid potential delays at the SW 37th Ave./SW 8th St. intersection. The study will include such issues as traffic circulation, geometry, crash analysis (years 2005 to 2007), trip generation and attraction, etc. The study area is bounded by SW 8th St. on the north, SW 16th St. on the south, SW 32nd Ave. on the east and SW 37th Ave. on the west.

Client:
City of Miami

Owner's Representative:
Tatiana Acosta
444 SW 2nd Avenue, 8th Floor, Miami, FL 33130
(305) 416-1263

Study Fee: $26,809

Begin/End Dates: February 2009 – May 2009

Key Personnel: Carlos Rodriguez, PE

Project Name: **SHENANDOAH ROADWAY IMPROVEMENTS, B-30167D**

Location: City of Miami Shenandoah Area

Description: Milling, Resurfacing and Minor Drainage Improvements for 11 City Blocks located within the Shenandoah Area

Client: City of Miami

Owner's Representative: Mr. John De Pazos

Design Cost: $98,855.00

Estimated Construction Cost: $650,000.00

Project Status: Begun Design on December 2, 2010. Design Completed on July 15, 2011

Key Personnel: Manuel Sauleda, PE, Fernando Larios, Oskar Perez

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PERSONNEL ASSIGNED TO PROJECT

NAME	JOB CLASSIFICATION	QUALIFICATIONS
Manuel Sauleda, PE	Project Manager	Plans production, maintenance of traffic, right-of-way marking, utility relocation, wet pond design, signing and pavement marking plans, lighting plans, cost estimating, QA/QC reviews and corridor transit studies.
Charles Alfaro, PE	Highway Engineer	Design and production of roadway, drainage, signing and pavement markings, signal, and lighting plan
Alejandro Jaureguy, PE	Civil Designer	Roadway geometric interchange design, open road tolling design and performing technical reviews of roadway and signing and pavement marking design
Michael McCoy	Sr. Environmental Scientist	Environmental permitting, marine biology, wildlife, wetlands, trees/landscaping, contamination, construction compliance
Oscar Cruz, PE	Structures Division Manager	Design of new and replacement bridges including steel plate girder bridges, pre-stressed beam bridges, and cast-in-place concrete flat slab bridges
Douglas Ruggiano, PE	Structural Engineer	Design of conventional, high level and movable bridges. He has been responsible for the design and supervision from preliminary design phases through final construction
Sergio Gonzalez, PE	CEI Area Manager	Claims analysis, multiple-project construction management, scheduling techniques, constructability reviews, contract management, public information engagements, traffic control plan revisions and enhancements and value engineering
Carlos Duart, Sr., PE	Roadway Engineer	Design of urban & rural roads, construction supervision, plans review, utilities, permits coordination
Carmen Bermudez, PE	Design Engineer	Roadway design, signing & pavement markings, signalization, lighting, MOT environmental permits
Leanet Mujica, EI	Design Engineer	Roadway design, signing and pavement markings, signalization, structural design, and computation book
Dennis Rodriguez, EI	Project Engineer	Structures design, roadway design, maintenance of traffic, signing and

		pavement markings, signalization, and utility coordination
Diego Quintero, EI	Project Engineer	preparation and development of contract plans for projects consisting of all structural/ roadway/site civil work
Justin Freedman	Senior Marine Biologist	Marine assessments, wetland delineation, environmental permitting
Jenny Basantes	Environmental Scientist	Construction compliance
Harry Delashmut	Sr. Environmental Scientist	Keys wetlands, wildlife, and marine habitats, FKNMS permitting
Daniel Cassalia, PG	Sr. Geologist	Contamination assessments
Julie Cheon	Environmental Scientist	keys wetlands, wildlife and marine habitats, FKNMS permitting
Enrique Antelo	Senior Project Manager	Roadway geometrics, lighting, drainage, land subdivision, and maintenance of traffic.
Fernando Larios	Project Engineer	highway/roadway horizontal/vertical layout, drainage grading, earthwork, lighting, water and sewer system design, utility design, maintenance of traffic, construction estimates, project specifications and construction inspection
Narciso Tome	Senior Designer	Plans preparation, structural inspection, design survey and cost estimate.
Manny Inastrilla	Highway Designer	Traffic studies, data collection, roadway design, maintenance of traffic, signing and pavement markings and signalization
Oskar Perez	Senior CADD Designer	Production of geometry, paving, grading, pavement marking, demolition and signalization plans
Jaime Tovar	Designer	Roadway construction, assisting with the preparation and development of contract plans for projects consisting of all structural/ roadway/site civil work
Antonio Diaz, PE	Sr. Project Engineer/Project Administrator	Expert in the administration of CEI projects
Felix Rodriguez	Project Administrator	Civil engineering, roadway construction , ITS implementation and canal dredging
Carlos Rodriguez, PE	Transportation Planning Manager	Transportation planning and traffic operations projects

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MANAGEMENT APPROACH

Metric Engineering, Inc. (MEI) provides all of the ***Civil Engineering Services*** as required by the RFP. The Team has extensive experience with preparing paving, grading and drainage plans for full scale engineering design that ranges from rehabilitating local streets to the reconstruction of major roads, as well as other site specific properties such as parking lots and parks. The Team's drainage design expertise includes design of detention ponds/swales, exfiltration trenches and deep wells, as well as experience in successfully permitting these projects to insure approval by the agencies, such as the South Florida Water Management District, Florida Department of Environmental Protection and the Army Corps of Engineers. In addition we perform Traffic Engineering Support Services such as Signing and Pavement Markings, Signalization and Lighting, including turtle friendly lighting. Metric Engineering has also prepared contract specifications for various municipalities, prepared and assisted with bid documents, and reviewed and ranked contractor's bid and qualification to insure they meet requirements set forth in the Bid Package.

Metric Engineering's Environmental Department will provide ***Environmental Engineering Services*** in support of civil, transportation and coastal development projects. Our capabilities include performing environmental site assessments, obtaining environmental permits, designing mitigation sites, conducting mitigation monitoring and conducting environmental compliance monitoring during project construction. Our staff includes experts in the assessment of wetland, mangrove, wildlife, trees and landscaping, upland forest, seagrass and coral habitats and professionals with expertise in contamination (Phase I and Phase II site assessments). Our permitting experience includes obtaining permits from the SFWMD, FDEP, USACE, FKNMS and the USCG, as well as local permits for tree removal. MEI's environmental professionals also provide professional guidance and support throughout project development by working directly with design engineers to avoid and minimize impacts, as well as serving as an extension of government agency staff to provide expert environmental support on an as-needed basis.

Metric Engineering will also provide ***Coastal Facilities Services*** as required by the RFP for seawalls, bridges and erosion control. The Team has extensive experience with the design and plans preparation of these structural items, as well as experience in successfully permitting these projects. Metric Engineering has also prepared contract specifications, as well as prepared and assisted with bid documents, and reviewed and ranked contractor's bid and qualification to insure they meet requirements set forth in the Bid Package, for these types of projects. Metric has designed various sea walls including two within the City of Key West, both along South Roosevelt Blvd (SR A1A): one designed (and already constructed) for the FDOT – District 6, and the other under design for the City of Key West. Metric Engineering has also designed and/or retrofitted numerous bridges for municipalities and counties. Currently Metric Engineering is designing a shared-use path bridge over the Marvin D. Adams Waterway in Key Largo for Monroe County.

In order to effectively manage a contract of this type, MEI has developed a comprehensive **Project Management and Quality Control Plan** that will ensure for a successful relationship

between the City and MEI. It begins with commitment from the Project Director/Principal-in-Charge level to assigning one of our top professionals to serve as Project Manager.

In the following pages, we will discuss:

- Team Capabilities
- Project Management Plan (PMP)
- Quality Control Plan (QCP)

Team Capabilities: The MEI Team brings a qualified group of professionals and sub-consultant partner that together combine for an effective, proactive and technically sound team, providing the City of Key West with exceptional service. Beyond the standard technical capabilities in transportation planning and design, structural design and environmental engineering, our firm also brings a very strong GIS component that can play a crucial role in the early stages of any planning and design. In fact, MEI has developed GIS Lite, a registered trademark and patent pending software that is web based and allows users to interface with multiple layers of real-time information without having expensive GIS software. This, coupled with our experienced team of GIS experts, will provide our design team with critical and real-time information while minimizing the amount of time that is normally spent collecting information through other sources.

MEI has a long-standing history of working within the Florida Keys including Key West on a variety of projects for different agencies. Currently we are working with both the Florida Department of Transportation and Monroe County. Our firm is the EOR for a portion of the SR A1A/South Roosevelt project currently under design.

We are also pleased to be joined on our team by the firm of **Manuel G. Vera and Associates, Inc**. who also has significant experience working within the Florida Keys and Key West and will provide surveying services.

They have been working in Monroe County for the Department of Transportation for over 20 years. Their Project Managers and Field Crew personnel are currently involved in survey projects throughout the Florida Keys and within Key West. Their survey firm is the first option for the Department of Transportation for any project in any portion of Monroe County, including Key West. They have recently completed a full design survey with Right of Way Survey and Mapping for North Roosevelt Blvd. from US – 1 to Jose Marti Blvd., in Key West. This survey consisted of a full topographic survey of N. Roosevelt along with boundary surveys of all adjacent properties, intersecting side streets and right of ways for the preparation of a new right of way map and the purchasing and or transfer of miscellaneous parcels and the creation of all kinds of easements. In addition to North Roosevelt, they also prepared similar survey for South Roosevelt Blvd, and are currently waiting for the FDOT to give them the go ahead to update the South Roosevelt survey and prepare right of way maps.

MGV's survey personnel has researched survey records, updated and set control points throughout the Keys and including Key West and is familiar with all existing recorded information as well as typical everyday survey information such as: existing bench marks,

control points, GPS points, survey baselines and Right of Way Monuments exact locations. This awareness of the Florida Keys is a key component to the success their firm has had in surveying the Florida Keys and one of the primary reasons why the State of Florida relies on their firm for most of its survey needs in the Keys.

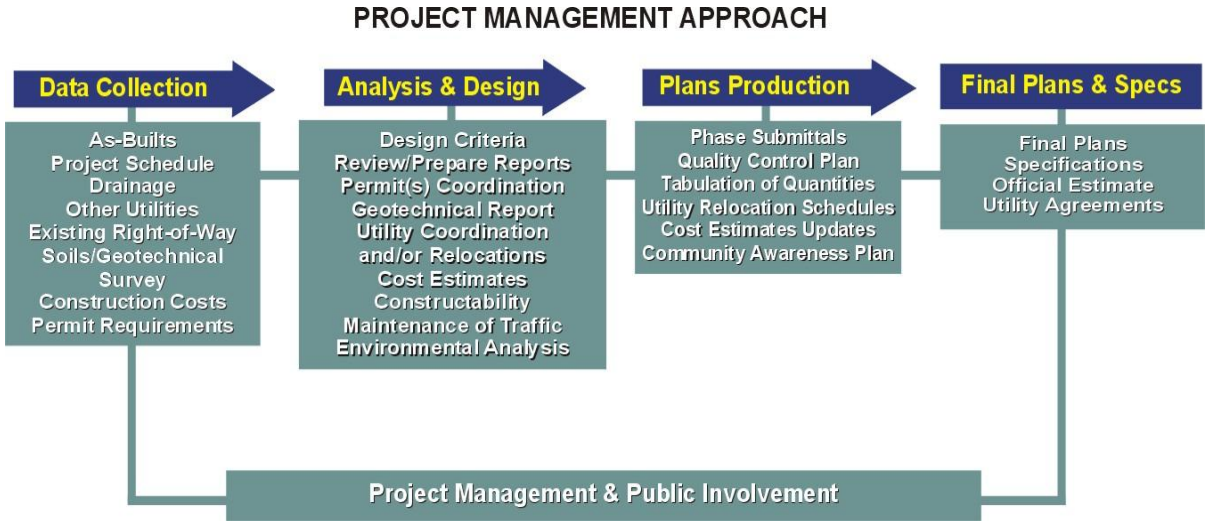
In addition to their Key West experience, in the last 2 years they have completed full design surveys in Key Largo, from MM 106 to MM 97, Plantation from MM 85 to MM 80, in Islamorada from MM 70 to MM 59, in Bahia Honda from MM 37 to MM 38, in Big Pine from MM 28 to MM 30 and in Stock Island from MM 3 to MM 5.

Project Management Plan: As a leading firm in delivery of infrastructure and transportation projects, MEI prides itself in a consistent and proactive project management approach to all its projects. This approach ensures that the client is kept informed on every aspect of any project regardless of size while all technical and day-to-day functions reside with MEI. This allows the City's Project Manager(s) to more effectively utilize their limited resources.

Our Project Management Plan consists of various steps outlined at the onset of the project and approved by City's Project Manager. Our Project Management Plan (PMP) will be submitted to the City's Project Manager within 10 working days after Notice to Proceed (NTP). This plan includes the following:

- Overall communications between MEI and City of Key West, which includes record of communications, i.e., memoranda, letters and other transmittals.
- Schedule of progress meetings, whether biweekly, monthly or as requested by the City's Project Manager.
- Establish a schedule for submittal of required drawings whether the standard 30%, 60% 90% and final plan phases or a more aggressive 50% phase and final plans phase.
- Overall Project Schedule, which includes the previously established phase, reviews, permitting requirements, utility clearances. Schedules will also contain the approved payout for each work order by the City to MEI.
- Quality Control Plan. This will be discussed in a separate section.

Figure 1 below outlines our Project Management Approach for these projects.



It should be that this system is modified when a study is performed as opposed to actual design.

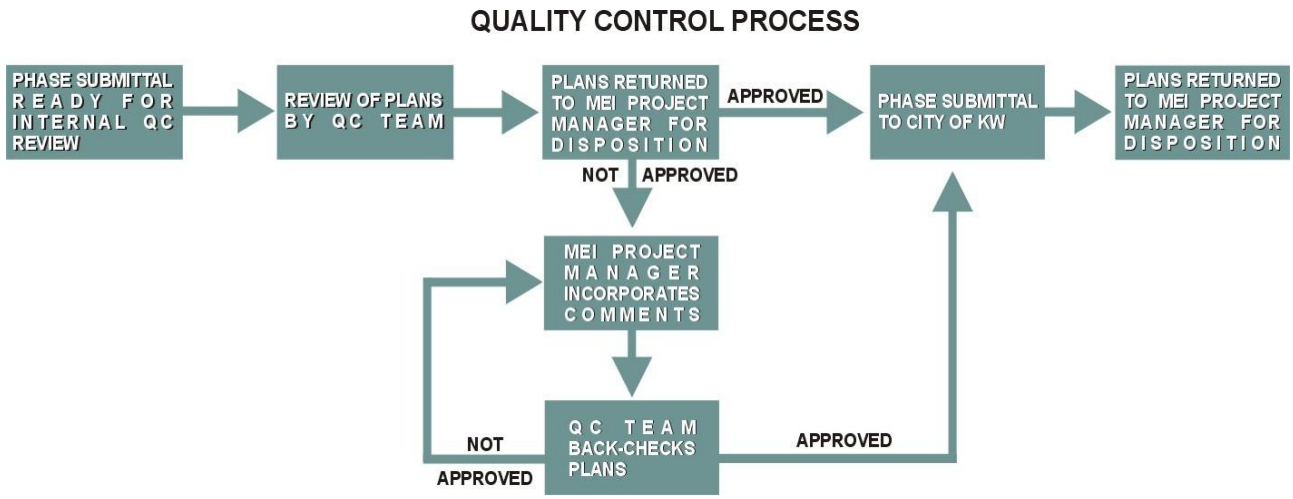
Quality Control Plan: A key aspect to any successful project is a successful and well-implemented quality control plan. MEI has developed a quality control approach that can be tailored to the specific needs and requirements of each client. It should be noted that reviews by experience and independent personnel are built into every Quality Control Plan ensuring that comments are meaningful and constructive. All of our subconsultants are required to submit a Quality Control Plan (QCP) that must be approved by MEI's Project Manager prior to the commencement of the work.

The Quality Control Plan (QCP) for these specific projects will initially be prepared by MEI and submitted to the City's Project Manager within 10 working days of NTP. Within this plan we will identify the independent review team that will be conducting the QC reviews at various stages of the project's life. Once the City's Project Manager approves the QCP, the independent review team will be part of the overall design team. They will receive copies of all design notes, reports and drawings along with quality control sets of drawings at each phase submittal.

The QC team will mark all comments in red and require the Project Manager to provide a response to all comments received from the QC team with a disposition. An independent reviewer will then perform a back-check marking all comments incorporated in green. All drawings will be stamped with a standard quality control stamp, which notes when the drawings were received and returned with the appropriate reviewer's initials. All internal QC reviews will be performed within 10 working days of receiving the plans from MEI's Project Manager. Each phase submittal to the City will have the appropriate QC set for review by the City's Project Manager and reviewers. No plans will be submitted to the City of Key West without the appropriate internal QC review performed.

The QA/QC Plan for each task work order will also be tailored to the individual project, whether large, medium or small. A larger project, which will be more complex and may include various disciplines will have a QC plan that not only consist of the individual disciplinary component QC review, but also an inter-coordination review and meeting to insure conformance and constructability of the entire plans set, to insure conflicts are eliminated. A larger size project will also contain more sheets in the contract plans, thus a tracking log for the various components and their individual sheets will be kept to record who designed, reviewed and signed-off approval on the sheets as well as when these reviews occurred. A more medium size project may not be as complex nor have as many sheets; however, more than likely, they may still contain more than one discipline thus an inter-disciplinary coordination review may still be required. Small projects that consist of only one discipline will still undergo a thorough QC process to insure that design standards have been adhered to and that the project is constructible.

Figure 2 illustrates our Quality Control Process.



6

LICENSES

METRIC ENGINEERING, INC.

State of Florida

Department of State

I certify from the records of this office that METRIC ENGINEERING INC. is a corporation organized under the laws of the State of Florida, filed on July 27, 1976.

The document number of this corporation is 509621.

I further certify that said corporation has paid all fees due this office through December 31, 2012, that its most recent annual report was filed on February 6, 2012, and its status is active.

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

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Seventh day of February, 2012

Secretary of State

Authentication ID: **600220606226-020712-509621**

To authenticate this certificate,visit the following site, enter this ID, and then follow the instructions displayed.
https://efile.sunbiz.org/certauthver.html

State of Florida

Board of Professional Engineers

Metric Engineering, Inc.

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

Certificate of Authorization

EXPIRATION: 2/28/2013
AUDIT NO: 228201301036
CA. LIC. NO: 2294

State of Florida

Board of Professional Engineers

Attests that

Manuel Arturo Sauleda, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013
AUDIT NO: 228201322719
P.E. LIC. NO: 45988

State of Florida

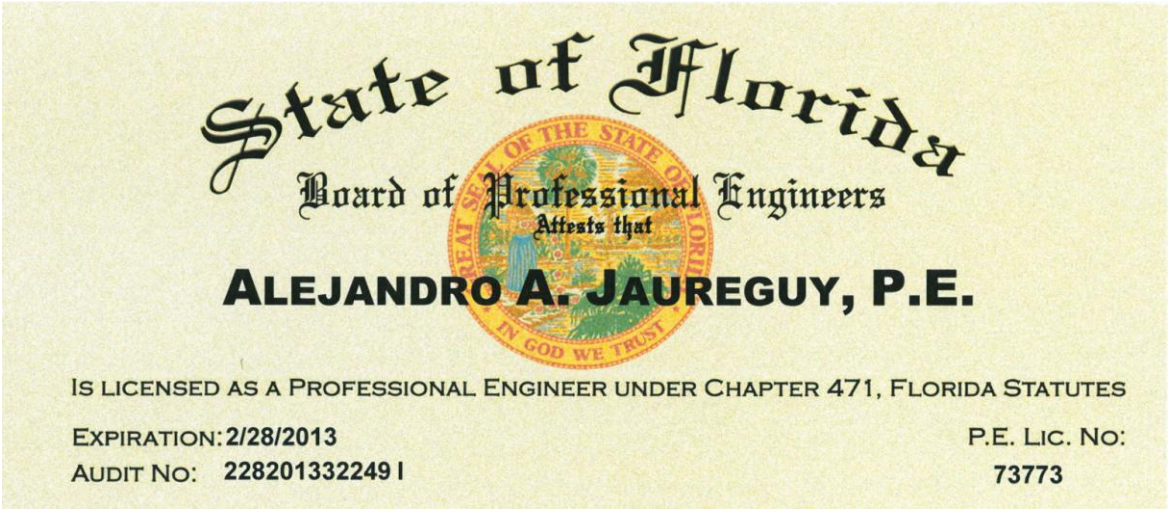
Board of Professional Engineers

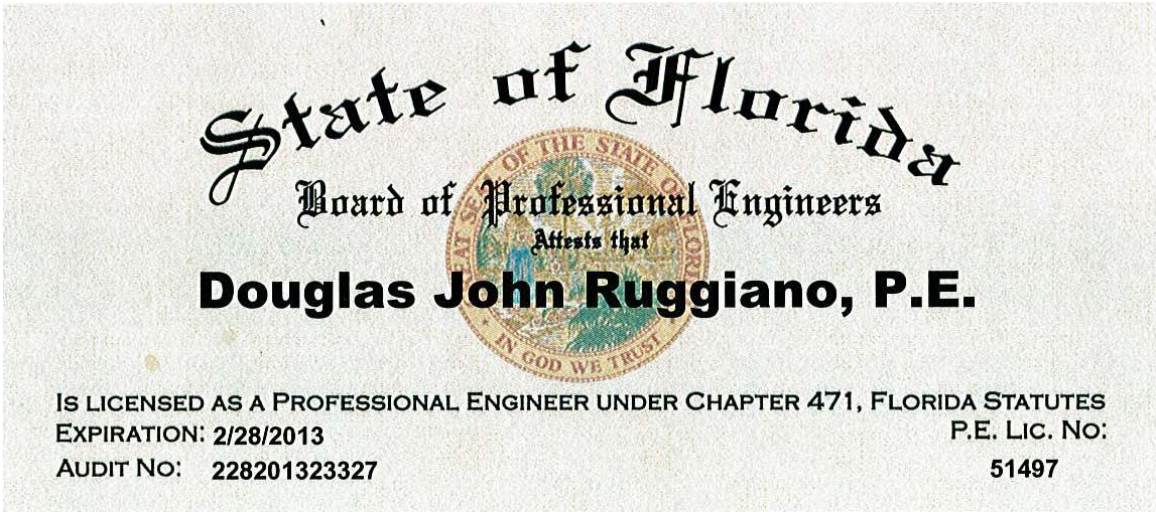
Attests that

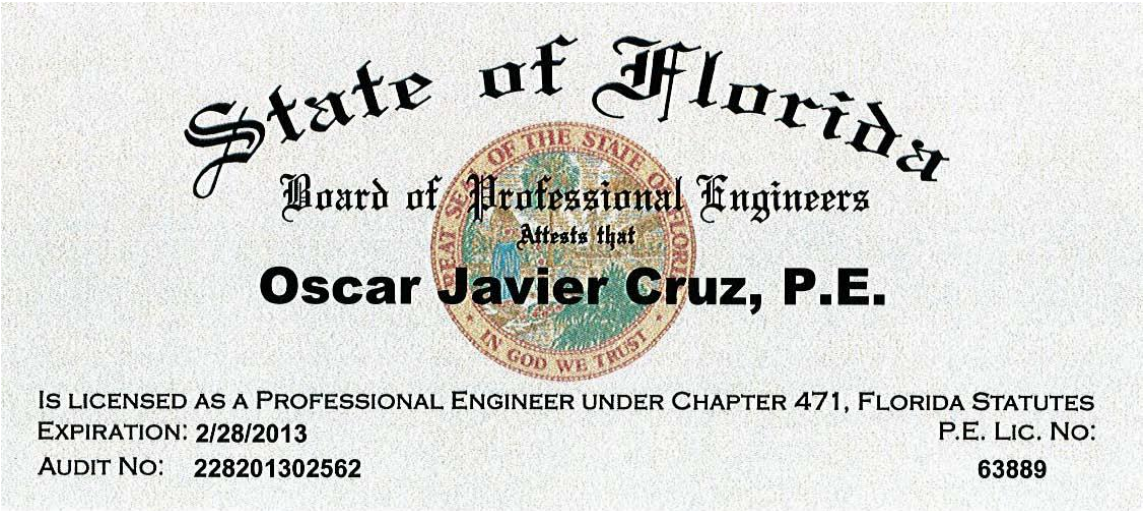
Charles M. Alfaro, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013
AUDIT NO: 228201300256
P.E. LIC. NO: 61411


State of Florida
Board of Professional Engineers
Attests that
ALEJANDRO A. JAUREGUY, P.E.
IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
EXPIRATION: 2/28/2013
P.E. LIC. NO: 73773
AUDIT NO: 228201332249 I


State of Florida
Board of Professional Engineers
Attests that
Douglas John Ruggiano, P.E.
IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
EXPIRATION: 2/28/2013
P.E. LIC. NO: 51497
AUDIT NO: 228201323327


State of Florida
Board of Professional Engineers
Attests that
Oscar Javier Cruz, P.E.
IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES
EXPIRATION: 2/28/2013
P.E. LIC. NO: 63889
AUDIT NO: 228201302562

State of Florida

Board of Professional Engineers

Attests that

Raul Driggs, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013 P.E. LIC. NO: 17218

AUDIT NO: 228201318278

State of Florida

Board of Professional Engineers

Attests that

Sonia Liza Shreffler-Bogart, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013 P.E. LIC. NO: 55679

AUDIT NO: 228201327617

State of Florida

Board of Professional Engineers

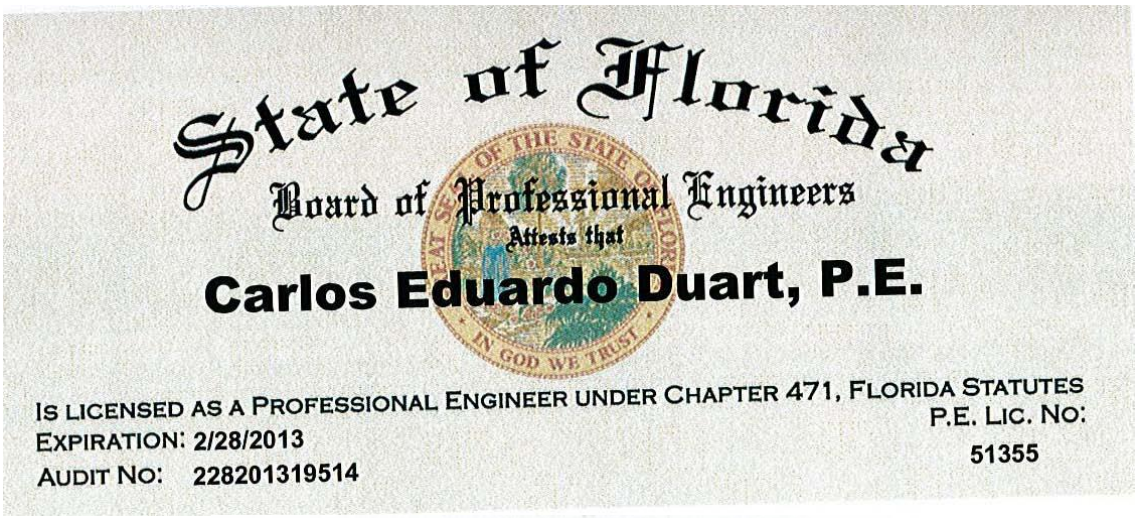
Attests that

Roberto A. Linares, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013 P.E. LIC. NO: 63003

AUDIT NO: 228201317556



State of Florida

Board of Professional Engineers

Attests that

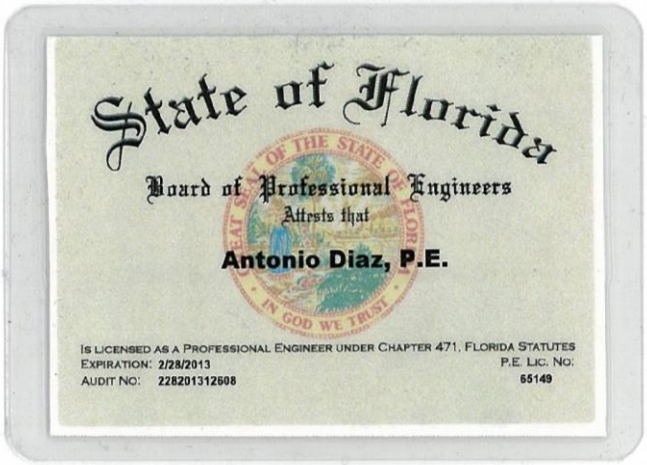
Carlos Eduardo Duart, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013

AUDIT NO: 228201319514

P.E. LIC. NO: 51355



State of Florida

Board of Professional Engineers

Attests that

Antonio Diaz, P.E.

IS LICENSED AS A PROFESSIONAL ENGINEER UNDER CHAPTER 471, FLORIDA STATUTES

EXPIRATION: 2/28/2013

AUDIT NO: 228201312608

P.E. LIC. NO: 65149

MIAMI-DADE COUNTY
TAX COLLECTOR
140 W. FLAGLER ST.
1st FLOOR
MIAMI, FL 33130

2011 LOCAL BUSINESS TAX RECEIPT 2012
MIAMI-DADE COUNTY - STATE OF FLORIDA
EXPIRES SEPT. 30, 2012
MUST BE DISPLAYED AT PLACE OF BUSINESS
PURSUANT TO COUNTY CODE CHAPTER 8A - ART. 9 & 10

FIRST-CLASS
U.S. POSTAGE
PAID
MIAMI, FL
PERMIT NO. 231

259275-7

THIS IS NOT A BILL – DO NOT PAY

RENEWAL

BUSINESS NAME / LOCATION
METRIC ENGINEERING INC
13940 SW 136 ST
33186 UNIN DADE COUNTY

RECEIPT NO. 271982-2
STATE# EB0002294
200

OWNER
METRIC ENGINEERING INC

Sec. Type of Business
212 P.A./CORP/PARTNERSHIP/FIRM

EMPLOYEE/S
1

THIS IS ONLY A LOCAL BUSINESS TAX RECEIPT. IT DOES NOT PERMIT THE HOLDER TO VIOLATE ANY EXISTING REGULATORY OR ZONING LAWS OF THE COUNTY OR CITIES, NOR DOES IT EXEMPT THE HOLDER FROM ANY OTHER PERMIT OR LICENSE REQUIRED BY LAW. THIS IS NOT A CERTIFICATION OF THE HOLDER'S QUALIFICATIONS.

DO NOT FORWARD

METRIC ENGINEERING INC
13940 SW 136 ST #200
MIAMI FL 33186

PAYMENT RECEIVED
MIAMI-DADE COUNTY TAX COLLECTOR:
07/13/2011
60100000338
000075.00

2742

SEE OTHER SIDE

Florida Department of Business & Professional Regulation

DBPR ONLINE SERVICES

Log On | Home

3:04:11 PM 7/12/2011

- Search for a Licensee
- Apply for a License
- View Application Status
- Find Exam Information
- File a Complaint
- AB&T Delinquent Invoice & Activity
- List Search

Licensee Details

Licensee Information

Name:	**GONZALEZ, SERGIO E** (Primary Name)
	(DBA Name)
Main Address:	**9120 SW 81 AVE MIAMI Florida 33156**
County:	**DADE**
License Mailing:	
LicenseLocation:	

License Information

License Type:	**Professional Engineer**
Rank:	**Prof Engineer**
License Number:	**58622**
Status:	**Current,Active**
Licensure Date:	**06/20/2002**
Expires:	**02/28/2013**

Special Qualifications	**Qualification Effective**

View Related License Information

View License Complaint

MANUEL G. VERA & ASSOCIATES, INC.

State of Florida

Department of State

I certify from the records of this office that MANUEL G. VERA & ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on April 27, 1977.

The document number of this corporation is 534958.

I further certify that said corporation has paid all fees due this office through December 31, 2012, that its most recent annual report was filed on February 7, 2012, and its status is active.

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

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Eighth day of February, 2012

Secretary of State

Authentication ID: **500220752255-020812-534958**

To authenticate this certificate,visit the following site, enter this ID, and then follow the instructions displayed.
https://efile.sunbiz.org/certauthver.html

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
800HELPFLA(435-7352) or (850) 488-2221

February 10, 2011

MANUEL G VERA & ASSOCS INC
13960 SOUTHWEST 47TH STREET
MIAMI, FL 33175

SUBJECT: Professional Surveyor and Mapper Business Certificate # LB2439

Your application / renewal as a professional surveyor and mapper business as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2013.

You are required to keep your information with the Board current. Please visit our website at www.800helpfla.com/psm to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here

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

License No.: **LB2439**
Expiration Date: February 28, 2013

Professional Surveyor and Mapper Business License

Under the provisions of Chapter 472, Florida Statutes

MANUEL G VERA & ASSOCS INC
13960 SOUTHWEST 47TH STREET
MIAMI, FL 33175

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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

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

License No.: **LS5291**
Expiration Date: February 28, 2013

Professional Surveyor and Mapper License

Under the provisions of Chapter 472, Florida Statutes

MANUEL G VERA JR
13960 SW 47 ST
MIAMI, FL 33175

ADAM H. PUTNAM
COMMISSIONER OF AGRICULTURE

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

2012 / 2013
MONROE COUNTY BUSINESS TAX RECEIPT
EXPIRES SEPTEMBER 30, 2013

RECEIPT# 30140-76319

Business Name: MANUEL G VERA & ASSOCIATES INC

Owner Name: MANUEL G VERA OWNER/QUALIFIER
Mailing Address: 13960 SW 47TH ST
MIAMI, FL 33175

Business Location: MO CTY
KEY WEST, FL 33040
Business Phone: 305-221-6210
Business Type: CONTRACTORS (SURVEYOR AND MAPPERS)

Rooms	Seats	Employees	Machines	Stalls
		13		

STATE LICENSE: LS2262 EXP 2-

For Vending Business Only
Number of Machines: Vending Type:

Tax Amount	Transfer Fee	Sub-Total	Penalty	Prior Years	Collection Cost	Total Paid
35.00	0.00	35.00	0.00	0.00	0.00	35.00

Paid 000-11-00002640 07/10/2012 35.00

THIS RECEIPT MUST BE POSTED CONSPICUOUSLY IN YOUR PLACE OF BUSINESS

THIS BECOMES A TAX RECEIPT WHEN VALIDATED

Danise D. Henriquez, CFC, Tax Collector
PO Box 1129, Key West, FL 33041

THIS IS ONLY A TAX. YOU MUST MEET ALL COUNTY AND/OR MUNICIPALITY PLANNING AND ZONING REQUIREMENTS.

METRIC ENGINEERING
WHY THINGS WORK®

MANUEL A. SAULEDA, PE
Chief Roadway Engineer

Metric Engineering, Inc., January 2011 - Present

City of Hialeah, Installation of finished water main of raw water transmission main, well maintenance pipeline and well site development to serve the City of Hialeah Reverse Osmosis Water Treatment Plan – Project Manager. Design of several underground piping which will serve 4 proposed deep water wells, as well as the new (under construction) City of Hialeah Reverse Osmosis Water Treatment Plant. Our design included: 6,720 L.F. of 30" D.I.P. Finish Water Main, 4,050 L.F. of 24" H.D.P.E. piping, 905 L.F. of 16" H.D.P.E. piping, 2,670 L.F. of 12" H.D.P.E. piping, 110 L.F. of 10" piping, 3,922 L.F. of Electrical Duct Bank, Site plans for each well (4). **Client:** City of Hialeah, **Contact:** Armando Vidal, PE (305) 556-3800, Begin/End Dates (Design) April 2011-December 2011

SR A1A/Ocean Boulevard in St Lucie County, Engineer of Record– Design and plans preparation for the roadway improvements of **5.3 miles** of the existing two-lane, rural arterial in St. Lucie County. Improvements include drainage, signing and pavement marking, up-grade of pedestrian facilities and safety improvements. **Client:** FDOT District 4**, Contact:** Bing Wang, PE, 954-486-1400**, Begin/End Dates:** 2009 – Ongoing**, Role:** Engineer of Record

SR-836 / I-395 from NE 2nd Avenue to West of MacArthur Causeway Bridge – Project consists of widening of the roadway, milling, resurfacing, drainage and utility coordination **Client**: FDOT, **Contact:** Vilma Croft, P.E., 305-470-5100, **Begin/End Dates:** April 2011 to present.

HNTB Corporation, August 2005 – January 2011

Bridges of the Isles PD&E, Florida Department of Transportation (FDOT) District 4, Broward County, FL – Lead Highway Engineer for this study to evaluate the replacement of the existing low-level bridges. The project involves preliminary engineering design, including the evaluation of alignment alternatives, associated environmental analyses and supporting technical documents. The bridges, Fiesta Way, Isle of Venice, Royal Palm Drive, Nurmi Drive (four Nurmi Isle Bridges) and Sunrise Key Boulevard connect the residents of the finger islands over the canals to the City of Fort Lauderdale. **Client:** FDOT District 4, **Contact:** Ray Holzweiss, PE & Thuc Le, (954) 777-4552 **Project Fee:** $1.2 million, **Begin/End Dates:** 2008-Ongoing

SR 15/US-441 (From 5th Street/MLK Jr. Blvd to SR 700), FDOT District 4, Broward County, FL – Engineer of Record, responsible for plans, reports and documents. The project involves resurfacing, analysis of existing drainage system, traffic control plans, and upgrade of guardrail and signing and pavement markings. **Client:** FDOT District 4, **Contact:** Thuc Le, (954) 777-4552, **Begin/End Dates:** 2009-Ongoing

SR 25 (US 27) Resurfacing, Restoration, Rehabilitation (3R) from North of Griffin Road to the Broward/Palm Beach County Line, FDOT District 4, Broward County, FL – Engineer-of-Record responsible for plans, reports and documents of a 20-mile segment of a four-lane, divided highway. Responsible for reviewing the pavement design, analysis of the existing drainage system, supervising the preparation of plans and details, traffic control plans, upgrade of guardrail, and signing and pavement markings. **Client:** FDOT – District 4 **Contact:** Henry Oaikhena, PE **Project Fee:** $1.5 million, **Begin/End Dates:** 2006-2008

NW 12th Avenue Bridge Replacement (SR 933) from NW 7th Street to NW 16th Street, FDOT District 6, Miami-Dade County, FL – Project Engineer during post-design services for drainage, signing and pavement marking, and signalization. Responsible for reviewing request for information, shop drawings and preparing plan revisions. **Client:** FDOT – District 6 **Contact:** Adriana Manzanares **Project Fee:** $1.8 million**, Begin/End Dates:** (Post Design Services) 2006-2009

I-395, I-495 and I-95 Interchange High Occupancy Toll (HOT) Lanes, Virginia Department of Transportation (VDOT), Washington, DC – Project Advisor on this public private partnership (P3) project that includes the addition of HOT Lanes on I-395, as well as sections of I-495 and I-95. Responsibilities include reviews of cross sections and

EDUCATION:
B.S.C.E., University of Miami, 1987

BS Architectural Engineering, University of Miami, 1987

PROFSSIONAL REGISTRATION:
Florida PE#45988 (1992)

YEARS OF EXPERIENCE:
24 years

PROFESSIONAL EXPERIENCE:
Manny has more than 24 years of highway experience in the technical execution of complex civil engineering projects, particularly in roadway geometrics, drainage design and permitting. His project management experience includes plans production, maintenance of traffic, right-of-way marking, utility relocation, wet pond design, signing and pavement marking plans, lighting plans, cost estimating, QA/QC reviews and corridor transit studies.

OFFICE LOCATION:
Miami

proposed alignments and coordination with the structures components, including bridges, retaining walls and noise walls. **Client:** Virginia DOT **Contact: Project Fee:** $76 million, **Begin/End Dates:** 2006-Ongoing

SR 821 Homestead Extension of Florida's Turnpike (HEFT) from US 1 to SR 874, Florida's Turnpike Enterprise, Miami-Dade County, FL – Project Manager/Engineer-of-Record (subconsultant to URS) for the widening of the HEFT from SW 216th Street to north of SW 184th Street. Responsible for geometric and drainage designs for the widening of the HEFT. Additional duties included the preparation of Bridge Hydraulic Reports at two South Florida Water Management District (SFWMD) canals: the C-1N and the C-100 canal crossings. **Client:** Florida's Turnpike Enterprise, **Contact:** Paul Naranjo, PE **Project Fee:** $3.75 million, **Begin/End Dates:** 2005-Ongoing

SR 836 from NW 107th Avenue to NW 87th Avenue, Miami-Dade Expressway Authority, Miami-Dade County, FL – QA/QC Advisor responsible for quality control reviews of geometric and drainage designs for the widening of the SR 836 mainline and the addition of new ramps to accommodate a new toll plaza between NW 107th Avenue and NW 87th Avenue. **Client:** Miami-Dade Expressway Authority **Contact:** Alfred Lurigados, PE (305) 637-3277 **Project Fee:** $5 million, **Begin/End Dates:** 2004-2007

West Flagler Street from 27 Avenue to 14 Avenue, District 6 - Project Manager for the reconstruction of 1.5 miles of urban roadway located in the City of Miami. Project challenges included maintenance of traffic due to the many businesses and pedestrian traffic located along the corridor; and drainage design due to the poor percolation of the in situ soils. Drainage issues were resolved by the use of gravity wells for water attenuation. Additional services include signing and pavement, signalization, roadway lighting and landscaping. **Client:** FDOT District 6 **Contact:** Adriana Manzanares (305) 470-5283, **Project Fee:** $1 million, **Begin/End Dates:** 2009-Ongoing

Metric Engineering, Inc. December 1994 – August 2005

Palmetto Expressway at Okeechobee Road and South River Drive, Section 10, Miami-Dade County for FDOT District VI - Project Manager for the final design plans of the reconstruction and widening of a 1.9 km section of the Palmetto Expressway including an interchange at South River Drive and Okeechobee Road. Duties consisted of supervising and managing project, geometric design, drainage design, permitting and plans. Client: Miami-Dade County

South Dade Busway Extension, Miami-Dade, Florida – Construction of a 7.3 miles of roadway and bike path for Miami-Dade Transit. The project design involved the transformation of an abandoned railroad corridor into a transit roadway that will extend and interconnect public bus routes and bicycle trails from Miami to Homestead and Florida City. Roadway design plans also included intersection improvements, street lighting, signalization, and maintenance of traffic. Special drainage design and earthwork measures were required to mitigate in-situ contaminated soils within significant portions of the project corridor. Significant public involvement with all impacted communities along the entire corridor was also important to the success of this project. **Client:** Miami-Dade Transit, **Contact:** Isabel Padron, P.E. (305) 375-4504 **Begin/End Dates:** April 2001 – January 2008

SR-AIA South Roosevelt Boulevard, Key West, Florida – Reconstruction of three miles of an urban arterial for FDOT District 6. Responsible for roadway and drainage design, signalization, lighting, plans and contract document production and construction administration. Project involved complete reconstruction of seawall, pavement, sidewalk, and drainage systems as well as significant project permitting. Project is currently under construction and post-design services are in progress. **Client:** FDOT District 6, **Contact:** Ali Toghiani, PE (305) 470-5343, **Begin/End Dates:** April 2006 – February 2007

Blue Heron Boulevard (S.R. 708) from Military Trail to I-95, Palm Beach County for FDOT District IV - Served as Project Manager for the final design of the widening and reconstruction of an urban arterial from a four (4) lane to a six (6) lane facility. Design services included roadway and drainage design, maintenance of traffic, signalization, signing and pavement markings, utility relocation, right-of-way mapping and surveying. **Client:** FDOT – District 4, **Begin/End Dates:** July 1998-December 2001

Suncoast Parkway/SR 589 Sections 1A and 2A, Hillsborough and Pasco Counties for FDOT Turnpike District. Final design of a limited access highway including a system to system connection with the Veteran's Expressway, and partial interchange with Van Dyke road. Duties included roadway and drainage design, wet pond design, and environmental permitting for new 4/6 lane toll facilities. **Client:** Florida's Turnpike Enterprise, Begin/End Dates: 1998-2000

Polk County Parkway No. 6, Polk County for FDOT Turnpike District. Final Design for a new multi- lane section of approximately 4.26 miles of the proposed Polk County Parkway, including two interchanges. Design of storm sewer design at Lakeland Highland Blvd. Interchange, spread calculations, ditch design, wet and dry detention pond design and culvert design.

CHARLES ALFARO, PE

Highway Engineer

Metric Engineering, Inc. – July 2010 - Present

US 1 Bayside Shared Use Path, Monroe County, Florida – Design of a shared use path adjacent to the north side of US 1 from approximately mile marker106 to mile marker 99.5. Services also include drainage, surveying, impacts to wetlands, permitting and MOT. **Client:** Monroe County, FL, **Contact:** Judith Clarke, PE (305)292-4329, **Begin/End Dates:** October 26, 2011-Ongoing

On-Call Professional Engineering Services, Monroe County, Florida - Provide transportation engineering design services for road and bridge construction and rehabilitation projects, including design, traffic studies, lighting and signalization, permitting, drainage engineering, assisting with review of contractor bids, environmental engineering including environmental assessments water quality studies and structural engineering services including facility inspections and assessments and rehabilitation and/or retrofit of County facilities and buildings. **Client:** Monroe County, FL **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates**: January 2010 – Ongoing

North Roosevelt Boulevard, Key West, Florida - Lighting and signal design for 3 miles of SR-A1A North Roosevelt Blvd. from Truman Avenue to US-1. **Client:** FDOT District 6, **Contact:** Ali Toghiani, PE (305) 470-5343, **Begin/End Dates:** August 2006 – Ongoing, **Role:** Project Manager

Northlake Boulevard from Seminole Pratt to Coconut Road in Palm Beach County, Florida – Preliminary and final roadway design, drainage design and permitting of a **3.4-mile** reconstruction project. **Client:** Palm Beach County, **Contact:** Kristine Frazell-Smith, PE (561) 478-5777, **Begin/End Dates:** May 2008 – Ongoing, **Role:** Project Manager

Haverhill Road and Dyer Blvd. Intersection Improvements, Palm Beach County, Florida - Improvements to the intersection of Haverhill Road & Dyer Boulevard, 0.68 miles, including modifications to the drainage system and addition of a permanent outfall to canal EPB-9. **Client:** Palm Beach County, Contact: Basher Khan, PE (561) 684-4191. **Begin/End Dates:** December 2008 – Ongoing, **Role:** Project Manager

Hypoluxo Road and I-95 Intersection Improvements, Palm Beach County, Florida - Improvements to the intersection of Hypoluxo Road & I-95 (0.24 miles). **Client:** Palm Beach County, Contact: Serge Jerome, PE (561) 684-4150 **Begin/End Dates:** July 2010 – Ongoing, **Role:** Project Manager

US 1 from SW 168th Street to SW 136 Street, Miami-Dade County, FL - Resurfacing, Restoration and Rehabilitation (RRR), **2.26 miles**, including pavement milling and resurfacing, minor intersection improvements, upgrading of ADA ramps, minor signalization improvements and new signing and pavement markings. **Client:** FDOT District 6, **Contact:** Hong Benitez, PE (305) 470-5471, **Begin/End Dates:** October 2010 – Ongoing, **Role:** Project Manager

Sanchez-Zeineli & Associates, Inc. (*) May 2005-July 2010

SR-5/US-1 Federal Highway from Young Circle to Sheridan Street – Lead project engineer responsible for the design of the roadway and signing and pavement markings plans for this **1.3 mile** RRR project. After completion of the first design phase of this project, the FDOT added a second design phase consisting of replacing the existing lighting system along the corridor with decorative light poles including pedestrian features and banners. The second phase also includes the addition of new sections of median with landscape and irrigation. **Client:** FDOT D-4, **Contact**: Mr. James Hughes, P.E. 954-777-4419, **Begin/End Dates:** March 2006 – Present, **Role:** Lead Project Engineer

South Roosevelt Boulevard (US-1) from Bertha Street to Sta. 41+10 – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **0.9 -mile** project which includes a complete roadway reconstruction with new drainage and lighting for a major four lane facility in the City of Key West. This project also includes the design of a new shared used path. **Client:** City of Key West, **Contact:** Mr. Roland Flowers (305) 809-3975, **Begin/End Dates:** April 2005-Present, **Role:** Project Engineer

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

EDUCATION:

Masters of Business Administration, Florida International University, 2003

B.S.C.E., Florida International University, 2000

PROFESSIONAL REGISTRATIONS:

Florida PE #61411, 2004

YEARS OF EXPERIENCE:

10 years

PROFESSIONAL EXPERIENCE:

Mr. Alfaro has over 10 years of experience in the preparation of the design and production of roadway, drainage, signing and pavement markings, signal, and lighting plans for projects from FDOT, Miami-Dade County, and other municipalities. Mr. Alfaro also has extensive experience in preparing drainage reports to be submitted to DERM for approval on Miami-Dade County. He is intimately familiar with roadway design and drainage requirements for Miami-Dade County Public Works Department's and FDOT plans preparation criteria. He also has broad experience preparing construction cost estimates and schedules for a wide variety of projects.

CERTIFICATIONS:

Advanced Maintenance of Traffic,

OFFICE LOCATION:

Miami

SR A-1-A/Collins Avenue from 63rd Street to 75th Street – Lead project engineer responsible for the preparation of the roadway, signing and pavement markings plans and signalization plans for this **1.1 mile** RRR project. This project will also be adding new paved shoulders along both side of the road plus new sections of sidewalk to provide a continuous sidewalk along each side of NW 31st Avenue. **Client:** FDOT D-6, **Contac**t: Ms. Erenia Nagid, P.E. 305-470-5469, **Begin/End Dates**: September 2008 – January 2010, **Role:** Lead Project Engineer

SR-944/Hialeah Drive from East 4th Avenue to East 10th Avenue – Lead project engineer responsible for the preparation of the roadway, signalization and signing and pavement markings plans for this **0.74 mile** RRR project. This project also included the full implementation of access management modifications within the corridor by providing raised medians throughout the corridor. **Client:** FDOT D-6, **Contact:** Mr. Jose Barrera, P.E. 305-470-5260, **Begin/End Dates:** April 2008 – January 2010, **Role:** Lead Project Engineer

SR-5/US-1 Intersection Improvements at SW 344th Street – Lead project engineer responsible for the preparation of the roadway, signalization and signing and pavement markings plans for this **0.2 mile** safety improvement project. This project included the conversion of a single left turn lane to a dual left turn lane with additional turn lane improvements. **Client:** FDOT D-6, **Contact:** Mr. Jose Barrera, P.E. 305-470-5260, **Begin/End Dates:** August 2008 – July 2009, **Role:** Project Engineer

SR-5/US-1/ Overseas Highway Interchange Improvements at Boca Chica Naval Base - The scope of this project consisted of RRR improvements for all the ramps connecting the Naval Base to SR-5/US-1. The project included cross slope corrections, shoulder improvements, guardrail upgrades and new signing and pavement markings. Mr. Alfaro was the Lead Project Engineer for the roadway and signing and pavement markings for this project. Client: FDOT D-6, Contact: Mr. Jose Barrera, P.E. 305-470-5260, **Begin/End Dates:** September 2007–December 2008, **Role:** Lead Project Engineer

SR-5/US-1 from South Roosevelt Boulevard to Cross Street - The scope of this project consisted of RRR improvements for the southernmost **0.7** miles of SR-5 prior to entering the island of Key West. The project included cross slope corrections, shoulder improvements, new shoulder construction, drainage improvements, new signing and pavement markings and new signalization upgrades. Mr. Alfaro was the Lead Project Engineer for the roadway, signing and pavement markings and signalization plans for this project. **Client:** FDOT D-6, **Contact:** Mr. Jose Barrera, P.E. 305-470-5260, **Begin/End Dates:** April 2006–May 2008, **Role:** Lead Project Engineer

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ALEJANDRO A. JAUREGUY, P.E.
Civil Designer

RELEVANT PROJECT EXPERIENCE

Metric Engineering, Inc. – June 2011 – Present

SR A1A/Ocean Boulevard in St Lucie County, Project Engineer– Design and plans preparation for the roadway improvements of **5.3 miles** of the existing two-lane, rural arterial in St. Lucie County. Improvements include drainage, signing and pavement marking, up-grade of pedestrian facilities and safety improvements. **Client:** FDOT District 4**, Contact:** Bing Wang, PE, 954-486-1400**, Begin/End Dates:** 2009 – Ongoing**, Role:** Engineer of Record

I-395 from NE 2nd Avenue to MacArthur Causeway– Project Engineer for design and plans preparation for widening and milling and resurfacing of this 0.32 miles of I-395 to provide additional capacity to accommodate the improvements from the Miami Tunnel project. The project includes heavy coordination for processing design variations and exceptions, roadway plans, drainage, signing and pavement marking and lighting. **Client:** FDOT District 6**, Contact:** Vilma Croft, PE, 305-470-5400**, Begin/End Dates:** December 2010 – Ongoing

SR 953 / LeJeune Road from SE 11th Place to South of E 25th Street – Project Engineer for design and plans preparation for the 2.2 mile Pavement Only project. The project includes roadway plans, minor drainage improvements to accommodate pedestrian ramps, and signing and pavement marking. **Client:** FDOT District 6**, Contact:** Chris Tavella, PE, 305-470-5103**, Begin/End Dates:** December 2010 – Ongoing

HNTB Corporation – March 2005 – June 2011

HEFT AET Phases 1-4 — Preparation of conceptual signing master plan for the conversion from a Sunpass/cash system to an All Electronic Tolling system for the Florida's Turnpike system. Project limits for the five phases extend from Florida City to the Lantana Toll Plaza and include the Sawgrass Expressway; as well as connecting highways and cross streets. Responsibilities included signing layout design and plans preparation as well as assistance for the preparation of the RFP package, and plans and shop drawings during the construction phase.

Florida Turnpike Enterprise (FTE-GEC), State-wide, FL — Project Engineer responsible for Site-Civil discipline plans review (as Lead Reviewer) for all projects throughout the state within corridor managed by FTE. Additional responsibilities assisting the Traffic Operations Engineer with the development of various miscellaneous items, including but not limited to plans and shop drawing reviews for several projects throughout the state.

Open Road Tolling Conversion SR 924, SR 874, SR 878, MDX, Miami-Dade County, FL — Project Engineer involved in the development of master signing plans for the ORT conversion of the MDX Systems (and portions of State roads leading to MDX Facilities) as well as the coordination, plans and shop drawing reviews during the design and construction phase of the project.

Miami Dade Expressway Authority (MDX-GEC), Miami-Dade County, FL — Project Engineer responsible for plans review for various projects within the limits of all 5 systems as well as miscellaneous studies and plans review of other projects, such as Central Boulevard. Responsibilities include the oversight for all signing improvements of all 5 corridors managed by MDX as well as the review and implementation of the new MUTCD requirements especially as it relates to ORT conversions and safety issues/studies.

Bridges of the Isles PD&E, FDOT District 4, Broward County, FL — Project Engineer for this study to evaluate the replacement of five existing low-level bridges. The project involves preliminary engineering design, including the evaluation of alignment alternatives, associated environmental analyses and supporting technical documents. The bridges, Fiesta Way, Isle of Venice, Royal Palm Drive, Nurmi Drive (four Nurmi Isle Bridges) and Sunrise Key Boulevard, connect the residents of the finger islands over the canals to the City of Fort Lauderdale mainland.

EDUCATION:
B.S., Civil Engineering, Florida International University, 2007

REGISTRATION:
PE # 73773 (2011)

YEARS OF EXPERIENCE
9 years

HOME OFFICE:
MIAMI

CERTIFICATIONS AND TRAINING:
Micro Station/Geopak
FDOT Site Menu
ERC (FDOT District 6, District 4 and Florida's Turnpike)
Project Wise
Project Solve
LRE & Transportation Including Project Suite
Microsoft Office Suite
Microsoft Project

AFFILIATIONS:
FES Florida Engineering Society
ASCE American Society of Civil Engineers

PROFESSIONAL EXPERIENCE:
Alejandro has over 9 years of highway design experience in various transportation projects particularly in roadway geometric design, signing and pavement marking design and plans/production. His skills include complex roadway geometric interchange design, open road tolling design and performing technical reviews of roadway and signing and pavement marking design for the Florida Department of Transportation (Florida's Turnpike Enterprise) and the Miami-Dade Expressway Authority (MDX).

SR 25 (US 27) Okeechobee Road 3R, FDOT District 4, Broward County, FL — Project Engineer on this 20-mile project, which included milling and resurfacing, correction of super elevations and safety recommendations implementation. Responsible for reviewing the existing geometry and ensuring compliance with current design standards.

I-395, I-495 and I-95 Interchange HOT Lanes, Washington, DC — Project Engineer on this public-private partnership (P3) project that includes the addition of HOT Lanes on I-395, as well as sections of I-495 and I-95. Work effort included the design entrance and exit ramps between the new HOT Lanes and existing mainlines. Responsibilities included the development of cross sections, improvements on proposed alignments to minimize cost, coordination with structural engineers for the design of retaining walls along the project and preparation of estimation reports.

I-495/Dulles Interchange HOT Lanes, Virginia Department of Transportation/Fluor, Washington, DC — Project Engineer on this P3 project for the addition of HOT Lanes on I-495, which includes but is not limited to additional entrance and exit ramps between the new HOT lanes and existing access ramps. Responsibilities included the development of cross sections, coordination with structural engineers for the design of walls along the project, and preparation of estimation reports.

SR 821 Florida's Turnpike Extension Widening, Florida's Turnpike Enterprise (FTE), Miami-Dade County, FL – Project Engineer involved in the development of the proposed alignment and profile, as well as plans preparation. Project includes the widening and realignment of portions of the facility to bring it to current standards. Also assisted in the preparation of bridge hydraulic reports for the C-1N and C-100 canal crossings.

SR 836 – 97th Avenue Toll Plaza – Miami Dade Expressway Authority, Miami, Florida – Project engineer on this Design Build/CM at Risk hybrid project, which includes the reconstruction of SR 836 and associated ramps and the construction of a new bi-directional toll plaza. Responsibilities included roadway plans production, the development of the signing and pavement marking and computation book for the reconstruction of this limited access highway facility.

SR 836 Flyover, Miami-Dade Expressway Authority (MDX), Miami, FL – Project Engineer for post design services on this project that consisted of ramp realignment, three new bridges and one bridge widening, the design of a complete new drainage system, new lighting system and new sign and marking.

SR A1A 3R, FDOT District IV, St. Lucie County, Florida – Project engineer on this seven-mile segment of SR A1A that includes milling and resurfacing, bridge widening, and the demolition and reconstruction of bridge structures damaged during the 2004 Hurricane season. Responsible for the roadway design, signing and pavement marking plans and utility coordination on this project.

I-595 3R, FDOT District IV, Broward County, Florida – Project engineer on this 2.5-mile segment of I-595 that includes milling and resurfacing, guardrail placement, and upgraded signage. Responsible for the roadway design and signing and pavement marking plans on this project.

Corradino – September 2002 – March 2005

SR 826 (Palmetto Expressway) Section 4 (SW 8th Street/SR 90) Interchange FDOT District VI, Miami-Dade County, Florida – Responsibilities included but where not limited to: The development of the Computation Book, Permit Sketches and Utility coordination. Also assisted on the preparation and completion of the roadway design as well as the signing and drainage designs.

Harding Avenue (SR A1A) from NW 88th Street to 94th Street, FDOT District VI, Miami-Dade County, Florida – Assisted on the preparation of the plans for the milling and resurfacing project including signing and pavement markings and Electronic Delivery.

City of Hialeah – Assisted with the development of the design and plans preparation for various roadway and drainage reconstruction projects to include but not limited to:

E 26th St, E 27th St, E 28th St, E 29th St, E 30th St & E 31st St, from E 4th Av. to E 6th Av.
E 22nd St, E 23rd St & E 24th St, from E 4th Av. to E 8th Av.
W 17th St, W 18th St, W 19th St & W 20th St, from W 2nd Av. to Palm Av.
W 16th St, from W 4th Av. to Palm Av.
W 11th St, W 12th St, W 13th St, W 14th St & W 15th St, from West 4th Av. to Palm Av.

FEMA/DORM Contracts – Assisted on the preparations of drainage design packages for over 25 projects.

Miami-Dade County – SW 104th Street from SW 137th Avenue to SW 154th Avenue. A 1.5 mile roadway reconstruction project which included drainage, signing & pavement markings, signalization and lighting. Responsibilities included plans production.

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MICHAEL MCCOY
Senior Environmental Scientist

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- FDEP Certified Stormwater, Erosion, and Sedimentation Control Inspector #9360 and Instructor #218
- Advanced Wetland Delineation, Restoration, Plant ID Interagency Training (EPA, USDA)
- Florida UMAM Training, 2005 (FDEP), Florida UMAM 201 Training, 2010 (SFWMD)
- Certified Arborist #MA-4243A (ISA), Certified Landscape Inspector #2008-0057 (LIAF)
- SCUBA Certified, open water, FWC Manatee Observer

South Roosevelt Boulevard Improvements Environmental Permitting, City of Key West (LAP Project) - Obtaining environmental permit authorizations including, SFWMD, USACE and FKNMS, for new seawall construction along South Roosevelt Boulevard. Work includes coordinating conservation measures with design engineers and coordinating with regulatory agencies, coordinating standards and approach for lighting replacement to minimize effects on hatchling sea turtles.

US-1 County Shared Use Path Environmental Permitting, Monroe County – Conducting environmental assessments and obtaining environmental permits for the development of a new six-mile pedestrian and bicycle path including a bridge over a navigable waterway in Key Largo. Permits being obtained include SFWMD, USACE and USCG.

Florida Keys Overseas Heritage Trail Environmental Permitting Oversight, FDEP— Providing environmental permitting, field ecology, GPS and GIS services for the 106 mile multi-phase Florida Keys Overseas Heritage Trail. This project is administered by FDEP's Office of Greenways and Trails. Work included providing permitting oversight to multiple engineering firms including creating ERP application templates, a permitting guidance document, conducting agency coordination, composing NEPA Class of Action determinations, identifying potential sensitive, threatened and endangered species habitat locations, developing a GIS database of resource information and reviewing permit applications for third party consultants.

Tavernier Creek Marina Seagrass Survey — Performing a seagrass and mangrove habitat survey in support of a private marina redevelopment project in Tavernier, Monroe County

Environmental Analysis for Stormwater Program Development, Village of Islamorada Performing environmental analysis using GIS tools, in support of development of a Village-wide stormwater program. Work involved categorizing land use types by user group, random sampling of representative parcels in each category, determination of percent impervious cover by land use type and developing average percent impervious cover ranges by land use category. Information was used to develop standards for stormwater allocation of assessments and infrastructure requirements Village-wide.

Tom's Harbor, Spanish Harbor and Indian Key Bridge Rehabilitation Environmental Surveys, FDOT D6 - As part of a districtwide CEI contract for the Florida Keys, providing benthic surveys at these bridge site locations to identify the presence/document the removal of debris from construction activities, to comply with Florida Keys National Marine Sanctuary permit requirements.

Districtwide Environmental Compliance for Roadway Construction, FDOT D6 (Monroe and Miami-Dade Counties) – Project Manager for this contract involving environmental inspections and monitoring on FDOT construction projects including coordinating compliance activities with regulatory agencies including the SFWMD, FDEP, FKNMS, USACE and USCG. Ongoing construction compliance projects include North Roosevelt Boulevard, City of Key West.

EDUCATION:

M.S., Ecological Design, The Robert Gordon University, Aberdeen, Scotland, 1999

B.S. Natural Resources; Ecosystem Assessment, North Carolina State University, 1997

YEARS OF EXPERIENCE:

12 years

PROFESSIONAL EXPERIENCE:

As Director of Environmental Services for Metric Engineering, Mr. McCoy focuses on environmental assessments, permitting and monitoring. His key areas of technical expertise include wetland delineation, assessment, permitting and mitigation design, wildlife habitat assessments, permitting and relocations, construction monitoring, planning assessments including NEPA/PD&E studies, marine benthic assessments and permitting and urban forestry. Mr. McCoy is a skilled communicator and regularly personally coordinates with clients and regulatory staff. Mr. McCoy's technology skills include advanced use of GPS, ArcGIS, MS Acess, Microstation CAD, ETDM and a wide variety of other tools.

Islamorada Founders Park Sea Turtle Lighting Assessment – Conducting an assessment of proposed lighting within this public park rehabilitation project in order to guide design to minimize potential hatchling disorientation affects on sea turtles.

Brickell Key Bridge Rehabilitation Environmental Permitting, City of Miami (LAP Project) – Conducted wetland, mangrove and seagrass assessments, obtained SFWMD, USACE and FDEP (SSL) permits for bridge rehabilitation, coordinated with design engineers on avoidance and minimization measures.

Citywide Environment and Arbortist Consultant Services, City of Dania Beach - Project Manager for this continuing services contract, work includes environmental support services and providing all functions of City Arborist. Environmental work includes evaluation of potential wetland areas and wildlife impacts for proposed developments, obtaining environmental permits on behalf of selected City projects, developing natural areas planting plans, and coordinating with environmental regulators including FWC for sea turtle lighting issues. Arborist work includes reviewing proposed landscape plans for compliance with the City Code, participation in monthly DRC meetings, reviewing and authorizing applications for tree removal for property owners, managers and developers, conducting landscape inspections of newly installed plantings and providing support to the code compliance unit including site inspections and providing written technical expert memorandums in support of special magistrate hearings.

Dollyland Property Phase I - Project Manager for this Phase I Environmental Site Assessment of a 63-acre parcel as part of a due diligence assessment that also included an evaluation of wetlands and listed species.

Dania Beach Property Acquisition Phase I's (10 sites) - Project Manager for a Phase I Environmental Site Assessment that covered 10 separate properties currently owned by the county that were proposed to be transferred to the City as part of a land exchange for airport expansion activities.

Dumfoundling Bay Artificial Reef Mitigation Monitoring, FDOT D4 — Conducting monitoring activities at an artificial reef site in Miami-Dade County used as mitigation for bridge construction. Monitoring activities included fish observations, water quality sampling and reef stability observations using SCUBA.

Lake Worth Lagoon Bimonthly Seagrass Monitoring, SFWMD — Conducting bimonthly seagrass monitoring at 15 sites throughout the Lagoon as part of an effort to assess the effects of CERP projects and water quality management activities on seagrass health and growth.

Boynton Beach Bridge Seagrass Survey, FDOT D4— performing a seagrass survey to include using GPS (from a boat) to identify locations of seagrass beds. Additional work included conducting light attenuation monitoring to determine the effects of bridge shading on adjacent seagrass beds.

17th Street Artificial Reef Mitigation Monitoring, FDOT D4 — Conducting monitoring activities at two artificial reef sites used as mitigation for bridge construction activities. Monitoring activities at the shallow reef included fish observations, water quality sampling and reef stability observations using SCUBA. Monitoring activities at the deep reef included contracting side-scan sonar bathymetric surveys.

Little Lake Worth Bridge Rehabilitation Seagrass Survey, FDOT D4 — Conducting a seagrass and mangrove survey in St. Lucie County in support of a bridge rehabilitation project for FDOT.

Best Western Marina Seagrass Survey, Best Western — Conducting a seagrass and SAV/benthic survey in support of an ERP application for redevelopment of a marina in Broward County.

SR A1A Shoreline Stabilization Environmental Permitting, FDOT D4 — Provided permitting support including wetland, mangrove and mean hide tide delineation, completion of ERP application, agency coordination and obtaining SFWMD and USACE permits for this stabilization project in Palm Beach County.

Grove Isle Bridge Rehabilitation Permitting, Metric Engineering (Grove Isle) — Conducted a wetland delineation, seagrass survey, benthic habitat survey and delineated extents of mangroves for a privately-owned bridge rehabilitation project in Miami-Dade County. Tasks include obtaining federal, state and local authorization for proposed activities.

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OSCAR J. CRUZ, PE

Structures Division Manager

Metric Engineering, Inc. – July 2010 – Present

S.R. 9 – I-95 Broward Express, FDOT District 4 – Engineer of Record in charge of the design and plans preparation for the widening of Bridge No. 860529 over Hallandale Beach Blvd. and Bridge No. 860530 over Hollywood Blvd. Bridge widening was accomplished by utilizing FIBs. Complex Design-Build project with multiple utility conflicts which required the use of innovative foundation alternatives. Project included the design of multiple MSE retaining walls, overhead sign structures, bridge mounted signs, as well as Bridge Load Rating Calculations **Client:** FDOT District 6 **Contact:** Mr. Donovan Pessoa, P.E., 954-777-4442, **Begin/End Dates:** Sep. 2011 – Present

S.R. 836 (I-395) from NE 1st Ave. to the MacArthur Causeway, FDOT District 6 – Engineer of Record in charge of the design and plans preparation for the widening of Bridge Nos. 870373 & 870575 over Biscayne Blvd. and Bridge Nos. 870374 & 870574 over Bay shore Drive. This important interim project will connect to the Port of Miami Tunnel. Bridge widening was accomplished by replacing existing AASHTO beams with FIBs. Project included the design of multiple cast-in-place concrete retaining walls as well as overhead sign structures, bridge mounted signs, as well as Bridge Load Rating Calculations **Client:** FDOT District 4 **Contact:** Mrs. Vilma Croft, P.E., CPM, 305-470-5400, **Begin/End Dates:** Dec. 2010 – Present

US1 SR 5 from SW 168th Street to SW 136th Street. FDOT District 6 – Engineer of Record in charge of the design and plans preparation for the bridge rehabilitation for multiple twin structures crossing the C-100 and C-100C canals. Plans included joint replacing details, slope protection replacement, traffic railings improvements and guardrail retrofits. Project also included the structural capacity evaluation of multiple mastarms throughout this important corridor **Client:** FDOT District 6 **Contact:** Mrs. Hong Benitez, P.E. 305-470-5500, **Begin/End Dates:** July 2010 – Present (Ongoing Construction)

Arthur Godfrey Rd S.R 112 from Alton Rd. to Collins Ave. FDOT District 6 – Engineer of Record in charge of the design and plans preparation for the bridge rehabilitation at Indian Creek Canal and Biscayne Canal crossings including steel coating details. Project also included the structural capacity evaluation of multiple mastarms throughout this important corridor **Client:** FDOT District 6 **Contact:** Mrs. Adriana Manzanares 305-470-5500, **Begin/End Dates:** July 2010 – Present (Ongoing Construction)

N.W. 42nd Avenue Bridge Replacement, City of Miami Gardens (ARRA) – Engineer of Record in charge of the design and plans preparation for the bridge replacement at this important canal crossing. The Design-Build Scope of work included structural analysis as well as bridge load rating calculations following LRFR as modified by the current edition of the FDOT Structures Design Guidelines. Replacement required phased construction and coordination with Geotech, Drainage and Environmental Disciplines **Client:** City of Miami Gardens **Contact:** Mr. Paul Rodas, P.E. 305-622-8000 x 3104, **Begin/End Dates:** September 2011 – Present (Ongoing Construction)

SR 874 (Don Shula Expressway) from Palmetto Expressway (SR 826) to Kendall Dr. (SR 94), Miami-Dade Expressway Authority, MDX 87409 – Engineer of Record in charge of the design and plans preparation of structural components of this important project including: widening of 9 prestressed concrete beam bridges including barrier retrofits, Design of multiple overhead sign structures including cantilever and span configurations, Design of Retaining Walls both Cast in Place and MSE as well as Noise Barriers throughout the project. Bridge widening includes the preparation of Load Rating plans using Conspan software and utilizing the latest LRFR criteria as modified by the current edition of the FDOT Structures Design Guidelines. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates:** March 2008 – Present

EDUCATION:
Masters of Science in Civil Engineering / Structures, FIU, Ongoing

Bachelors of Science in Civil Engineering, FIU, 2000

PROFESSIONAL REGISTRATIONS:
Florida PE #63889, 2006

Earth Retaining Structures
FDOT D4/NHI, 2011

NSBA, Steel Bridge Seminar, USF, 2002

ACI, Concrete Repair Seminar.
Orlando, Fl. 2001

YEARS OF EXPERIENCE:
11 years

PROFESSIONAL EXPERIENCE:
Oscar's experience includes the Structural design of new and replacement bridges including steel plate girder bridges, pre-stressed beam bridges, and cast-in-place concrete flat slab bridges. Oscar has prepared and performed quality control checks to proposed construction documents. Oscar's structural experience includes the design and construction documents preparation of multiple bridge replacement projects including canal crossings. In addition Oscar's experience includes retaining walls, critical temporary sheet pile walls, sign structures, mast arms, strain poles and miscellaneous steel structures and traffic railing retrofits. Oscars experience includes responses to RFI's, shop drawing approval, as well as construction observations and inspections for plan's compliance.

OFFICE LOCATION:
Miami

On-Call Professional Engineering Services, Monroe County, Florida - Provide transportation engineering design services for road and bridge construction and rehabilitation projects, including design, traffic studies, lighting and signalization, permitting, drainage engineering, assisting with review of contractor bids, environmental engineering including environmental assessments water quality studies and structural engineering services including facility inspections and assessments and rehabilitation and/or retrofit of County facilities and buildings. **Client:** Monroe County, FL **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates**: January 2010 - Ongoing

Task No. 1 - Truman Bridge Widening, Duck Key, Florida - Widening of the Truman Bridge to allow for safe pedestrian traffic. Develop a preliminary design of the proposed widening and determine if the existing bridge is capable of supporting additional load without the modification/strengthening of the existing foundation. **Client:** Monroe County, FL **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates:** November 2011 – Ongoing, **Role:** Project Engineer

N.W. 36th Street @ Palmetto Expressway (SR 826), Sidewalk Improvements, FDOT District 6 – Engineer of Record in charge of the design and plans preparation for the addition of a 6" thick sidewalk to an existing 3 span cast in place bridge. Retrofit plans included connection details. Scope included structural analysis as well as bridge load rating calculations following LRFR as modified by the current edition of the FDOT Structures Design Guidelines. **Client:** Florida Department of Transportation D-6, **Contact:** Mr. Judy Solaun, P.E. 305-470-5500, **Begin/End Dates:** October 2008 - Present

Sanchez-Zeinali & Associates, Inc. (*) – 2002-2010

MIA-MOVER Project – Engineer of Record responsible for the design and plans preparation of 16 spans of the **guideway** supporting this important element within the Miami International Airport passenger moving system. The scope of work includes the MIA Station, structure connecting the MIA Station to the MIC Station. **Client:** Parsons-Odebrecht, J.V **Contact:** Robert Tucker 305-341-8777, **Begin/End Dates:** September 2008 - Present

SW 127th Avenue from SW 88th Street to SW 120th Street – Mr. Cruz is the **Engineer of Record** for the structural plans for the new bridge to be installed as part of this 2 mile reconstruction project crossing the C-100 Canal which will replace the existing 17' diameter culvert. Bridge Plans included a detailed construction sequence which implemented requirements such as force main relocations, water main relocation, sidewalk and maintenance of traffic and permitting with SFWMD. Oscar is currently in charge of assistance services during construction. **Client:** Miami-Dade Public Works Dept., **Contact:** Mr. Marcos Redondo, P.E. 305-375-3848, **Begin/End Dates:** January 2005-April 2010

SW 160th Street from SW 137th Avenue to SW 147h Avenue -Oscar is the **Engineer of Record** for the structural plans for the new bridge to be installed as part of this 1 mile reconstruction project crossing the C-1W Canal. The bridge design included bent cap extensions for future utilities, construction phases to accommodate the proposed maintenance of traffic and close coordination with SFWMD for vertical clearances over the canal and access for maintenance. **Client:** Miami-Dade Public Works Dept., **Contact:** Mr. Marcos Redondo, P.E. 305-375-3848, **Begin/End Dates:** January 2005-October 2007, **Post Design:** January 2011

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

Palmetto Expressway (SR 826) at SR 836 (Dolphin Expressway), FDOT District – The scope of this project is the complete redesign of this complex interchange. The prime consultant for FDOT D6 is URS Corporation. SZA's participation included the design of 6 temporary bridges, multiple MSE walls, Temporary Sheet Pile walls and Project Engineer in charge of the design and plans production of Prestressed AASHTO Beam Bridges, as well as a concrete flat slab bridge to replace an existing structure over North Line Canal. Project also includes two twin box concrete culverts relocating the existing canal. **Client:** Florida Department of Transportation D-6, **Contact:** Mr. Ali Toghiani, P.E. 305-470-5343, **Begin/End Dates:** September 2004-May 2009

Perimeter Road – FDOT D6, Oscar is the **Engineer of Record** for the replacement of an existing 2 span concrete flat slab bridge with a 10' diameter culvert pipe and endwalls for the 2 lane addition to this important roadway in Miami-Dade County. Considerations during the replacement were removal of existing piles, maintenance of traffic and coordination with existing utilities to maintain service at all times during construction. **Client:** Florida Department of Transportation D-6, **Contact:** Mr. Ali Toghiani, P.E. 305-470-5343

SR 826 (Palmetto Expressway) and NW 154th Street – The scope of this widening and reconstruction project included widening and resurfacing within the intersection of SR 826 and NW 154th Street. Oscar was a Project Engineer in the widening of two concrete flat slab structures supported by a concrete sheet pile bulkhead. Responsibilities include design and preparation of construction documents as well as post design services. SZA was assigned the roadway and structural components for this project as a sub consultant to Consultech, Inc. Mr. Jason Chang, P.E. was the FDOT-D6 project manager. **Client:** FDOT District 6 **Contact:** Mr. Jason Chang (305)470-5331, **Begin/End Dates:** June 2004-September 2007

NW 25 St. Viaduct from NW 82 Ave. to NW 22 St. – Project Engineer responsible for the design and plans preparation of the Substructure for 20 piers including, steel cap, columns and drilled shafts for this 2.7 miles project in Miami-Dade County. **Client:** FDOT District 6, **Contact:** Mr. Jason Chang (305)470-5331

SR 826 (Palmetto Expressway) at N.W. 36th Street – Miami-Dade County: **Project Engineer** for the design and plans preparation of Permanent Steel Sheet Pile Bulkheads, Reinforced Concrete Endwalls, Cofferdam and multiple cantilever, span and butterfly sign structures as well as post design services. **Client:** FDOT District 6, **Contact:** Mr. Ali Toghiani, P.E. 305-470-5343, **Begin/End Dates:** March 2002-June 2006

MIC Interchange at Lejeune Road – **Project Engineer** for the design and preparation of a 285' prestressed AASHTO beams bridge and a 968' long steel box girder bridge, including post design services. **Client:** FDOT District 6, **Contact:** Mr. Gary Donn, P.E. (305) 470-5343, **Begin/End Dates:** September 2004-June 2008

Kendall Cottages – General Services Administration. **Project Engineer** responsible for the 40 year structural certification of multiple county buildings, site plans and illumination improvements. **Client:** Miami-Dade Housing Authority, **Contact:** Ms. Ivette Newland, PE. (305) 375-2063, **Begin/End Dates:** September 2004-March 2007

S.R. 826 at I-75 Northbound – Miami-Dade County: **Project Engineer** for the design of a MSE wall widening and multiple sign structures including span and cantilever structures. **Client:** FDOT District 6, **Contact:** Mr. Ali Toghiani, P.E. 305-470-5343

13th Street SW Bridge over the Golden Gate Canal – Collier County, Florida. **Project Engineer** for the design and preparation of a bridge development report, plans and documents and shop drawings for a three span (42.75'; 43.417'; 42.75') bridge. This bridge is composed of eleven precast prestressed concrete box beams supported by pile cap end and intermediate bents. Collier County Project No. 60012 (239)-530-5335

Building Experience

Alexander Orr WTP Onsite Generation Building, Miami-Dade Water and Sewer Department - Engineer of Record in charge of the design and plans preparation of a 43' high reinforced masonry building. Design included a second story, stairs, masonry openings and louver installations. This important building is located inside the Alexander Orr Water Treatment Plant in Miami-Florida. Structural specifications required the capacity of elements to withstand a heavy corrosion industrial facility. **Client:** Miami-Dade Water and Sewer Department, **Contact:** Brian Trujillo, PE (305) 588-4565, **Begin/End Dates:** June 2009-June 2010

MIA Station - MIA Mover Project, Miami-Dade Aviation Department - Project Engineer in the design/build project of a people mover train station at Miami International Airport. Structure spans over the existing roadway configuration by means of 5 spans for a total length of 285' at the airport and supports a maintenance level and a passenger level. Design tasks include the concrete design of cast in place substructure, columns and footings and superstructure elements, connecting beams utilizing the Florida Building Code.

Steel Towers – Polk County (TECO Plant) - Analysis of Steel Towers designed for electrical equipment. Project included three (3) towers with complex equipment configurations, Steel design for varied steel shapes and Concrete design for multiple isolated concrete footings, pedestals and concrete slabs.

Kendall Cottages – General Services Administration. **Project Engineer** responsible for the 40 year structural certification of multiple county buildings, site plans and illumination improvements.

Aerothrust Building – General Services Administration / MDAD. **Project Engineer** assisting in the structural inspection and report preparation of the Aerothrust Building at Miami International Airport. Building presented cracking and minor spalls throughout floor slabs and fascia walls.

DOUGLAS RUGGIANO, P.E.
Structural Engineer

EDUCATION:
B.S.C.E., Florida State University, 1991

PROFESSIONAL REGISTRATIONS:
Florida P.E. #51497 - 1997

YEARS OF EXPERIENCE:
20 years

PROFESSIONAL EXPERIENCE:
Doug has over 20 years of engineering design experience as a structural engineer. He has design experience with a variety of structures, including the design of conventional, high level and movable bridges. He has been responsible for the design and supervision from preliminary design phases through final construction as well as the production of engineering reports on numerous projects.

Metric Engineering, Inc. – 2004 to Present

Grove Isle Seawall Repair Project, Miami-Dade County, Florida, Project Manager - Project involves the replacement of 95 linear feet of existing seawall and the strengthening of 30 linear feet of seawall along the perimeter of Grove Isle. The design of a new-cantilevered steel sheet pile system was utilized to replace an existing section of wall that had failed. 12" square prestressed piles were designed to permanently shored a section of wall suspected to be rotating out of position. **Client:** Grove Isles Association, **Contact:** Calixto Rodriguez (305) 858-1207, **Begin/End Dates**: October 2011-June 2012, **Role:** Project Manager

On-Call Professional Engineering Services, Monroe County, Florida - Provide transportation engineering design services for road and bridge construction and rehabilitation projects, including design, traffic studies, lighting and signalization, permitting, drainage engineering, assisting with review of contractor bids, environmental engineering including environmental assessments water quality studies and structural engineering services including facility inspections and assessments and rehabilitation and/or retrofit of County facilities and buildings. **Client:** Monroe County, FL **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates**: January 2010 - Ongoing

Task No. 1 - Truman Bridge Widening, Duck Key, Florida - Widening of the Truman Bridge to allow safe access for pedestrian traffic. Develop a preliminary design of the proposed widening and determine if the existing bridge is capable of supporting additional load without the modification/strengthening of the existing foundation. **Client:** Monroe County, FL, **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates:** November 2011 – March 2012

Task No. 2 – Pigeon Key Ramp Bridge Rehabilitation Study, Pigeon Key, Florida - Prepare a feasibility study for the rehabilitation of the existing timber ramp bridge that connects the Old Seven Mile Bridge to Pigeon Key. Perform an in depth inspection of existing structural conditions and determine required repairs for maintaining serviceability over the next 25 years. **Client:** Monroe County, FL, **Contact:** Clark Briggs (305) 295-4306, **Begin/End Dates:** January 2012 – April 2012

Brickell Key Bridge Rehabilitation (Bridge 876414), City of Miami - Engineer of Record in charge of the rehabilitation plans for this four lane, thirteen span low level bridge over Biscayne Bay that provides the only vehicular access to Brickell Key Island. In 2008 it was deemed structurally deficient on the biannual bridge inspection report and therefore required rehabilitation. The project entailed the structural assessment and development of rehabilitation plans necessary to upgrade the bridge condition to a satisfactory level. The scope included structural inspection above and below the waterline, survey of roadway approaches, regrade roadway approaches, design of concrete repairs to all bridge components (piling, pile caps, precast bridge beams, precast deck slab, cast in place deck topping and bridge railings), prepare detailed construction plans/specifications/technical special provisions, prepare all necessary permit packages for local and state authorities (City of Miami, Dept of Environmental Resource Management, South Florida Water and Sewer Authority, Coast Guard and Army Corps of Engineers), perform LRFR load rating, prepare construction cost estimate and provide utility coordination. The critical repairs consisted of repairs to damaged precast piling by pile jacketing with cathodic protection and repair to four pile bent caps by way of concrete restoration combined with external carbon fiber strengthening and cathodic protection. **Client:** City of Miami, **Contact:** Jose Lago, P.E. (305) 416-1252, **Begin/End Date:** September 2009 – September 2011, **Role:** Project Manager

45th Street Bridge of the Florida Turnpike, Palm Beach County – The structure consists of four curved and skewed spans (>30 degrees), 134'- 130' – 126' – 126' for an overall length of 486' and total square footage of 62,000 sf, with seven Bulb-T72 girders carrying each of the eastbound and westbound superstructures and supported by framed piers on 18 in. sq. pre-stressed concrete piles. Performed the prestressed beam analysis and CIP continuous superstructure deck calculations. Also checked the intermediate pier and end bent design performed by others. **Client:** Palm Beach County Engineering & Public Works, **Contact:** Basher Khan, PE (561)684-4191, **Begin/End Date:** 2005 - 2007, **Role:** Project Engineer

Grove Isle Bridge Low Level Bridge Rehabilitation Miami-Dade County, Florida, Project Manager - Project involves the rehabilitation of a 28 span low-level bridge over Biscayne. The rehabilitation consists of repairing prestressed/post tensioned deck/slab units, cast-in-place-bent caps and prestressed piles. Project manager responsible for the bridge inspection determination of deficiencies and implementation plan for bridge repair. Also responsible for the development of contract plans, technical specification, quantity computations and construction cost estimate. **Client:** Grove Isles Associates, LTD, **Contact:** Larry Rothstein (305)854-6803, **Begin/End Dates**: 2006-2007, **Role:** Project Manager

I-95 Over Lake Washington Road, Brevard County, FL – Project involves the widening of bridge nos. 700123 (northbound) and 700040 (southbound) along I-95 over Lake Washington Road. The twin bridges are 4-span, AASHTO Type II girder bridges with CIP continuous deck superstructure with an overall length of 172 feet. The cap/multi-column bents are founded on 18" square prestressed piles. He was certifying Engineer of record and performed the deck design and AASHTO Type II girder

design as well as checked the intermediate hammerhead piers founded on 4 -18" pre-cast piles. **Client:** FDOT District 5, **Contact:** Neil Kennis, PE (386)943-5419, **Begin/End Dates:** 2005-2006, **Role:** Project Engineer

Avart, Inc. – 2003 to 2005

Inspection of Bridges, and Sign Structures for MDX, Miami-Dade County, Florida, Project Manager – Project involves routine bi-annual inspections of 120 bridges and 112 sign structures along SR-836, SR-874, SR-878, SR-924 and SR-112. Responsible for project scheduling, reviewing inspection reports, and performing QA/QC for the inspections performed. **Client:** MDX, **Contact:** Mike Smith (305)637-3277, **Begin/End Dates:** 2003-2004, **Role:** Project Manager

East 79th Street Bascule and Low Level Bridge Rehabilitation, Miami-Dade County, Florida, Bridge Design Engineer – Project involves the rehabilitation of four 17 span low-level bridges and two bascule bridges. The rehabilitation consists of repairing pre-stressed/post-tensioned deck/slab units, pre-stressed AASHTO girders, cast-in place bent caps, bridge fender system, painting of structural steel on bascule leaves, repair mechanical and electrical component associated with the bascule leaves and replacement of steel maintenance platform. Responsible for the development of contract plans, technical specification, quantity computations and construction cost estimate. **Client**: FDOT District 6**, Contact:** Luis Amigo (305)470-5436 **Begin/End Date**: 2003-2004, **Role:** Project Manager

Julia Tuttle Causeway, Miami-Dade County, Florida, Bridge Design Engineer Project involves the rehabilitation of a high level 27 span prestressed AASHTO girder type bridge structure over North Biscayne Bay. The scope of retrofit included repairs to prestressed girders, steel pot bearings and concrete piers, as well as the replacement of the existing fender system. The bulk of the project involved the repairs to the concrete pile cap foundations where cathodic protection was implemented into the restoration to ensure longevity of repair life. Responsible design engineer for the development of contract plans, technical special provisions, quantity computations and construction cost estimates. **Client**: FDOT District 6**, Contact:** Luis Amigo (305)470-5436 **Begin/End Date:** 2003-2004, **Role:** Project Manager

BCC Engineering, Inc. – 1999 to 2003

Haverhill Road Over EPB-10 Canal Bridge Replacement, Palm Beach County, Florida, Bridge Design Engineer – Responsible for superstructure and substructure design, quantity computation, and final construction document preparation of single span Pre-cast Pre-stressed Unit Superstructure Bridge. **Client:** Palm Beach County **Contact:** Mark Tomlinsen, PE (561) 684-4191, **Begin/End Date:** 2001-2002 **Role:** Project Engineer

Haverhill Road over LWDD L-14 Canal Bridge, Palm Beach County, Florida, Bridge Design Engineer – Responsible for superstructure and substructure design, quantity computation, and final construction document preparation of 3-span Pre-cast Pre-stressed Unit Superstructure Bridge. Palm Beach County, Florida. **Client:** Palm Beach County **Contact:** Mark Tomlinsen, PE (561) 684-4191, **Begin/End Date:** 2001-2002 **Role:** Project Engineer

SR-836 Over SR-826 Bridge Repair, Miami-Dade County, Florida, Bridge Design Engineer – Responsible for design and final construction document preparation of superstructure repair of this AASHTO type superstructure type bridge, including existing AASHTO Beam evaluation and assessment of damaged pre-stressed beam. Responsibilities also included quantity computation and construction cost estimate. Miami-Dade County, Florida. **Client**: FDOT District 6**, Contact:** Luis Amigo (305)470-5436 **Begin/End Date:** 2000-2001**, Role:** Project Manager

Volkert & Associates, Inc. – 1993 to 1999

District Wide Overhead Sign Inspection, Broward County, Florida, FDOT District 4, Lead Inspector – Lead inspector for ninety-six overhead sign structures along I-75 and I-595. Responsible for field inspections and report development. **Client**: FDOT District 6**, Contact:** Luis Amigo (305)470-5436 **Begin/End Date:** 1997-1999, **Role:** Project Engineer

Jensen Beach Causeway Bridge Inspection, Martin County, Florida FDOT District 4, Bridge Design Engineer – Performed the structural inspection and evaluation of the Jensen Beach Causeway Bascule Bridge. **Client:** FDOT District 4**, Contact:** Ernesto Nunez, PE (305) 470-5100 **Begin/End Date:** 1995-1996**, Role:** Project Engineer

SR-100, Bridge Replacements, Flagler County, FDOT District 5, Bridge Design Engineer – Project involved the design of three replacement bridges and the extension of two concrete box culverts. Roadway approaches to each structure are included. Work consisted of an alignment justification report, bridge development reports, determination of jurisdictional lines, wetland impacts and coordination with St. Johns River Water Management District. Maintenance of traffic at two-bridge sites project engineer required temporary detour structures. **Client:** FDOT District 5, **Contact:** Neil Kemis (386) 943-5419, **Begin/End Date:** 1994-1995 **Role:** Project Engineer

NW 17th Avenue Bascule Over the Miami River, Miami-Dade County, Florida, Bridge Design Engineer – Produced plans and specifications for a major rehabilitation to the existing 70-year old structure. The scope of work involved replacing the existing steel deck, repairing the floor beams, main girders and five load anchors, providing new lock bars, replacement of the existing gear train with an enclosed gear reducer and hydraulic pumps, relocation/replacement of the control house with a two story facility and a new control system. **Client:** FDOT District 4**, Contact:** Ernesto Nunez, PE (305) 470-5100 **Begin/End Date:** 1993-1994, **Role:** Project Engineer

Venetian Causeway Historical Bridge Replacement/Rehabilitation, Miami, Florida, Bridge Design Engineer – Participated in initial bridge inspections and responsible for miscellaneous structural design in the replacement for two bascule bridges and their approach spans and the rehabilitation of two fixed span bridges. **Client:** FDOT District 6, **Contact**: Gabriel Romanach, PE (305) 470-5100 **Begin/End Date:** 1992-1994**, Role:** Project Engineer

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SERGIO GONZALEZ, P.E.
CEI Area Manager

PROFESSIONAL EXPERIENCE: Mr. Gonzalez has over fifteen years of combined civil engineering design, limited access facility construction, urban roadway construction and airport construction management experience. Participating in major projects serving in roles from Resident Engineer to office engineer he has excelled in claims analysis, multiple-project construction management, scheduling techniques, constructability reviews, contract management, public information engagements, traffic control plan revisions and enhancements and value engineering. This has given him in depth experience necessary for all aspects of heavy construction, from Major Highway Interchange Reconstruction to Airport Runway construction. His current project is serving as Project Engineer for the $84M widening and reconstruction of SR 826 from SW 32 St to SW 4 St including the interchanges at SW 24 St (Coral Way) and SW 8 St. Prior to this assignment, he was the Quality assurance Engineer of the construction engineering and inspection oversight of the design-build construction of the new four-lane extension of SR-836 from Florida Turnpike to NW 137th Avenue including the construction of 137th Avenue from SW 8th Street to NW 12th Street (83605). Previously Sergio performed as Resident Engineer on a 150 project residency for the Miami Dade County Derm. He managed the design and construction of major drainage mitigation and retrofit, roadway reconstruction and rehabilitation projects in Miami-Dade County. Prior to this assignment, Sergio served as Office Engineer for Miami International Airport's New Northside Runway 8-26 estimated construction budget $160 million. Responsibilities included field oversight of major construction activities as well as pay estimate corroboration, claims analysis and contract management.

October 2004 – Present: South Florida CEI Area Manager – Managing project personnel and contract administration for FDOT, county and municipal CEI contracts, including Hurricane Wilma emergency contracts.

August 2008 – Present: Proposal review and Construction Services: Operate and Maintain (O&M and Construction Management portions of the FDOT I-595 Public-Private Partnership proposals. This $1.5 billion expansion of I-595 consists of the Responsible for review and comment on the reconstruction of the I-595 mainline and all associated improvements to adjacent cross-roads, frontage roads and ramps from the I-75/Sawgrass Expressway interchange to the I-595/I-95 interchange, for a total project length of approximately 10.5 miles. Ensure proposals are in conformance with contract documents and provide the Department with required level of service for the traveling public. FDOT Reference: Joe Barello, PE 954-777-4426.

5/2005 – 2/2008: FDOT Dist. 6. SR-826 at Coral Way and SR-90 (SW 8th St.) Interchange Reconstruction and Widening, Project Engineer for a $90M highway interchange project which consists of 12 bridge replacements/modifications including the replacement of the mainline SR-826 bridges over Coral Way and the replacement of a pedestrian bridge and new construction of over 5 miles of cast in place noise walls, Mechanically Stabilized Earth Walls, Steel Sheet Piling and Concrete Bulkhead Walls. Bridges include drilled shaft foundations and concrete piles. Responsibilities also include extensive exposure to public impacts and the mitigation thereof. In addition the project includes the installation of the ITS and CCTV Infrastructure for the Palmetto Corridor. Currently, this project is one of the largest major interchange widening and reconstruction on going in District 6, (construction budget $84M). FDOT Reference: Mario Cabrera, P.E. (305) 499-2370.

EDUCATION:
B.S.C.E., University of Miami

PROFESSIONAL REGISTRATION:
Florida P.E. #58622

CERTIFICATIONS:
TIN#G52478571

OSHA Hazardous Substance Health & Safety Training

OSHA Supervisor/ Management Health & Safety Training

OSHA Construction Safety Training

CMEC ACI Concrete Field Testing Grade 1

ATSSA Advance MOT

Troxler Nuclear Gauge Safety

CTQP Asphalt Paving Level 1

CTQP Earthwork Levels 1 & 2

CTQP QC Manager

CTQP Drilled Shaft

CTQP Final Estimates Levels 1

CTQP Pile Driving Module A

YEARS OF EXPERIENCE:
12 years

October 2004 – May 2005: Metric Engineering, Inc., Senior Project Engineer/Project Administrator – Managing project and contract administration for county and municipal CEI contracts, while obtaining the required CTQP certifications for state and federal projects.

December 2001 – October 2004: FEMA / DORM Drainage and Roadway Projects, Resident Engineer – Reference: Leo Salgueiro (DERM Project Manager 305-372-6875). He served as Resident Engineer under the FEMA/DORM Drainage Program for the Department of Environmental Resources Management (DERM) with an

estimated construction budget of $34 million over approximately 300 sites throughout Miami-Dade County. Management tasks included:

- Contract Administration for nine individual Contractors and their respective Sub-Contractors
- Running Pre-Construction Meetings
- Perform Constructability Review and Review Construction Takeoffs
- Staffing and Supervision of Nine Inspectors and Two Sr. Inspectors
- Claim Avoidance / Evaluation / Negotiation / Recommendation
- Project Scheduling / Staffing and Program Goals
- Requisition Review and Approval (five per month)
- Contractor's Performance Meetings
- Request for Information and Responses
- Issuance Letters of Non-Conformance
- Overall Construction Coordination
- Meeting with Client and Support in Public Meetings (ie. Commissioners, Town Hall Meetings, etc.)
- Coordinating / Supervising Utility Related Conflicts
- As-Built Review
- Project Document / Data Control Program
- Issuing Certificates of Completion and Closure Documentation

OVERALL PROGRAM FACTS (Estimated Construction Cost $34 million)

Sergio and his staff managed to avoid any major claims and maintained nine contractors in compliance with an aggressive minimum contract production requirement.

FEMA/DORM Concurrent Project Examples – Reference: Leo Salgueiro, DERM Project Manager (305) 372-6875)

SW 137th Avenue From Street From 87th Avenue to 97th Avenue – Estimated Cost $1.5 million. Project included 5000 lf of reconstruction and associated drainage for a 4 lane divided major arterial. Due to heavy traffic and limited work area special care was taken with regards to safety and maintenance of traffic issues.

NW 58th Street From 87th Avenue to 97th Avenue – Estimated Cost $250K. Project included reconstruction of one traffic lane adjacent to an existing canal. Due to heavy traffic and limited work area, conventional reconstruction methods were not a viable option. Costs for MOT proved to be excessive for the duration of the project. Substituted limerock base with optional asphalt base to minimize impact on local traffic and save on excessive MOT costs. Base was replaced in four days and traffic was returned to normal within one week.

Horse Country – Estimated Cost $2.5 million. Project included reconstruction and resurfacing of 6 collector streets and 1 mile of a major arterial as well as installing over 40,000 LF of valley gutter and associated drainage components. Due to budget constraints, designer could not propose reconstruction on all streets although the existing conditions warranted said improvement. As a result to improve surface runoff and gutter slopes, the designer proposed adjusting the profile grade line with asphalt.

SW 78th Court From Grand Canal Boulevard to Flagler Street – Estimated Cost $300K. Project included 1500 LF of road reconstruction and associated drainage components. During excavation for road reconstruction, muck was encountered at the subgrade surface. In order to minimize impacts on the neighborhood and excessive excavation costs, the alternative to use geogrid was introduced. This alternative allowed the contractor to reconstruct the road and re-open to normal traffic flow within four days.

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CARLOS E. DUART, P.E.
Roadway Engineer

Metric Engineering, Inc.: April 2007 – to Present
Florida International University, Miami, FL, Project Engineer. Responsible for obtaining and updating SFWMD's Water Use Permit and preparing the Quarterly Reports for well and surface water pumps. Also responsible for obtaining and updating DERM's pump station permits and preparing the yearly Private Sewage Pump Station reports. Also, responsible for the data collection and the manuals preparation for the following Location Surveys: Domestic Water Meters, Electrical Meters, Natural Gas Meters, M-DWASD Fire Hydrants, Sewage Pump Stations, Irrigation Withdrawal Facilities and Fire Lines Double Check Detectors and Meters. **Client:** Florida International University, **Contact:** Jose Calzadilla (305) 348-4678, **Begin/End Dates:** December 2007-Ongoing, **Role:** Project Engineer.

Republic of Haiti Project: Rehabilitation of the National Route No.1 (Lot and Lot 2) 90 KMS (56 miles). From Bon Repos to Arcahaide and Arcahaide to Saint Marc. Public Works and Transportation Communication Ministry. Project Manager. Responsible for providing assistance in all activities related to the Construction Engineering and Inspection of this project. Part of the day-to-day routine consist of reviewing the design plans being prepared by the Contractor; and as part of the supervision team, to assist the Supervision Team in Haiti and the Ministry of Public Works, Transport and Communications by overseeing construction activities, preparing anticipated cost overruns, detailed construction cost estimates and value engineering reports to be used in selecting the best cost/social/engineering alternatives for the project. **Client:** Ministry of Public Works, Transportation & Communications, **Contact:** Garry Jean, Eng. 509-375-3366 **Begin/End Dates:** January 2008-January 2011, **Role:** Project Manager

NE 71 St. Drainage Improvements, Project Manager. Responsible for all permit coordination and post-design services for this environmentally sensitive project. Part of the day-to-day routines is to perform field visits, provide design modifications, review shop drawings and be in charge of all other administrate functions related to the construction phase of this significant drainage improvement project. **Client:** City of Miami, **Contact:** Jose Lago, PE (305) 416-1252, **Begin/End Dates:** August 2004-April 2006, **Role:** Project Manager

Florida International University, Miami, FL, Project Engineer. The project consisted of obtaining and updating a 20-year Water Use Permit from South Florida Water Management District for 41 existing withdrawal facilities installed around University Park Campus. Responsible for preparing quarterly water use reports for SFWMD & Annual sewage pumps **Client:** Florida International University **Contact:** Jose Calzadilla (305) 348-4678, **Begin/Eng Dates:** December 2007-June 2008, **Role:** Project Engineer

Miami-Dade County – 1989 to 2005
Miami-Dade County Public Works Department, Plan Review and Design Section – Project Manager. Responsible for the Consultant selection, design and development of construction plans for Miami-Dade County projects. In charge of six major and several minor projects, including the N.W. 97th Avenue bridge over SR 836, N.W. 87th, Avenue bridge over I-75, SW 2nd Avenue Bridge over the Miami River, Venetian Causeway Toll Facility and Administration Building, SW 137 Avenue, NW 87 Avenue from NW 154 St. to NW 186 St. NW 110 Ave. from NW 14 St. to NW 25 St., Eureka Dr., etc. Also, part of the day-to-day routine was to review and negotiate consultant's proposals and schedules, review plans, coordinate with utilities companies and permitting agencies, prepare work orders, process invoices, etc. July 1999-July 2005

EDUCATION:
B.S.M.E., Florida International University, 1983

PROFESSIONAL REGISTRATIONS:
Florida P.E. #51355 (1997)

YEARS OF EXPERIENCE:
26 years

PROFESSIONAL EXPERIENCE:
Mr. Duart has over 25 years of experience in the construction and design of numerous urban and rural roads, bridges and rapid transit systems. Some of his responsibilities included roadway design, construction supervision, plans review, contracts and specifications, construction estimates, consultants selection, consultant negotiations, utilities, drainage design and survey, utilities and permits coordination.

OFFICE LOCATION:
Miami

Miami-Dade County Public Works Department, Contracts and Specifications Section – Engineer II. In charge of writing the specifications, preparing the bid forms, reviewing design plans, and assembling the bid package for Miami-Dade County engineering projects to be let out for bids. Daily routine consisted of reviewing construction plans for completeness and conformance with FDOT, AASHTO, ands M-DPWD design criteria and specifications, writing special provisions and coordinating all other activities related to the pre and post bidding process. February 1994-July 1999

Miami-Dade Transit Agency, Bridge Inspection Section – Engineer II. Responsible for the planning, organizing and supervising the inspection crews performing structural inspections on the 20 miles elevated guide way for the Miami-Dade Rapid Transit System corridor. This Inspection Program also included the Metrorail Stations and the Metromover guideways, October 1992-February 1994

Department of Environmental Resource Management, Pollution Control Division – Engineer I. Main responsibility was to review design plans for the installation or modification for a variety of underground storage facilities containing hazardous or flammable materials. The purpose of these reviews was to ensure that all Federal, State and Local environmental regulations were met and that the design, materials and installation methods were in compliance with the applicable construction codes and nationally recognized industry standards October 1989-October 1992

Metric Engineering, Inc. – 1986 to 1989

I-75 Alligator Alley, Broward County for FDOT District IV. Responsible for all construction, engineering and inspection activities of this challenging and environmentally sensitive project that consisted in the construction of **8 miles** or roadway and 8 new bridges across the Florida Everglades, Prime responsibilities were to assure that the daily construction activities were performed and conducted in accordance with the contract requirements, and that personnel under my supervision understood and followed all established rules and directives while performing their duties. Also, part of the day-to-day routine was to keep up with the administration activities and directly supervise all phases of construction, assist the inspectors under my supervision with the interpretation of plans and specifications, discuss in a daily basis the Contractor ongoing activities and discrepancies and coordinate all surveying work. **Client:** FDOT District IV, **Contact:** Eduardo Perez de Morales, PE, **Begin/End Dates:** 1986-1989, **Role:** Project Manager

Miami-Dade County – January 1982 to October June 1986

Capital Improvement & Development, Office of Quality Assurance – Auditor and Field Engineer for this Miami-Dade County Office. Main function was to audit other local agencies for compliance with applicable rules, regulations, established procedures and the quality of service provided. Also was responsible for overseeing and coordinating the plans preparation and construction of mayor institutional buildings like the new Medical Examiner building for the Jackson Memorial Hospital, the North Dade Justice Center and the Turner Guilford Knight Correction Center. October 1985-June 1986

Office of County Manager/Office of Quality Assurance – Engineer I. As part of the Quality Assurance team for this Department, was responsible for performing post construction inspections for all the structural elements of this 20 miles elevated guide way. These inspection records of hundred of columns, pier caps, concrete and steel girders, were later assembled and served as a base line catalog for the Structural Inspection Program for the Miami-Dade Rapid Transit System. October 1984-October 1985

Miami-Dade County Transportation Administration, Miami-Dade County – Engineer I. Responsible for inspecting and overseeing diversified construction operations during the construction of the 20 miles Miami-Dade Rapid Transit System. Directly involved in all phases of heavy construction, specially in piles caps and spread foundations construction, auger cast and pre-cast pilling driving, post tensioned structures, post tensioning operations, reinforced concrete, reinforcement installation, high volume concrete placement, sheet piling, excavations, cofferdams, retaining walls, roadway reconstruction and widening, utilities relocations and storm sewer collection systems. January 1982-October 1984

Bahamas Construction Corporation, Miami, Florida – Superintendent. Coordinated and supervised all phases of construction for a 60 units condominium complex in Miami. Also responsible for the design of the storm water collection, the water distribution and the sewer collection system. January 1981-January 1982

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CARMEN BERMUDEZ, P.E.
Design Engineer

Metric Engineering, Inc. – July 2010 – Present

SR-825/SW 137 Avenue, from N of SW 128TH St to S of SW 88th St., Miami Dade County, Florida- Resurfacing, Restoration and Rehabilitation (RRR), **2.52 miles**, including pavement milling and resurfacing, minor intersection improvements, upgrading of ADA ramps, minor signalization improvements and new signing and pavement markings. **Client:** FDOT District 6, **Contact:** Ana Arvelo, PE (305) 470-5471, **Begin/End Dates:** July 2011 – Ongoing

SR-94/Kendall Dr, from SW 79th Avenue to SW 73rd Place, Miami Dade County, Florida- Resurfacing, Restoration and Rehabilitation (RRR), **0.37 miles**, including pavement milling and resurfacing, minor intersection improvements, upgrading of ADA ramps, minor signalization improvements and new signing and pavement markings. **Client:** FDOT District 6, **Contact:** Adriana Manzanares, (305) 470-5471, **Begin/End Dates:** February 2011 – Ongoing

SR-968/West Flagler St from W 14th Avenue to W 2nd Avenue, Miami Dade County, Florida - Design of signalization plans. **Client:** FDOT District 6, **Contact:** Adriana Manzanares, (305) 470-5471, **Begin/End Dates:** December 2011 – Ongoing

I-395 from west side of I-95 to West Channel Bridges of US-41/MacArthur Causeway, Miami Dade County, Florida - Reconstruction of the entire corridor including roadway design, drainage system, signing and markings and permitting. **Client:** FDOT District 6, **Contact:** Vilma Croft, (305) 470-5471, **Begin/End Dates:** September 2012 – Ongoing

I-95 Express Lanes from North of the Golden Glades Interchange to South of the Broward Boulevard Park & Ride and the Ives Dairy Rd Interchange from NE 16th Ave to East of Highland Lakes Blvd. – Project Engineer assisting in the design of the traffic control plans of this **17.647 mile** project. **Client**: FDOT Districts 4 and 6, **Contact:** Donovan Pessoa, P.E., (954) 777-4442, **Begin/End Dates:** November 2011 – Ongoing.

SW 184 ST from SW 177th Avenue to SW 157th Avenue, Miami Dade County, Florida- Widening at intersection of SW 157th Avenue to provide exclusive left turn lane and shoulder improvements, including drainage improvements, **1.78 miles**. **Client:** FDOT District 6, **Contact:** Jason Chang, PE (305) 470-5471, **Begin/End Dates:** May 2011 – Ongoing

SR-953/LeJeune Rd. from SE 11 Place to 74'N of SR-934/E 25 St., Miami-Dade, Florida – Milling and resurfacing of SR 953/Lejeune Rd./E 8 Ave. from SE 11 Place (MP 5.90) to 74' North of E 25 Street (MP 8.210). Also included under this project are drainage modification, safety and signal improvement. Client: FDOT District 6, Contact: Christopher Tavella, PE (305) 470-5551, Begin/End Dates: September 2010 - Ongoing

Flavor Pict Road from SR 7 to Lyons Road, Palm Beach County, Florida – Roadway design, drainage design and permitting of a 1**-mile** reconstruction project. **Client:** Kenco-Ansca Delray Holdings, LLC (KADH), Contact: Polidoro Africano, PE (561) 364-3653, Begin/End Dates: February 2008-Ongoing

Hypoluxo Road and I-95 Intersection Improvements, Palm Beach County, Florida – Improvements on Hypoluxo Road at I-95 that include addition of a second left turn lane, signing and pavement markings and design analysis for conversion of the I-95 exit ramp right turn into lane into a free-flow right turn lane. **Client:** Palm Beach County**, Contact:** Morton Rose, PE (561)684-4150, **Begin/End Dates:** October 2008-Ongoing

North Roosevelt Boulevard, Key West, Florida - Lighting and signal design for **3 miles** of SR-A1A North Roosevelt Blvd. from Truman Avenue to US-1. **Client:** FDOT District 6, **Contact:** Ali Toghiani, PE (305) 470-5343, **Begin/End Dates:** August 2006 – Ongoing

EDUCATION:
Bachelors of Science in Civil Engineering, Florida International University, 2001

Masters in Transportation Engineering, Florida International University, 2003

PROFESSIONAL REGISTRATIONS:
PE (number pending) 2012 (Florida)

Fundamentals of Engineering, July 2002 No.: 1100007908

Traffic Control Technician, ATTSA June 2002

Nuclear Radiation Safety, May 2002

YEARS OF EXPERIENCE:
8 years

PROFESSIONAL EXPERIENCE:
Ms. Bermudez has 8 years of experience in the design and the production management of highway plans for projects from FDOT, Miami-Dade County, and other municipalities. Her experience includes roadway design, signing and pavement markings, signalization, lighting, maintenance of traffic, environmental permits, and computation book. She has a thorough knowledge of Microstation and AutoCAD programs in addition to Highway Capacity, Guidesign, and Auto turn software.

OFFICE LOCATION:
Miami

Northlake Boulevard from Seminole Pratt to Coconut Road in Palm Beach County, Florida – Preliminary and final roadway design, drainage design and permitting of a **3.4-mile** reconstruction project. **Client:** Palm Beach County, **Contact:** Kristine Frazell-Smith, PE (561) 478-5777, **Begin/End Dates:** May 2008 – Ongoing

Haverhill Road and Dyer Blvd. Intersection Improvements, Palm Beach County, Florida - Improvements to the intersection of Haverhill Road & Dyer Boulevard, **0.68 miles**, including modifications to the drainage system and addition of a permanent outfall to canal EPB-9. **Client:** Palm Beach County, Contact: Basher Khan, PE (561) 684-4191. **Begin/End Dates:** December 2008 – Ongoing

SR A1A/Ocean Boulevard in St Lucie County – Design and plans preparation for the roadway improvements of **5.3 miles** of the existing two-lane, rural arterial in St. Lucie County. Improvements include drainage, signing and pavement marking, up-grade of pedestrian facilities and safety improvements. **Client:** FDOT District 4**, Contact:** Bing Wang, PE, 954-486-1400**, Begin/End Dates:** 2009 – Ongoing

Seminole Pratt Whitney Road From Sycamore Drive to Orange Boulevard for Palm Beach County – Design and plans preparation for the reconstruction of **3.5 miles** of two lanes urban roadway into a four lane divided urban arterial in Palm Beach. The project included the design of a new bridge structure, the preparation of right of way maps, coordination with utility owners and improvement districts. Drainage design, wetland impacts and the acquisition of land needed for water management areas required to accommodate flood plain compensation impacts were some of the major issues. **Client:** Palm Beach County, **Contact:** Morton Rose, (561-684-4150) **Begin/End Dates:** 2001-Ongoing

US 1 from SW 168th Street to 68' N of SW 136 Street, Miami-Dade County, FL - Resurfacing, Restoration and Rehabilitation (RRR), **2.26 miles**, including pavement milling and resurfacing, minor intersection improvements, upgrading of ADA ramps, minor signalization improvements and new signing and pavement markings. **Client:** FDOT District 6, **Contact:** Hong Benitez, PE (305) 470-5471, **Begin/End Dates:** October 2010 – Ongoing

Sanchez-Zeineli & Associates, Inc. (*) February 2006 – July 2010

SR-5/US-1 Federal Highway from Young Circle to Sheridan Street – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this 1.3 mile RRR project. **Client:** Florida Department of Transportation D-4, **Contact:** Mr. James Hughes, P.E. 954-777-4419, **Begin/End Dates**: March 2006 – February 2009

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

Hollywood Boulevard from Young Circle to Intracoastal Waterway – Project Engineer assisting in the preparation of the signalization and signing and pavement markings plans for this 1.4 mile RRR project. Project includes widening for installation of raised landscape medians as well as drainage improvements. **Client:** Florida Department of Transportation D-4, **Contact:** Mr. James Hughes, P.E. 954-777-4419, **Begin/End Dates**: March 2006 – April 2009.

SR 924 Toll Plaza Modifications – Project Engineer assisting in the preparation of the signing and pavement markings plans for this toll plaza modification. This project consists of converting two existing Sun Pass lanes to Sun Pass Express Lanes. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates**: June 2006 – February 2007

SR 878 Eastbound Exit Ramp at SW 87 Avenue – Project Engineer assisting in the preparation of the signing and pavement markings plans for this ramp modification in Miami-Dade County. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates**: March 2006 – October 2006.

SR 836 Eastbound Exit Ramp at NW 45 Avenue - Project Engineer assisting in the preparation of the signing and pavement markings and signalization plans for this ramp modification in Miami-Dade County. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates**: March 2006 – January 2009.

South Roosevelt Boulevard (US-1) from Bertha Street to Sta. 41+10 – Assisted in the preparation of the roadway and signing and pavement markings plans for this 0.9 -mile project which includes a complete roadway reconstruction with new drainage and lighting for a major four lane facility in the City of Key West. This project also includes the design of a new shared used path. **Client:** City of Key West, **Contact:** Mr. Roland Flowers, P.E. 305-809-3950, **Begin/End Dates:** April 2005-Present

Ludlam Road/NW 67 Avenue & Palmetto Expressway, Miami-Dade County - Developed the roadway and signing and marking plans for this intersection improvement project. **Client:** Miami-Dade County Public Works Department, **Contact:** Mr. David Hays, P.E.305-375-1019, **Begin/End Dates**: May 2006- January 2007.

Red Road/NW 57 Avenue and NW 138 Street, Miami-Dade County Developed the roadway and signing and marking plans for this intersection improvement project. *Miami-Dade County Public Works Department – Mr. David Hays, P.E. 305-375-1019,*

Red Road/NW 57 Avenue & Miami Lakes Drive, Miami-Dade County Developed the roadway and signing and marking plans for this intersection improvement project. Miami-Dade County Public Works Department – Mr. David Hays, P.E. 305-375-1019,

SR 5 (Biscayne Boulevard) from NE 15 to NE 35 Terrace, FDOT District 6 – Assisted in the preparation of signing and pavement marking plans for this reconstruction project that aims to upgrade the existing pavement, *improve* drainage and replace the antiquated lighting and signal system. The project traverses one of the most important sections of Biscayne Boulevard near downtown and was closely coordinated with the City of Miami, the businesses and the residential communities. FDOT District 6 – Mr. Jason Chang, P.E. (305) 470-5331

N.W. 25th Street and Viaduct, Miami-Dade County - Developed the design of signal plans on N.W. 25 St from N.W. 87 Ave to N.W. 67 Ave. Design of signing and marking plans, and supported the design team in the development of MOT plans, environmental permit plans, and in the development of roadway and drainage plans as well. Developed the Computation Book. FDOT District 6 – Mr. Jason Chang, P.E. (305) 470-5331

Hometown Station, Miami-Dade County - Developed the plans for the temporary bus entrance at South Miami Metrorail Station for FDOT Driveway Permit and the Traffic Control Plans for S.W. 59 PL. *FDOT District 6.*

N.W. 14th Street, Miami-Dade County - Supported the design team in the signing and pavement markings plans. *Miami-Dade County Public Works Department, - Mr. Cesar Gonzalez*

Indian Creek Road, Florida - Developed the signal and signing and marking plans. Supported the designed team in the traffic control plans. *FDOT District 6 – Mr. Dennis Fernande*

SR-80, Palm Beach County, Florida - Supported the design team in the development of lighting, and signing and marking plans. *District 4*

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

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LEANET MUJICA, E.I.
Design Engineer

Metric Engineering, Inc. – July 2010 – Present

SR-9 / I-95 Express Lanes from North of the Golden Glades Interchange to South of the Broward Boulevard Park & Ride and the Ives Dairy Rd Interchange from NE 16th Ave to East of Highland Lakes Blvd. – Project Engineer assisting in the drainage analysis for this **17.647 miles** project during Phase IIA and Phase IIB. Also included under this project are traffic control plans. **Client**: FDOT District 6, **Contact:** Donovan Pessoa, P.E., (954) 777-4442, **Begin/End Dates:** May 2012 to present.

SR-836 / I-395 from NE 2nd Avenue to West of MacArthur Causeway Bridge – Project Engineer assisting in the roadway plans for this **0.427 mile** project, including drainage modification, widening of the roadway, milling and resurfacing. **Client**: FDOT District 6, **Contact:** Vilma Croft, P.E., (305) 470-5100, **Begin/End Dates:** April 2011 to present.

SR-959 / SW 57th Avenue / Red Road from SW 40th St. to SW 24th St. – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **0.934 mile** RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project **Client**: FDOT District 6, **Contact:** Ana Arvelo, P.E. (305) 470-5210, **Begin/End Dates:** October 2011 to present.

SR-976 / SW 40th Street / Bird Road from SW 95th Avenue to SW 85th Avenue. – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **1 mile** project, including modifying sections of raised median for seven intersections along the project length and upgrading signing and pavement markings plans. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client**: FDOT District 6, **Contact:** Jason Chang, P.E. (305) 470-5331, **Begin/End Dates:** October 2011 to present.

SR-953/LeJeune Rd. from SE 11 Place to 74'N of SR-934/E 25 St., Miami-Dade, Florida – Milling and resurfacing of SR 953/Lejeune Rd./E8 Ave. from SE 11 Place (MP 5.90) to 74' North of E 25 Street (MP 8.210). Also included under this project are drainage modification, safety and signal improvement. **Client:** FDOT District 6, **Contact:** Christopher Tavella, PE (305) 470-5551, **Begin/End Dates:** September 2010-Ongoing

Flavor Pict Road from SR 7 to Lyons Road, Palm Beach County, Florida – Roadway design, drainage design and permitting of a **1 mile** reconstruction project. **Client:** Kenco-Ansca Delray Holdings, LLC (KADH), **Contact:** Polidoro Africano, P.E. (561) 364-3653, **Begin/End Dates:** February 2008-Ongoing

Hypoluxo Road and I-95 Intersection Improvements, Palm Beach County, Florida – Improvements on Hypoluxo Road at I-95 that include addition of a second left turn lane, signing and pavement markings and design analysis for conversion of the I-95 exit ramp right turn into lane into a free-flow right turn lane. **Client:** Palm Beach County**, Contact:** Morton Rose, P.E. (561) 684-4150, **Begin/End Dates:** October 2008-Ongoing

North Roosevelt Boulevard, Key West, Florida - Lighting and signal design for **3 miles** of SR-A1A North Roosevelt Blvd. from Truman Avenue to US-1. **Client:** FDOT District 6, **Contact:** Ali Toghiani, P.E. (305) 470-5343, **Begin/End Dates:** August 2006 – Ongoing

Northlake Boulevard from Seminole Pratt to Coconut Road in Palm Beach County, Florida – Preliminary and final roadway design, drainage design and permitting of a **3.4 miles** reconstruction project. **Client:** Palm Beach County, **Contact:** Kristine Frazell-Smith, P.E. (561) 478-5777, **Begin/End Dates:** May 2008 – Ongoing

Haverhill Road and Dyer Blvd. Intersection Improvements, Palm Beach County, Florida - Improvements to the intersection of Haverhill Road & Dyer Boulevard, **0.68 miles**, including modifications to the drainage system and addition of a permanent outfall to canal EPB-9. **Client:** Palm Beach County, Contact: Basher Khan, P.E. (561) 684-4191. **Begin/End Dates:** December 2008 – Ongoing

EDUCATION:
Bachelors of Science in Civil Engineering, Florida International University, 2008

Masters in Structural Engineering, Florida International University, 2011

PROFESSIONAL REGISTRATIONS:
Fundamentals of Engineering, October 2008
No.: 1100013245

YEARS OF EXPERIENCE:
4 years

PROFESSIONAL EXPERIENCE:
Ms. Mujica has over 4 years of experience in the design and the production management of highway plans for projects from FDOT, Miami-Dade County, and other municipalities. Her experience includes roadway design, signing and pavement markings, signalization, structural design, and computation book. She has a thorough knowledge of Microstation software.

OFFICE LOCATION:
Miami

SR A1A/Ocean Boulevard in St Lucie County – Design and plans preparation for the roadway improvements of **5.3 miles** of the existing two-lane, rural arterial in St. Lucie County. Improvements include drainage, signing and pavement marking, up-grade of pedestrian facilities and safety improvements. **Client:** FDOT District 4**, Contact:** Bing Wang, P.E., 954-486-1400**, Begin/End Dates:** 2009 – Ongoing

Seminole Pratt Whitney Road from Sycamore Drive to Orange Boulevard for Palm Beach County – Design and plans preparation for the reconstruction of **3.5 miles** of two lanes urban roadway into a four lane divided urban arterial in Palm Beach. The project included the design of a new bridge structure, the preparation of right of way maps, coordination with utility owners and improvement districts. Drainage design, wetland impacts and the acquisition of land needed for water management areas required to accommodate flood plain compensation impacts were some of the major issues. **Client:** Palm Beach County, **Contact:** Morton Rose, (561-684-4150) **Begin/End Dates:** 2001-Ongoing

US 1 from SW 168th Street to 68' N of SW 136 Street, Miami-Dade County, FL - Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **2.26 miles** RRR project, including pavement milling and resurfacing, minor intersection improvements, upgrading of ADA ramps, minor signalization improvements and new signing and pavement markings. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** FDOT District 6, **Contact:** Hong Benitez, P.E. (305) 470-5471, **Begin/End Dates:** October 2010 – Ongoing

SR-5/US-1 in Key Largo from North of Atlantic Avenue to Hialeah Lane – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **3.1 mile** RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** Florida Department of Transportation D-6, **Contact:** Ms. Erenia Nagid, P.E. (305) 470-5469, **Begin/End Dates:** July 2010 – Ongoing

Sanchez-Zeineli & Associates, Inc. (*) June 2008 – July 2010

Perimeter Road from Milam Dairy Road to NW 57th Avenue – Project Engineer assisting in the preparation of signing and pavement markings for this project. The scope of this project consisted of a full reconstruction of **1.2 miles** or roadway and RRR improvements to **0.8 miles** of roadway. The project combined roadway and structures components since there was also a bridge replacement. **Client:** Florida Department of Transportation D-6 **Contact:** Mr. Ali Toghiani, P.E. (305) 470-5343

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

Biscayne Blvd. from NE 15th Street to NE 35th Terrace – Project Engineer assisting in the preparation of signing and pavement markings and signalization plans for this project. The scope of this project consists of complete reconstruction of Biscayne Boulevard within the project limits. The client for this project is FDOT D-6. The prime consultant for this project was Keith and Schnars. **Client:** Florida Department of Transportation D-6, **Contact:** Mr. Jose Barrera, P.E. (305) 470-5260

Collins Avenue from 63rd Street to 75th Street – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **1.1 mile** RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** Florida Department of Transportation D-6, **Contact:** Ms. Erenia Nagid, P.E. (305) 470-5469

SR-5/US-1 in Sugarloaf from 4890 feet East of East Circle Drive to 510 feet East of Crane Blvd. – Project Engineer assisting in the preparation of the roadway and signing and pavement markings plans for this **3.2 mile**s RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** Florida Department of Transportation D-6, **Contact:** Ms. Erenia Nagid, P.E. (305) 470-5469

SR-948/NW 36th Street from NW 79th Avenue to NW 74th Avenue – Project Engineer assisting in the preparation of the roadway, signalization, signing and pavement markings and structural plans for this **0.6 mile** RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** Florida Department of Transportation D-6, **Contact:** Ms. Judy Solaun, P.E. (305) 470-5207

SR-944/Hialeah Drive from East 4th Avenue to East 10th Avenue – Project Engineer assisting in the preparation of the roadway, signing and pavement markings and signalization plans for this **0.7 mile** RRR project. Ms. Mujica was also responsible for assisting in the preparation of the computation book for this project. **Client:** Florida Department of Transportation D-6, **Contact:** Mr. Jose Barrera, P.E. (305) 470-5260

(*) SZA was acquired by Metric Engineering, Inc. on July 2010

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DENNIS RODRIGUEZ, EI
Project Engineer

SR-836 / I-395 from NE 2nd Avenue to West of MacArthur Causeway Bridge – Assisting in the design, preparation and completion of structural plans for the widening of 4 existing bridges. The project also included multiple MSE walls. **Client**: FDOT, **Contact:** Vilma Croft, P.E., 305-470-5100, **Begin/End Dates:** April 2011 to present.

District IV I-95 Broward Express – Assisting in the design, preparation and completion of structural plans for the widening of 5 existing bridges. The project also included multiple MSE walls and Temporary Sheet Pile walls. **Client**: FDOT, **Contact:** Donovan Pessoa, P.E., 305-777-4350, **Begin/End Dates:** March 2011 to present.

NW 42nd Avenue Bridge Replacement, Miami Dade County – Assisting in the design, preparation and completion of structural plans for the bridge replacement, which will carry NW 42nd Ave over Carol City Canal. **Client**: City of Miami Gardens, **Contact:** 305-622-8000, **Begin/End Dates:** May 2011 to present.

SR 112 / Arthur Godfrey Road, from Alton Road to Collins Avenue, FDOT District VI – Assisting in the preparation and completion of Structural Rehabilitation plans for two bridges along this RRR project. Also responsible for the development of deficiency schedules and corresponding details for the two bridges in the project. **Client:** FDOT District VI, **Contact:** Adriana Manzanares, P.E. 305-470-5283, **Begin/End Dates:** November 2010 (Ongoing Construction).

SR 874 Don Shula Expressway from Kendall Drive / SW 88th Street to Miller Drive / SW 56th Street. MDX – Assisting in the preparation and completion of structural plans for the widening and rehabilitation of 5 existing bridges. The project also included multiple MSE walls, Temporary Sheet Pile walls, Noise Barrier walls and Traffic Barrier walls. **Client**: MDX, **Contact:** Alfred Lurigados, P.E., 305-637-3277, **Begin/End Dates:** March 2010 to December 2010.

Alexander Orr, Jr. Water Treatment Plant Improvements, MDWASD – Assisting in the preparation and completion of Civil, Architectural and Structural plans for two facilities that will house the Chlorine On-Site Generation (OSG) system equipment and tanks. Also responsible for other tasks such as: water analysis data collection, assisting in the testing of three wells, gap analysis, among others. This project also includes the remodeling of a structural building and the design of another that will house lime/slurry aging tanks, pumps and equipment. **Client:** Miami-Dade Water and Sewer Department, **Contact:** Brian Trujillo, PE (305) 588-4565, **Begin/End Dates:** June 2009-June 2010.

SR 809 / Military Trail from PGA Boulevard to Blue Heron Drive– FDOT District IV Assisted in the preparation and completion of roadway and signing and pavement marking plans and was responsible for the utility coordination for this RRR project. This project also included the restoration of several sidewalk sections and replacement of all pedestrian ramps within the project limits. **Client**: FDOT District IV, **Contact:** Tuch Le, P.E., 954-486-1400, **Begin/End Dates:** September 2008 to July 2009.

SR-997 / Krome Avenue from US-1 to Lucy Street / SW 328th Street– FDOT District VI – Assisted in the preparation and completion of roadway and signing and pavement marking plans and was responsible for the utility coordination for this reconstruction project. This project also included signalization improvements, the restoration of several sidewalk sections and replacement of all pedestrian ramps within the project limits. **Contact:** Adriana Manzanares, P.E. 305-470-5283, **Begin/End Dates:** September 2008 to February 2009.

EDUCATION:
Bachelors of Science in Civil Engineering, Florida International University, 2008

YEARS OF EXPERIENCE:
6 years

PROFESSIONAL REGISTRATIONS:
EI #: 1100015070 (2010)

PROFESSIONAL EXPERIENCE:
Mr. Rodriguez has over 6 years of engineering experience in assisting with the preparation and development of contract plans for projects consisting of all structural, roadway/site civil work for FDOT, Miami-Dade County, and other municipalities. His experience includes structures design, roadway design, maintenance of traffic, signing and pavement markings, signalization, and utility coordination.

TRAINING:
National Highway Institute, FHWA-NHI-132036 – Earth Retaining Structures

NW 36th Street at NW 22nd Avenue and NW 17th Avenue Intersections, FDOT District VI – Assisted in the preparation and completion of roadway and signing and pavement marking plans, signalization plans and was responsible for the utility coordination for this RRR project. The project included pavement resurfacing of the two intersections and a new pavement marking design to eliminate the parking lanes through the limits of the project to increase traffic capacity. **Client**: FDOT District VI, **Contact:** Judy Solaum-Gonzalez, P.E. **Begin/End Dates:** February 2009 to December 2009.

SR 826-SR 836 Interchange, FDOT District VI – Responsible for the utility coordination for this reconstruction project, which includes the rising, reconstruction and development of several elevated ramps, the widening of the Palmetto and Dolphin Express Way, the relocation of NW 72nd Avenue and Milam Dairy road, and other major roadway improvements. The project also includes a water and sewer betterment system, a new lighting design and signal system. **Client:** FDOT District VI, **Contact:** Ali Toghiani, P.E. 305-470-5343, **Begin/End Dates:** January 2006 to July 2009.

SR 934 / Normandy Drive, from West Bay Drive to Rue Notre Dame, FDOT District VI- Assisted in the preparation and completion of roadway and signing and pavement marking plans, and was responsible for the utility coordination for this RRR project. This project consisted of milling and resurfacing of both bounds of SR-934 and includes signalization improvements, the restoration of several sidewalk sections and replacement of all pedestrian ramps within the project limits. **Client**: FDOT District VI, **Contact:** Judy Solaum-Gonzalez, P.E. **Begin/End Dates:** December 2007 to December 2009.

NW 71st Street, from West Bay Drive to Rue Notre Dame, FDOT District VI- Responsible for the utility coordination for this RRR project. The Engineer of Record for this project was BCC Engineers. **Client**: FDOT District VI, **Contact:** Judy Solaum-Gonzalez, P.E. **Begin/End Dates:** December 2007 to December 2009.

S.W. 62nd Avenue from SW 24th Street to NW 7th Street, Miami Dade County – Assisted in the preparation and completion of roadway and signing and pavement marking plans, and was responsible for the utility coordination for this RRR project. This project includes the implementation of a roundabout, a new lighting design, hardscape and landscape design and drainage improvements. **Client**: Miami Dade County and URS Corp., **Contact:** Carlos Zea, URS, 305-884-8900, **Begin/End Dates:** May 2006 to February 2008.

MIC-Earlington Heights Connector, Miami Dade Transit - Assisted in the preparation and completion of roadway, signing and pavement marking, and maintenance of traffic plans for this reconstruction project. This project included the relocation and reconstruction of several roadways around the multilevel station at the MIC entry plaza. **Client**: Miami Dade Transit, URS Corp, **Contact:** Carlos Zea, URS, 305-884-8900, **Begin/End Dates:** November 2006 to August 2007.

Capital Improvements Program, Neighborhood No. 10B - Lummus from Washington Avenue to Ocean Drive, at 6th, 10th, 11th, 12th, 13th & 14th Street, and Española Way, City of Miami Beach – Assisted in the preparation and completion of roadway, signing and pavement marking, hardscape and landscape plans for this reconstruction project. Project included grading and drainage and lighting improvements. **Client**: City of Miami Beach, **Contact:** Reynaldo Abreu, **Begin/End Dates:** February 2007 to January 2008.

SW 8th Street from SW 4th Avenue to SW 27th Avenue, City of Miami – Responsible for the hardscape design and associated miscellaneous enhancements. The project included the implementation of pedestrian benches and trash receptacles along the project limits. **Client**: City of Miami, **Contact:** Tatiana Acosta, 305-416-1263, **Begin/End Dates:** August 2008 to March 2009.

DIEGO QUINTERO, EI
Project Engineer

SR-836 / I-395 from NE 2nd Avenue to West of MacArthur Causeway Bridge – Responsible for Superstructure, Substructure and Miscellaneous structures design by using LEAP CONSPAN, .LEAP RC-PIER, FB MULTIPIER and multiples FDOT Structures design programs. Responsible for the preparation of Computation Booklet. Assisting in the preparation and completion of structural plans for the widening of 4 existing bridges. The project also included multiple CIP walls. **Client**: FDOT, **Contact:** Vilma Croft, P.E., 305-470-5100, **Begin/End Dates:** April 2011 to present.

District IV I-95 Broward Express – Responsible for Superstructure, Substructure and Miscellaneous structures design by using LEAP CONSPAN, .LEAP RC-PIER, FB MULTIPIER and multiples FDOT Structures design programs. Responsible for the preparation of Computation Booklet. Assisting in the preparation and completion of structural plans for the widening of 2 existing bridges. The project also included multiple MSE walls and Temporary Sheet Pile walls. **Client**: FDOT, **Contact:** Donovan Pessoa, P.E., 305-777-4350, **Begin/End Dates:** March 2011 to present.

NW 42nd Avenue Bridge Replacement, Miami Dade County – Responsible for Superstructure, Substructure and Miscellaneous structures design by using LEAP CONSPAN, .LEAP RC-PIER, FB MULTIPIER and multiples FDOT Structures design programs. Responsible for the preparation of Computation Booklet. Assisting in the preparation and completion of preliminary structural plans for the bridge replacement, which will carry NW 42nd Ave over Carol City Canal. **Client**: City of Miami Gardens, **Contact:** 305-622-8000, **Begin/End Dates:** May 2011 to present

SR 112 / Arthur Godfrey Road, from Alton Road to Collins Avenue, FDOT District VI – Assisting in the preparation and completion of Structural Rehabilitation plans for two bridges along this RRR project. Also responsible for the development of deficiency schedules and corresponding details for the two bridges in the project. **Client:** FDOT District VI, **Contact:** Adriana Manzanares, P.E. 305-470-5283, **Begin/End Dates:** November 2010 to present.

SR 874 Don Shula Expressway from Kendall Drive / SW 88th Street to Miller Drive / SW 56th Street. MDX – Assisting in the preparation and completion of structural plans for the widening and rehabilitation of 5 existing bridges. The project also included multiple MSE walls, Temporary Sheet Pile walls, Noise Barrier walls and Traffic Barrier walls. **Client**: MDX, **Contact:** Alfred Lurigados, P.E., 305-637-3277, **Begin/End Dates:** March 2010 to December 2010.

Alexander Orr, Jr. Water Treatment Plant Improvements, MDWASD – Assisting in the preparation and completion of Civil, Architectural and Structural plans for two facilities that will house the Chlorine On-Site Generation (OSG) system equipment and tanks. Also responsible for other tasks such as: water analysis data collection, assisting in the testing of three wells, gap analysis, among others. This project also includes the remodeling of a structural building and the design of another that will house lime/slurry aging tanks, pumps and equipment. **Client:** Miami-Dade Water and Sewer Department, **Contact:** Brian Trujillo, PE (305) 588-4565, **Begin/End Dates:** June 2009-June 2010.

EDUCATION:
Bachelors of Science in Civil Engineering, Florida International University, 2010

PROFESSIONAL REGISTRATIONS:
EIT #18570 – (2012) South Carolina

PROFESSIONAL EXPERIENCE:
Mr. Quintero has over 2 years of engineering experience in assisting with the preparation and development of contract plans for projects consisting of all structural/ roadway/site civil work for FDOT, Miami-Dade County, and other municipalities.

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JUSTIN FREEDMAN

Senior Environmental Scientist/ Permit Coordinator; Miami, FL

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- PD&E Essential Fish Habitat Training, 2009 (NMFS)
- Florida UMAM Training, 2007 (SFWMD)
- Florida ETAT Workshop, 2008 (FDOT Districts 6 and 4)
- Environmental Impact Review Training, 2007 (FDOT)
- Marine Invertebrates Identification Training, FDEP, August 2008
- Stony Corals Identification Training, FDEP, September 2008
- Certified NPDES Erosion and Sediment Control Instructor, FDEP: 18936
- Certified Manatee Observer, FWC
- Certified Species Observer, NOAA
- Certified Arborist, International Society of Arboriculture
- Certified Landscape Inspector, Landscape Inspector Association of Florida
- PADI Advanced Open Water/ NITROX Certification

RELEVANT PROJECT EXPERIENCE

SR 5/US1 Lateral Ditch Reconstruction, FDOT D4 - Designed on-site mangrove mitigation, obtained ERP/ USACE permits, provided construction compliance inspections.

Westlake Park Mangrove Wetland Mitigation, FDOT D4 - Conducted construction compliance inspections, turbidity monitoring for this 2-acre project in a contaminated site

Sheridan Street Natural Area Mitigation Design, FDOT D4 - Developing mangrove mitigation design including construction plans, SWPPP, UMAM & agency coordination.

I-95 Managed Lanes GGI to Broward Blvd, FDOT D4 & FDOT D6 – Providing SFWMD ERP, USACE and SFWMD WU (dewatering) permit support, related tasks include contamination assessment and environmental compliance monitoring during construction.

Brickell Key Bridge Repairs, City of Miami - Conducting benthic survey, obtaining USACE NWP, SFWMD Gen. Permit, PERA permits for this FDOT-funded LAP project.

Hialeah Water Treatment Plant – Obtaining, USACE, FDEP ERP and PERA permits for development of a water treatment facility in Miami-Dade County.

Coastal Construction Control Line Permit, City of Dania Beach – Acquired permit for a dune revegetation project. Work included conducting lighting surveys, drafting a sea turtle protection ordinance, leading public involvement effort to overcome controversy.

SR A1A Improvements in Riviera Beach, FDOT D4: - Provided wetland delineation and permitting support for a roadway improvement in Palm Beach County.

NW 42nd Avenue Bridge Replacement, City of Miami Gardens – Obtaining USACE, SFWMD, PERA permits, conducting environmental assessment for bridge replacement.

SR 826/ I-395 ITS, Florida DOT District 6 - Provided permitting support for an ITS installation project in Miami-Dade County.

General In-house Environmental Services, FDOT District 4 – Served three days a week as an in-house environmental specialist in the FDOT District 4 PL&EM Office.

Jupiter Pier Seagrass Mitigation Project, FDOT D4 - Benthic surveys, seagrass mitigation design and USACE and SFWMD permitting support for bridge removal project.

Dixie Flyover Reevaluation, FDOT District 4 — Prepared environmental documents for the permitting of the Dixie Flyover.

Grove Isle Bridge/ Grove Isle Seawall – Obtained USACE, FDEP, PERA permits for bridge work, now obtaining permits for seawall repair for an island in Biscayne Bay.

Fort Lauderdale Executive Airport Burrowing Owl Survey, City of Fort Lauderdale— Conducted survey of burrowing owls, prepared application for FWC Migratory Bird permit.

Permitting Support, Toscana Condominium – Work included preparation of mitigation and monitoring plans, site planting and site monitoring for a mangrove mitigation project in Palm Beach County, FL.

EDUCATION:

M.S., Marine Biology, Nova Southeastern University
B.A., Biology, Tufts University

YEARS OF EXPERIENCE/ SOUTH FLORIDA EXPERIENCE:

9 years/ 6 years

AVAILABILITY:

80 Percent

ROLE ON THIS CONTRACT:

Mr. Freedman will serve as Permit Coordinator for this contract. In this role, Mr. Freedman will serve as the technical lead for **preparation of permit applications** and supporting documents, **RAI response submittals,** and preparing agency correspondence (including **Section 7 consultation**), preparing **mitigation plans and designs** and leading **field delineations** and **literature reviews**. Mr. Freedman has over six years of experience with permitting South Florida FDOT projects, as well as conducting **environmental compliance inspections** on mitigation projects. Mr. Freedman is skilled in native and protected flora and fauna ID, as well as identifying and controlling invasive species. Mr. Freedman has extensive **plan/ SWPPP review** experience and has entered **ERC comments** for more than 70 projects. As a marine biologist, Mr. Freedman is skilled in conducting **benthic resources surveys** and **EFH assessments**. Mr. Freedman is a Certified Arborist and Certified Landscape Inspector, and provides consulting/ **expert witness** service regarding **tree preservation, protection and relocations.**

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JENNY BASANTES

Environmental Scientist; Miami, FL

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- Certified Landscape Inspector, Landscape Inspector Association of Florida
- Certified NPDES Erosion and Sediment Control Inspector, FDEP
- Member of the Florida Association of Environmental Professionals (FAEP)

RELEVANT PROJECT EXPERIENCE

Districtwide Environmental Compliance and Monitoring, FDOT D6 — Compliance Coordinator for this contract, conducting regular environmental inspections for numerous road and bridge construction projects throughout Miami-Dade and Monroe counties in order to verify compliance with federal, state and local environmental regulations; verifies implementation and maintenance of permit requirements; and provides project and agency coordination prior, during and after construction.

Hialeah Reverse Osmosis Water Treatment Plant Pipeline and Well Pads and Pipeline Permitting, City of Hialeah - Assisted with environmental permitting for the construction of production well pads and water transmission lines through the preparation of federal, state and local permit applications (FDEP ERP, USACE Nationwide Permit, and PERA Class IV Wetlands permit) and supporting technical documents. Other permitting support work includes wetland delineations and field assessments.

I-95 Managed Lanes Miami-Dade and Broward Counties — Provided ERP and SFWM WU (dewatering) permit support and environmental assessment for extension of express lanes through FDOT Districts 6 and 4.

Bridges of the Isles Permitting Support, Broward County, FDOT D4 — Completed the SFWMD ERP application; and prepared PD&E and permit support documentation including the Endangered Species Biological Assessment Report, Essential Fish Habitat Assessment Report and the Wetland Evaluation Report.

Wetlands Permitting Tool — Authored and designed Metric's web-based State Wetlands Permitting Tool.

Grove Isle Seawall Replacement Permitting Support, Miami-Dade County — Work includes conducting seagrass and benthic surveys, preparing the FDEP verification of permit exemption, the USACE pre-construction notification, and completing the PERA Class I permit application.

SR-836 (NW 17th Avenue to west of the Midtown Interchange) Permitting Support, Miami-Dade County, FDOT D6 — Prepared environmental permit support documentation including the Endangered Species Biological Assessment and Wetlands Evaluation Report, and conducted GIS analysis and field reviews to determine the project's impacts and mitigation requirements.

Toscana Permitting Support, Palm Beach County — Work included preparation of monitoring plans, site planting and site monitoring for a mangrove mitigation project in Palm Beach County, FL.

Pigeon Key Ramp Bridge Permitting Support, Monroe County — Work includes conducting environmental and GIS assessments and determining the project's federal, state and local environmental permitting requirements for a bridge rehabilitation project in Marathon, Florida Keys.

Truman Bridge Widening Permitting Support, Monroe County — Responsibilities includes preparing environmental assessments, conducting GIS analyses and determining federal, state and local environmental permitting requirements for a widening project in Duck Key, Florida Keys.

Titan America Permitting Support — Responsibilities includes preparing environmental assessments and field reviews and assisting in the completion of USACE, SFWMD ERP and PERA permit requirements.

EDUCATION:
M.S., Interdisciplinary Ecology, University of Florida, 2009

B.S., Environmental Science, University of Florida, 2007

YEARS OF EXPERIENCE/ SOUTH FLORIDA EXPERIENCE
5 years/ 2 years

AVAILABILITY:
60 percent

ROLE IN THIS CONTRACT:
Ms. Basantes' role will be to provide support for environmental permit compliance inspections, and to provide key input from D6 Compliance inspections to provide recommendations for permitting designs, specifications and conditions that have or have not worked well in the field. Ms. Basantes will also be available for permitting support for this contract, including field and **desktop environmental assessments, plan review** and **preparing permit applications**. Ms. Basantes has detailed knowledge of FDOT's permitting requirements and process and will be a key resource for the MEI Team to help insure that all required permits and coordination are being accounted for. Ms. Basantes will also provide reviews of **staging areas**, **SWPPPs** including **turbidity monitoring** and **erosion control plans**. Ms. Basantes will also provide support for **wetland evaluations** and **endangered and threatened species surveys** and assist in the preparation of **Public Notices.**

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HARRY DELASHMUTT

Senior Environmental Scientist/ Florida Keys Specialist; Marathon, FL

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- EPA Wetland Delineation Training KEYWEP - 2011
- SFWMD – Florida Keys Regulatory Workshop - 2010
- DEP Environmental Permitting Summer School, 1999
- DEP & SFWMD Florida Wetlands Delineation, 2000
- DEP Wetland Identification Field Training – 2001
- DEP Water Quality Monitoring – 2004
- State of Florida Sea Turtle Habitat, Identification & Delineation
- EPA Hazmat Identification and Handling - 2005
- National Park Service (Everglades & Ft. Jefferson) Ecosystems Management 1967 -70

RELEVANT PERMITTING PROJECT EXPERIENCE

Florida Keys National Marine Sanctuary Permits

- Coral relocation at Tranquility Bay Resort (Permit 2009-140)
- Jan Sandstrom (2010-569)
- Sanctuary Management - Prop Dock ID Markers (2011-130)

DEP Permits for Mangrove Trimming — Numerous permits for mangrove trimming for private clients

FORMER WORK EXPERIENCE

Ports Manager – City of Marathon **2001 to 2005**

Department head for the City responsible for managing the near-shore waters which involved four boat ramps, City marina, mooring fields and anchorages, baybottom leases, coordinated and reviewed for authorization all ACOE, DEP, & City permits for private and public docks and marinas in the City.

Biologist and Planner IV – FL State Department of Community Affairs **1999-2001**

As lead biologist, conducted field reviews of Keys-wide building permits to assess potential environmental or biological impact & mitigation. Reviewed and approved habitat evaluations and field truthed vegetative inventories / analysis as required by development permit applications from all local governments. Conducted underwater benthic reviews for docks, seawalls and marina permits in Monroe County, City of Marathon, Ocean Reef, and Islamorada.

Biologist – Monroe County, Division of Growth Management **1997 to 1999**

As field biologist, I was responsible for the evaluation and approval of all environmental aspects of development permits for the middle Keys. This involved diving to inspect dock locations and to conduct benthic impact reports. Reviewed terrestrial plant inventories and Habitat Evaluation Indices to support private consulting biologist's recommendations on development permit applications. Was advisor to the Code Enforcement Division for environmental oriented cases & issues.

Department of the Interior – National Park Service **1964 – 1997**

Retired with 32 years of public service as a Park Ranger involved in the comprehensive ecosystem management and natural resource protection in diverse National Parks. Assignments included Everglades National Park; Fort Jefferson National Park – Dry Tortugas, Area Mgr.; Great Smoky Mountains National Park; Mount Rainier National Park; C & O Canal National Historical Park – Chief Ranger; Cape Cod National Seashore Park – Chief Ranger; Washington, DC – Park Service Director's Office, Staff Park Ranger Specialist.

EDUCATION:
B.A., Forestry, Colorado State University

YEARS OF EXPERIENCE/ SOUTH FLORIDA EXPERIENCE:
48 years/ 19 years

AVAILABILITY:
50 Percent

ROLE ON THIS CONTRACT:
Because of his location in the central Florida Keys and his extensive experience Mr. DeLashmutt is well suited to support team efforts in Monroe County**.** Mr. DeLashmutt will conduct **wetland impact assessments, endangered species, benthic and vegetative surveys** in the Keys and will assist in the acquisition of **FKNMS permits** for coral relocations. Mr. DeLashmutt will also be called upon to provide **water quality and turbidity sampling** as required and **Phase I Site Assessments** and **mitigation planning and strategies.** Prior to his consulting career, Mr. DeLashmutt has worked for and with various governmental agencies as a permit reviewer and thus is experienced with the documentation and coordination required for the planning and permitting projects in the Keys, including **USACE, FDEP and local building permits** (including understanding the various setback requirements).

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DANIEL CASSALIA, PG

Sr. Environmental Scientist/ Contamination Specialist; Miami, FL

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- Licensed Professional Geologist – State of Florida
- Completed Sclumberger Geophysical Fundamentals Course
- FAA Licensed Pilot – Single Engine
- NAUI Scuba Certification, Open Water
- 40 Hour OSHA HAZWOPER
- 40 Hour MSHA

SELECTED PROJECT EXPERIENCE

I-95 Managed Lanes Miami-Dade and Broward Counties – Provided contamination assessments and other SFWMD WU (dewatering) permit support for the extension of express lanes through FDOT Districts 6 and 4.

Contamination Screening for Land Acquisitions, City of Dania Beach - Provided contaminations screenings for 10 parcels in 10 days for a land-swap with Broward County to facilitate airport expansion.

Sydney Washer Landfill NPL Site, Valrico, FL — Provided geologic oversight to a program of assessment and evaluation to the effectiveness of groundwater remediation activities. Provided necessary information in support of litigation against engineering contractor. Included directing a program of monitoring and compliance for the landfill.

South Florida Water Management District, Miami-Dade County, FL — Performed Phase 1 and Phase 2 Environmental Assessments on over 1,000 acres of land along the coast of Biscayne Bay. These assessments were part of the Environmental Land Acquisition Program. This work required a thorough understanding of available GIS data along with researching all available historical data. Data was also collected on surface water elevation to assist in understanding the hydrology of these parcels and how they are related to the Biscayne Bay ecosystem.

Background Radiation Assessment on Reclaimed Mine Lands, Central Florida — Developed a program for a major mining company to assess the quantity and intensity of radioactive emissions of reclaimed property from their phosphate mining operations. Procedures and methodology developed were adopted by the state regulatory agencies.

ACME Basin B Project, Palm Beach County FL, — Performed environmental and hydrologic assessment of rural property for construction of a filter/retention pond for the South Florida Water Management District and the Army Corps of Engineers. This project also included the environmental assessment in support of widening the connecting C-41 Canal

Petroleum Site Assessments and Remediation Throughout Florida and the Bahamas — Provided assessments on the soil and groundwater at numerous gas station and petroleum storage facilities. In addition to providing assessments to fulfill regulatory requirements the work included developing remediation plans and system designs as required. Also supervised and monitored the required upgrading of petroleum fuel storage and dispensing systems.

Performed Site Assessments at Various industrial Sites throughout Central and Southern Florida — Performed assessments for regulatory as well as ISO compliance at various industrial sites. Also included was assisting the client to attain necessary permits regarding locations within a well field, water use permits, and dewatering discharge permits. Work also included performing geophysical investigations using electro-magnetic methods and ground penetrating radar.

EDUCATION:

M.S., University of South Florida – Geology, Hydrogeology

B.S., Geology, University of Texas – El Paso

YEARS OF EXPERIENCE/ SOUTH FLORIDA EXPERIENCE:

30 years/ 30 years

AVAILABILITY:

60 percent

ROLE IN THIS CONTRACT:

Mr. Cassalia will serve as Senior Environmental Scientist on this Contract with a focus on geological assessments, contamination assessment and remediation. When the Department requires **dewatering permits**, Mr. Cassalia will review existing files and documentation to evaluate potential contamination involvement. Mr. Cassalia will also be utilized to conduct **soil and water sampling** and, working with Florida Spectrum Laboratories, analyze data and provide **contamination assessment reports** and recommendations. Mr. Cassalia is a Professional Geologist with a broad background in the mining industry with an emphasis on environmental permitting and compliance issues. Mr. Cassalia has worked on numerous petroleum impacted sites through Florida.

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JULIE CHEON

Senior Environmental Scientist/ Florida Keys Specialist; Marathon, FL

PROFESSIONAL REGISTRATIONS, CERTIFICATIONS, TRAINING & AFFILIATIONS

- *Florida Keys Wetlands Evaluation Procedures Update*–United States Environmental Protection Agency, August 2011
- *Unified Mitigation Assessment Methodology (UMAM) Training* –South Florida Water Management District, December 2011
- *Benthic Survey Training* – Florida Keys National Marine Sanctuary, February 2007
- *Florida Wetland Delineation Training* – Florida Department of Environmental Protection, February 2002
- *Wetland Plant and Soil Identification Training* – Florida Department of Environmental Protection, August - 2001
- Member of the Florida Association of Environmental Professionals (FAEP)

RELEVANT EXPERIENCE

Permitting Project Experience:

- Melody Key Observation Platform Installations - performed benthic analysis, and completed permitting for the FDEP, ACOE and FKNMS authorization
- Safety Harbor Dock Installation and Lift Installation – performed benthic analysis with coral relocation plan in compliance with FKNMS standards. Relocated over 70 coral specimens.
- Palm Island (Marathon) Bridge Repair – performed benthic analysis and completed coral relocation plan.
- Duck Key Water, Wastewater and Reclaimed Utility Installation
- Big Coppitt Wastewater Utility Installation
- Cudjoe Key Wastewater Utility Installation
- FKAA Low Pressure Reverse Osmosis Water Treatment Plant Construction
- FKAA Stock Island RO Facility Seawall Repair

Environmental Assessment/ Consulting Experience

Ms. Cheon has managed a variety environmental projects with extensive work in benthic analysis, vegetation surveys, habitat evaluations and wetland delineations including the Keys Wetland Evaluation Procedures (KEYWEP-Local), the Unified Mitigation Assessment Method (UMAM-State) and the Army Corps of Engineers Wetland Delineation Manual (ACOE-Federal). Accomplished in site plan development with regard to environmental impact minimization and mitigation alternatives. Experienced in salinity monitoring.

Water Quality and Environmental Manager Florida Keys Aqueduct Authority

Assists in facility siting and design and advises on ongoing projects with regard to environmental impacts and regulations. Project diversity includes water and wastewater utility construction. Oversees management of an 80-acre Pine Rockland habitat owned by the agency.

EDUCATION:
B.S., Biology, Springfield College

YEARS OF EXPERIENCE/ SOUTH FLORIDA EXPERIENCE
11 years/ 11 years

AVAILABILITY:
20 percent

ROLE IN THIS CONTRACT:
Based in the middle Keys, Ms. Cheon has completed training on local assessment methods and local, protected natural resources. Ms. Cheon has extensive experience with permitting and environmental assessment both as consultant and as an environmental manager at a local utility. Ms. Cheon's role on this contract is to assist with **dredge and fill, ERP and FKNMS permitting** for projects in the Keys. She will also conduct field assessments as needed, including **wetland delineation**, **benthic resources surveys, threatened and endangered species surveys** and **water quality, turbidity and salinity sampling** as needed for projects throughout the Keys.

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ENRIQUE ANTELO
Senior Project Manager

City of Hialeah, Installation of finished water main of raw water transmission main, well maintenance pipeline and well site development to serve the City of Hialeah Reverse Osmosis Water Treatment Plan – Sr. Designer. Design of several underground piping which will serve 4 proposed deep water wells, as well as the new (under construction) City of Hialeah Reverse Osmosis Water Treatment Plant. Our design included: 6,720 L.F. of 30" D.I.P. Finish Water Main, 4,050 L.F. of 24" H.D.P.E. piping, 905 L.F. of 16" H.D.P.E. piping, 2,670 L.F. of 12" H.D.P.E. piping, 110 L.F. of 10" piping, 3,922 L.F. of Electrical Duct Bank, Site plans for each well (4). **Client:** City of Hialeah, **Contact:** Armando Vidal, PE (305) 556-3800, Begin/End Dates (Design) April 2011-December 2011

45th Street from Jog Road to Haverhill Road, Palm Beach County, Drainage Engineer – Existing two-lane 45th Street will be improved and widened to four-lane roadway, a distance of approximately **1.0 mile**. It also includes an elevated intersection and a four-span bridge structure over the Florida's Turnpike. An additional 0.3 miles of Florida's Turnpike improvement and 0.3 miles of road and bridge demolition and grading will also be done. The system will drain stormwater from 45th Street and its north side frontage road. Also included milling and resurfacing, drainage improvements, signalization, right of way acquisition, utility coordination, signing and pavement marking. Responsible for the design of signalization at two intersections an all pavement marking. **Client:** Palm Beach County, **Client Representative:** Morton Rose, (561-684-4150) **Begin/End Dates:** 2004-2009

South Dade Busway Extension, Miami-Dade, Florida, Project Engineer – Construction of a 7.3 miles of roadway and bike path for Miami-Dade Transit. Responsible for the design of all roadway signalization, pavement marking, and drainage systems as well as plans and contract document production and construction administration. The project design involved the transformation of an abandoned railroad corridor into a transit roadway that will extend and interconnect public bus routes and bicycle trails from Miami to Homestead and Florida City. Roadway design plans also included intersection improvements, street lighting, signalization, and maintenance of traffic. Special drainage design and earthwork measures were required to mitigate in-situ contaminated soils within significant portions of the project corridor. Significant public involvement with all impacted communities along the entire corridor was also important to the success of this project. **Client:** Miami-Dade Transit, **Client Reference:** Isabel Padron, P.E. (305) 375-4504 **Begin/End Dates:** April 2001 – January 2008

North Roosevelt Boulevard, Key West, Florida, Project Engineer - Lighting and signal design for 3 miles of SR-A1A North Roosevelt Blvd. from Truman Avenue to US-1. **Client:** FDOT District 6, **Client Representative:** Ali Toghiani, PE (305) 470-5343, **Begin/End Dates:** August 2006 - Ongoing

SR-AIA South Roosevelt Boulevard, Key West, Florida, Project Engineer – Reconstruction of three miles of an urban arterial for FDOT District 6. Responsible for roadway and drainage design, signalization, lighting, plans and contract document production and construction administration. Project involved complete reconstruction of seawall, pavement, sidewalk, and drainage systems as well as significant project permitting. Project is currently under construction and post-design services are in progress. **Client:** FDOT District 6, **Client Representative:** Ali Toghiani, PE (305) 470-5343, **Begin/End Dates:** April 2006 – February 2007

Washington Avenue Parking Lot, Homestead, Florida, Project Manager – Design of 217 parking spaces to serve the Busway, the new City Hall and adjacent businesses. The first phase of the two-phase project consisted of 122 car spaces parking lot located in SE corner of Washington Ave. and NE 2nd Street. The Civil design includes French drain system,ornamental lighting, singing and pavement markings, landscaping and irrigation system. **Client:** City of Homestead CRA, **Client Representative:** Julio Brea, PE (305) 224-4772 **Begin/End Dates:** August 2006 – January 2007

EDUCATION:
B.S. Engineering Technology, Florida International University, 1980

YEARS OF EXPERIENCE:
37 years

PROFESSIONAL EXPERIENCE:
Mr. Antelo has 37 years of extensive experience in complex civil engineering projects, particularly in the areas of roadway geometrics, lighting, drainage, land subdivision, and maintenance of traffic.

OFFICE LOCATION:
Miami

Force Main Improvements, City of Dania Beach, Florida, Project Manager – Construction of 2,300 linear feet of 16" sanitary sewer force main under a joint project agreement between Dania Beach and FDOT. The project involved fast-track design to upgrade and relocate existing sanitary systems in advance of planned road improvements and to service local redevelopment. The project also involved significant traffic control, permitting, and post-design services. **Client:** City of Dania Beach, **Client Reference:** Dominic Orlando, P.E., (954) 924-3740

Water Main Improvements, City of Dania Beach, Florida, Project Manager – Construction of 4,338 linear feet of 12" potable water main under a joint project agreement between Dania Beach and FDOT. The project involved fast-track design to upgrade and relocate existing water systems in advance of planned road improvements and to service local redevelopment. The project also involved significant traffic control, permitting, and post-design services. **Client:** City of Dania Beach, **Client Reference:** Dominic Orlando, P.E., (954) 924-3740 **Begin/End Dates:** January 2006– August 2006

Flagler Avenue Parking Lot, Homestead, Florida – Site development project for the City of Homestead Community Redevelopment Agency to create a new one-acre, 45-space parking facility in the Downtown Business District. Project involves site layout, paving, drainage improvements, and integrated improvements with the adjacent South Dade Busway facility and alleyway. **Client:** City of Homestead CRA, **Client Representative:** Julio Brea, PE (305) 224-4772 **Begin/End Dates:** November 2007 – November 2008

Parking Lot at SW 4th Street, City of Homestead CRA – Fifteen car spaces parking lot located in the NW corner of SW 4th St. and SW 2nd Ave. The civil design includes French drain system, ornamental lighting, signing and pavement markings, landscaping and irrigation system. **Client:** City of Homestead CRA, **Client Representative:** Julio Brea, PE (305) 224-4772 **Begin/End Dates:** December 2004 – February 2005

Auduban Park, Homestead, Florida, Project Manager – Site development project for the City of Homestead Parks and Recreation Department to construct improvements to the existing City park. Project included of a new parking lot, site grading, multi-use path, lighting, and landscaping and post-design services. **Client:** City of Homestead Parks & Recreation Department, **Client Representative:** Julio Brea, PE (305) 224-4772 **End Date:** September 2008

Sample Road (SR-834) – 12" watermain and 12" forcemain extension for Broward County J.R.A.

Suncoast Parkway/SR-589 Sections 1A and 2A, Hillsborough and Pasco Counties for FDOT Turnpike District – Final design of a limited access highway (a new 4/6 lane toll facility) including a system to system connection with Veteran's Expressway, and partial interchange with Van Dyke Road. Project is part of a 41.6 mile facility, which begins at the connection with Veteran's Expressway in Hillsborough County and terminates at US-98 in northern Hernando County. **Client:** Florida's Turnpike **Client Representative:** Kevin Hoeflich, PE (850) 877-7275 **Begin/End Dates:** November 1993 – October 1997

Pioneer Village, Homestead, Florida, Project Engineer – Site development of a 15.5-acre parcel for 40 single-family residences for the City of Homestead Community Redevelopment Agency. Project included site planning and design, access roadway improvements, utility systems, stormwater management environmental resource permitting, and final platting of entire development. Responsible for the design of all water distribution and sanitary systems including regional pump station and preparation of construction contract documents. **Client:** City of Homestead, **Client Representative:** Julio Brea, PE (305) 224-4772 **Begin/End Dates: March 1997 – March 1999**

Port Labelle Development, Hendry County Florida, Project Engineer – Site development for 7 units for a total of over 9000 single-family residential units for the General Development Corporation. Project included site planning and design, access roadway improvements, utility systems, stormwater management environmental resource permitting, and final platting of entire development. Responsible for the design of all water distribution and sanitary systems and preparation of construction contract documents. **Client:** General Development Corp., **Client Representative:** George Avino **Date:** 1992

Key Biscayne Hotel and Villas, Key Biscayne, Florida, Project Engineer – Site development for a new major resort on Key Biscayne. The project involved a Development Regional Impact Study, site planning and all elements of site design, construction contract plans, and environmental permitting. Responsible for all site engineering including building locations, parking lot and site access configuration, lake excavation, utility relocations, and structural retaining wall design, and water distribution and sewer collection systems including a regional pump station. **Client:** VMS Realty Partners **Client Representative:** Eric Nesse **Begin/End Dates**: 1991-1993

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FERNANDO LARIOS
Project Engineer

City of Hialeah, Installation of finished water main of raw water transmission main, well maintenance pipeline and well site development to serve the City of Hialeah Reverse Osmosis Water Treatment Plan - Designer. Design of several underground piping which will serve 4 proposed deep water wells, as well as the new (under construction) City of Hialeah Reverse Osmosis Water Treatment Plant. Our design included: 6,720 L.F. of 30" D.I.P. Finish Water Main, 4,050 L.F. of 24" H.D.P.E. piping, 905 L.F. of 16" H.D.P.E. piping, 2,670 L.F. of 12" H.D.P.E. piping, 110 L.F. of 10" piping, 3,922 L.F. of Electrical Duct Bank, Site plans for each well (4). **Client:** City of Hialeah, **Contact:** Armando Vidal, PE (305) 556-3800, Begin/End Dates (Design) April 2011-December 2011

City of Miami, Silver Bluff Traffic Calming Phase II (Project No. B-30168B) and Priority III (Project No. B30168A), Project Manager/Design Engineer - Design of Traffic Calming Devices. The project involved the modification of 10 existing intersections within the Silver Bluff Area of the City of Miami with Traffic Calming Circles. The design included geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and signalization to meet Miami-Dade County Public Works and City of Miami standards. **Client:** City of Miami, **Contact:** Tatiana Acosta (305) 416-1263, **Begin/End Dates:** April 2009-August 2009

City of Miami, Traffic Calming Grove Area, Project No. B-30037A, Project Manager/Design Engineer - Design of Traffic Calming Devices. The project involved the modification of 4 existing intersections within the Coconut Grove Area of the City of Miami with Traffic Calming Circles and Flat-Topped Speed Hump. The design includes geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and signalization to meet Miami-Dade County Public Works and City of Miami standards. **Client:** City of Miami, **Contact:** Tatiana Acosta (305) 416-1263, **Begin/End Dates:** November 2008-August 2009

City of Miami, Flagami Traffic Calming Priority IV, Project No. B40672A, Project Manager/Design Engineer – Design of Traffic Calming Devices. The project involved the modification of existing intersections within the City of Miami with Traffic Calming Circles. The design included geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and pavement markings to meet Miami-Dade County Public Works and City of Miami Standards. **Client:** City of Miami, **Contact:** Tatiana Acosta (305) 416-1263, **Begin/End Dates:** December 2008-July 2009

Florida International University General Engineering Services, Miami, Florida, Project Engineer – **Client:** Florida International University, **Contact:** Alberto Delgado (305)348-4036

- S.W. 109 Avenue Improvements. Widening of 109 Avenue from two to four lanes from SW 9 Street to SW 10 Street to improve Ingress and Egress to and from the University. **Completed Date**: May 2007
- FIU Irrigation Permit. The project consisted of obtaining a 20-year Water Use Permit from South Florida Water Management District for 31 existing withdrawal facilities installed around University Park Campus. **Completed Date**: June 2008
- PG3 Site Improvements. General site improvements around the existing garage, improvements included drainage, sodding and irrigation system. **Completed Date**: October 2007
- W1 Building Access Road. Access Road reconstruction and new storage area. The project included drainage, limited landscape, irrigation and lighting system. **Completed Date**: March 2008
- FIU Soccer Field. The project involved the design of an NCAA Regulation Artificial Turf Soccer Field, drainage design, construction estimating, specifications and inspections. **Completed Date**: March 2006

EDUCATION:
B.S.M.E., Florida International University, 1993

YEARS OF EXPERIENCE:
26 years

PROFESSIONAL EXPERIENCE:
Mr. Larios has 26 years of experience in the design and construction phase services related to transportation projects. His work includes highway/roadway horizontal/vertical layout, drainage grading, earthwork, lighting, water and sewer system design, utility design, maintenance of traffic, construction estimates, project specifications and construction inspection. Duties also involve coordination with federal government, municipal government, and private clients.

OFFICE LOCATION:
Miami

Force Main Improvements, City of Dania Beach, Florida, Design Engineer – Construction of 2,300 linear feet of 16" sanitary sewer force main under a joint project agreement between Dania Beach and FDOT. The project involves fast-track design to upgrade and relocate existing sanitary systems in advance of planned road improvements and to service local redevelopment. The project also involves significant traffic control, permitting, and post-design services. **Client:** City of Dania Beach, **Contact:** Dominic Orlando, PE (954) 924-3740, **Begin/End Dates:** January 2006-August 2006

Water Main Improvement, City of Dania Beach, Florida, Design Engineer – Construction of 4,338 linear feet of 12" potable water main under a joint project agreement between Dania Beach and FDOT. Responsible for the water main design, plan production, and preparation of specifications. The project involves fast-track design to upgrade and relocate existing water systems in advance of planned road improvements and to service local redevelopment. The project also involves significant traffic control, permitting, and post-design services. **Client:** City of Dania Beach, **Contact:** Dominic Orlando, PE (954) 924-3740, **Begin/End Dates:** January 2006-August 2006

Martin Luther King, Jr. Boulevard, Miami, Florida, Design Engineer – Resurfacing restoration and rehabilitation (RRR) improvements for the Dr. Martin Luther King, Jr. Boulevard (NW 62nd Street). Responsible for Lighting System Design. Dr. Martin Luther King, Jr. Boulevard is a major urban road consisting generally of a four lane divided configuration with left and right turn lanes. The project corridor extends in two sections from NW 37th Avenue to NW 12th Avenue (under Miami-Dade County jurisdiction) and from NW 12th Avenue to I-95 (under City of Miami), with an approximate length of 2.56 miles and 0.64 miles respectively. The project design involves milling and resurfacing, sidewalk beautification and restoration, ADA ramp reconstruction, landscape restoration, new lighting and reconstruction of several linear parks. The project also includes coordination with FDOT, M-DCPWD and the City of Miami. **Client:** City of Miami, **Contact:** Kevin Brown, PE (305) 416-1090, **Begin/End Dates:** February 2005-May 2007

Virginia Key Beach Park, Miami, Florida, Design Engineer – Site reconstruction of the 8-acre park site and roadway improvements to Virginia Beach Drive and a circulation road adjacent to beach front and mangrove wetlands. The project included site design for reconstruction of a parking lot, storm-water management improvements, lighting system design, and permitting. The project also involved construction across Coastal Construction Control Line and impact analysis in a marine turtle habitat environment. Responsible for the design of site layout and new lighting systems. **Client:** City of Miami, **Contact:** Jose Lago, PE (305) 416-1252 **Begin/End Dates:** February 2005-May 2006

Lower Matacumbe Key Fire Station, Islamorada, Florida, Design Engineer – New emergency service facility on 0.36-acre site on Marlin Boulevard. Responsible for the design of conceptual site plan to incorporate 3420 square foot facility, preliminary design of closed drainage system, wetland delineation. Project also included geotechnical investigations and vegetation survey of the site. **Client:** Village of Islands, **Contact:** Zully Hemeyer (305) 664-2345, **Begin/End Dates:** November 2004-March 2006

South Dade Busway, Miami, Florida, Design Engineer – Construction of a 7.3 miles of roadway and bike path for Miami-Dade Transit. Responsible for the design of all roadway signalization, pavement marking, and drainage systems as well as plans and contract document production and construction administration. Responsible for project specifications and construction estimates. The project design involves intersection improvements, street lighting, signalization, maintenance of traffic, and engineered mitigation of in-situ contaminated soils within significant portions of the project corridor. Project is currently under construction and post-design services are in progress. **Client:** Miami-Dade Transit, **Contact:** Isabel Padron, PE (305)375-4504, **Begin/End Dates:** April 2001-January 2008

NE 38th Street, Miami, Florida, Design Engineer – Reconstruction of 0.22 miles of urban collector roadway between North Miami Avenue and NE 2nd Avenue in downtown Miami. Improvements consist of milling and resurfacing, widening, drainage and street lighting improvements. The project also includes coordination with a light rail system. Responsible for roadway design and plan production. **Client:** City of Miami, **Contact:** Tatiana Acosta (305)416-1263, **Begin/End Dates:** February 2005-May 2006

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NARCISO TOME
Senior Designer

Brickell Key Bridge Rehabilitation (Bridge 876414), City of Miami - The project entailed the structural assessment and development of rehabilitation plans necessary to upgrade the bridge condition to a satisfactory level. The scope included structural inspection above and below the waterline, survey of roadway approaches, regrade roadway approaches, design of concrete repairs to all bridge components (piling, pile caps, precast bridge beams, precast deck slab, cast in place deck topping and bridge railings), prepare detailed construction plans/specifications/technical special provisions, prepare all necessary permit packages for local and state authorities (City of Miami, Dept of Environmental Resource Management, South Florida Water and Sewer Authority, Coast Guard and Army Corps of Engineers), perform LRFR load rating, prepare construction cost estimate and provide utility coordination. The critical repairs consisted of repairs to damaged precast piling by pile jacketing with cathodic protection and repair to four pile bent caps by way of concrete restoration combined with external carbon fiber strengthening and cathodic protection. **Client:** City of Miami, **Contact:** Jose Lago, P.E. (305) 416-1252, **Begin/End Date:** September 2009 – September 2011

Grove Isle Bridge Low Level Bridge Rehabilitation Miami-Dade County, Florida, Design Engineer - Project involves the rehabilitation of a 28 span low-level bridge over Biscayne. The rehabilitation consists of repairing prestressed/post tensioned deck/slab units, cast-in-place-bent caps and prestressed piles. Assisted the project manager in the bridge inspection, and for developing the contract plans. **Client:** Grove Isles Associates, LTD, **Contact:** Larry Rothstein (305)854-6803, **Begin/End Dates**: 2006-2007

I-95 Over Lake Washington Road, Brevard County, F - Project involved the widening of bridge nos. 700123 (northbound) and 700040 (southbound) along I-95 over Lake Washington Road. The twin bridges are 4-span, AASHTO Type II girder bridges with CIP continuous deck superstructure with an overall length of 172 feet. The cap/multi-column bents are founded on 18" square prestressed piles. Senior Technician for final Plans preparation, quality control, construction cost estimate, and quantities. **Client:** FDOT District 5, **Contact:** Neil Kennis, PE (386)943-5419, **Begin/End Dates:** 2005-2006

45th Street Bridge of the Florida Turnpike, Palm Beach County - Senior Technician for final Plans preparation, quality control, construction cost estimate, and quantities. Palm Beach County, Florida. **Client:** Palm Beach County Engineering & Public Works, **Contact:** Basher Khan, PE (561)684-4191, **Begin/End Date:** 2005 - 2007

Haverhill Road Bridge Over LWDD L-14 Canal - Engineering services for bridge replacement. Senior Technician for final construction document preparation and construction cost estimate. Palm Beach County, Florida **Client:** Palm Beach County **Contact:** Mark Tomlinsen, PE (561) 684-4191, **Begin/End Date:** 2001-2002

Haverhill Road Bridge Over EPB-10 Canal - Senior Technician for final construction document preparation and construction cost estimate. The bridge also included a utility support structure for carrying a 10" force main over the canal. Palm Beach County, Florida **Client:** Palm Beach County **Contact:** Mark Tomlinsen, PE (561) 684-4191, **Begin/End Date:** 2001-2002

SR-836 Over SR-826 Bridge Repair, Miami-Dade County, Florida - Senior technician, responsible for final construction document preparation of superstructure repair of this AASHTO type superstructure type bridge, including inspection and assessment of damaged superstructure. Miami-Dade County, Florida. *Client**: FDOT District 6***, *Contact:* ***Luis Amigo (305)470-5436*** **Begin/End Date:** 2000-2001

EDUCATION:
Miami Dade College - 1980

YEARS OF EXPERIENCE:
25 years

PROFESSIONAL EXPERIENCE:
Mr. Tome has over 25 years of engineering experience as a designer and senior engineering technician. His experience ranges a wide variety of engineering discipline, including structural, roadway, civil, electrical and mechanical engineering. In particular, he's been responsible for plans preparation, structural inspection, design survey and cost estimate.

Graves Avenue over I-4 - Senior Technician for final Plans preparation and quality control, construction cost estimate. Palm Beach County, Florida.

SR-112/NW 41 Street over Indian Creek Canal Bridge Repair - Senior Technician, responsible for final construction document preparation of superstructure repair and maintenance painting of this steel girder superstructure bridge. Services included inspection and assessment of damaged bridge railings and preparation of painting specs. Dade County, Florida.

West 76 Street Roadway Improvement – Designer for the engineering design services includes master plan preparation/public involvement, roadway plan and profile design, pavement design, intersection profiles, drainage structure design, MOT plan, signing and pavement marking and signalization. The project also involved the coordination with utility companies biding services and construction management services. Dade County, Florida.

Sunny Isles Bridge and Flyover Retrofit - Engineering services for bridge repair and renovation. As a sub-consultant, BCC Engineering provided structural inspection and plans preparation for the flyover substructure repair, concrete bridge deck sealing, and post-design services. Miami-Dade County, Florida, completed in 1999.

SR-5/US-1 over Coral Gable Canal Bridge Repair. - Senior technician, responsible for final construction document preparation of superstructure repair and maintenance painting of this steel girder superstructure bridge. Services included inspection and assessment of damaged bridge railings, analysis of existing beam condition. Miami-Dade County, Florida

Ft. Lauderdale International Airport Access Interchange - Senior technician, responsible for final construction document preparation of miscellaneous structural design. Engineering services include the design of MSE walls, critical temporary sheet piling, high mast light pole design, overhead and cantilever sign structure design and shop drawing review. Broward County, Florida.

Blue Heron Blvd Roadway Improvement - Senior technician responsible for the design and final construction document preparation of noise wall/privacy wall design and post design services. Palm Beach County, Florida.

QNIP Program, Dade County, Florida – Designer for Quality Neighborhood Improvement Program. Responsible for inspecting asphalt pavement resurfacing, drainage construction, sidewalk construction, signing and pavement marking.

Ft. Lauderdale International Airport Access Interchange - Senior technician, responsible for final construction document preparation of miscellaneous structural design. Engineering services include the design of MSE walls, critical temporary sheet piling, high mast light pole design, overhead and cantilever sign structure design and shop drawing review. Broward County, Florida.

Venetian Causeway Historical Bridge Replacement/Rehabilitation - Senior Technician for final Plans preparation, quality control, construction cost estimate, quantities and inspection of the bridge. Dade County, Florida. **Client:** FDOT District 6, **Contact**: Gabriel Romanach, PE (305) 470-5100 **Begin/End Date:** 1992-1994

NW 17 Avenue Bridge Over the Miami River - Technician for final Plans preparation, quality control, construction cost estimate, and quantities. Dade County, Florida

NE 2 Ave Bridge over the Miami River - Technician for final Plans preparation, quality control, construction cost estimate, and quantities. Dade County, Florida

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MANUEL INASTRILLA
Highway Designer

SR-5/US-1 Federal Highway from Young Circle to Sheridan Street – Roadway designer assisting in the preparation of the roadway plans and responsible for electronic delivery for this 1.3 mile RRR project. **Client:** FDOT District 4, **Contact:** Mr. James Hughes, P.E. 954-777-4419, **Begin/End Dates:** March 2006 – Ongoing

Hollywood Boulevard from Young Circle to Intracoastal Waterway – Project Engineer assisting in the preparation of the roadway plans and responsible for electronic delivery for this 1.4 mile RRR project. Project includes widening for installation of raised landscape medians as well as drainage improvements. **Client:** FDOT District 4, **Contact:** Mr. James Hughes, P.E. 954-777-4419, **Begin/End Dates:** March 2006 – Ongoing

Blue Heron Blvd. (SR 708) from Avenue S to Old Dixie Highway, FDOT District 4 – Designer assisting in the completion of roadway and signing and pavement marking plans for this 0.93 miles project in West Palm Beach County. **Client:** FDOT District 4, **Contact:** Mr. Jean Hanna (954)777-4440, **Begin/End Dates:** June 2003-March 2007.

SR 924 Toll Plaza Modifications – Designer assisting in the preparation of the roadway geometry and maintenance of traffic plans for this toll plaza modification. This project consists of converting two existing Sun Pass lanes to Sun Pass Express Lanes. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates:** June 2006 – February 2007.

SR 878 Eastbound Exit Ramp at SW 87 Avenue – Designer assisting in the preparation of the roadway geometry and maintenance of traffic plans for this ramp modification in Miami-Dade County. **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates:** March 2006 – October 2006.

SR 836 Eastbound Exit Ramp at NW 45 Avenue – Designer assisting in the preparation of the roadway and maintenance of traffic plans for this ramp modification in Miami-Dade County. Miami Dade County Expressway Authority – **Client:** Miami Dade County Expressway Authority, **Contact:** Mr. Alfred Lurigados, P.E. 305-637-3277, **Begin/End Dates:** March 2006 – Present.

SR-826 and NW 154th Street Interchange Improvements, FDOT District 6 – Designer responsible for assisting in the completion of the roadway plans for this project in Town of Miami Lakes. **Client:** FDOT District 6, **Contact:** Mr. Jason Chang (305)470-5331, **Begin/End Dates:** August 2004-January 2007.

SW 127th Avenue from SW 88th Street to SW 120th Street, Miami Dade County – Designer responsible for assisting in the development of roadway, signing and pavement markings and signalization plans for this 2 mile complete roadway reconstruction project including new culvert design. **Client:** Miami-Dade County Public Works Dept., **Contact:** Mr. Adolfo Fernandez (305)375-1565, **Begin/End Dates:** August 2003-February 2007.

SW 160th Street from SW 137th Avenue to SW 147th Avenue- Designer responsible for assisting in the development of roadway, signing and pavement markings and signalization plans for this 1 mile complete roadway reconstruction project including new bridge design. **Client:** Miami-Dade County Public Works Dept., **Contact:** Mr. Adolfo Fernandez (305)375-1565, **Begin/End Dates:** November 2004-February 2007.

Brickell Avenue from SE 15th Road to Coral Way, FDOT District 6 – Designer responsible for assisting in the completion for this 0.22 mile project including new signalization plans, signing and pavement markings and rigid pavement roadway widening. **Client:** FDOT District 6, **Contact:** Mr. David Mendez (305)470-5207, **Begin/End Dates:** June 2004-October 2006.

Krome Avenue and SW 336th Street, FDOT District 6 – Designer responsible for assisting in the completion of intersection improvements at this location including 0.05 miles of roadway, signing and pavement markings and signalization plans **Client:** FDOT District 6, **Contact:** Mr. David Mendez (305)470-5207, **Begin/End Dates:** November 2004-October 2006.

PROJECT ASSIGNMENT:
Highway Designer

OFFICE LOCATION:
Miami, Florida

YEARS OF EXPERIENCE:
6 years

PROFESSIONAL EXPERIENCE:
Mr. Inastrilla has over 6 years of experience in the design and the production management of highway plans for projects from GDOT, FDOT, Miami-Dade County, and other municipalities. His experience includes traffic studies, data collection, roadway design, maintenance of traffic, signing and pavement markings and signalization. He has a thorough knowledge of Microstation, Auto-Cad, EDI, Geopak and Pedds. Mr. Inastrilla has been employed at SZA since 2003

Harding Avenue from 75th Street to 88th Street, FDOT, District 6 – Designer responsible assisting in the roadway improvements within this project including 0.95 miles of milling and resurfacing, signing and pavement markings and minor landscaping and signalization improvements. **Client:** FDOT District 6, **Contact:** Mr. David Mendez (305)470-5207, **Begin/End Dates:** June 2003-January 2007.

City of Cochran, GDOT – This 7 intersection project includes sidewalk reconstruction, new pavement markings and signalization improvements upgrades from span wire to mast arm.

City of Covington, GDOT – This 15 intersection project includes sidewalk reconstruction, new pavement markings and signalization improvements upgrades from span wire to mast arm.

City of Carrolton, GDOT – This 15 intersection project includes sidewalk reconstruction, new pavement markings and signalization improvements upgrades from span wire to mast arm

City of Toccoa, GDOT – This 7 intersection project includes sidewalk reconstruction, new pavement markings and signalization improvements upgrades from span wire to mast arm.

Old Salem Connector, Gwinnet County, Georgia - Developed traffic projections and capacity analysis to support the design of a one-half mile roadway on new alignment in Rockdale County.

Indian Trail Timing Project, County, Georgia – Developed, implemented and fine-tuned traffic signal timing for 14 intersections in Gwinnett County.

Indian Trail Signal Design, County, Georgia – This 14 intersection project included sidewalk reconstruction, new pavement markings and signalization improvements upgrades from span wire to mast arm.

Woodstock Traffic Study, City of Woodstock, Georgia – Initial evaluations were made to assess the current operating conditions at two intersections in the downtown area. This evaluation included the collection, analysis of existing traffic data and field assessments of the current signal operations. Based on the evaluation, revised phasing and timing operations were developed and implemented.

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Oscar Perez
Senior CADD Designer

Downtown Infrastructure Street Phases I and II, City of Miami, Florida, Senior CADD Designer – Street improvements (RRR) in the Miami Downtown project. The project covers all the streets at the center of Miami Downtown under jurisdiction of the City of Miami and extends North to South from North 5th to South 4th Street and West to East from I-95 to Biscayne Boulevard.

Virginia Key Beach Park, Miami, Florida, Senior CADD Designer – Site reconstruction and stormwater management system for the 8-acre public beach park and access road. Responsible for the drafting of all the plans. The project design involves a 6-acres parking lot, lighting systems, and circulation road adjacent to the beachfront and mangrove wetland. Construction across the Coastal Construction Line is also involved.

NE 38th Street, Miami, Florida, Senior CADD Designer – Reconstruction of 0.22 miles of urban collector roadway between North Miami Avenue and NE 2nd Avenue in downtown Miami.

NE 71st Street Storm Sewers, Miami, Florida, Senior CADD Designer – Roadway improvements to two miles of urban roads and stormwater management systems to mitigate flooding conditions within 35 acres of urban watershed. Responsible for the drafting of the plans in ACAD.

45th Street / Haverhill Road, Palm Beach County, Florida, Senior CADD Designer – Roadway reconstruction and widening of 1.3 miles of urban arterial between Jog Road and Haverhill Road.

Liberty City, Miami, Florida, Senior CADD Designer – Widening of 1.8 miles of urban roadway. Improvements consist of milling and resurfacing, widening, drainage improvements, streetscaping, and street lighting improvements.

Martin Luther King Jr. Boulevard, Miami, Florida, Senior CADD Designer – The Fast-track production of Resurfacing restoration and rehabilitation (RRR) improvements for the Dr. Martin Luther King, Jr. Boulevard (NW 62nd Street). Dr. Martin Luther King, Jr. Boulevard is a major urban road consisting generally of a four lane divided configuration with left and right turn lanes. The project corridor extends in two sections from NW 37th Avenue to NW 12th Avenue (under Miami-Dade County jurisdiction) and from NW 12th Avenue to I-95 (under City of Miami), with an approximate length of 2.56 miles and 0.64 miles respectively. Responsible for the drafting of the roadway plans.

Silver Beach Road, Palm Beach County, Florida, Senior CADD Designer – Roadway reconstruction and widening of 0.9 miles of urban collector between N. Congress Ave. and Old Dixie Highway. The project involves widening the road to three lanes, milling and resurfacing, drainage improvements, right of way acquisition, design of two new roundabouts, FEC Railroad crossing, utility coordination, signing, and pavement marking.

FIU General Engineering Services, Miami, Florida, Senior CADD Designer - Tasks Include:

- Construction of the SW 107th Avenue north bound left turn closing at block 1100.

EDUCATION:
A.A. Architectural Program, Miami-Dade Community College, 1985

YEARS OF EXPERIENCE:
18 years

PROFESSIONAL EXPERIENCE:
Mr. Perez has over 18 years of experience in the plan production phase related to transportation projects. His work includes the production of geometry, paving, grading, pavement marking, demolition and signalization plans.

- FIU Parking Garage Buildings 3 and 4
- FIU Recreation Facility Building
- FIU Track and Field

Biscayne Boulevard, State Road No. 5, Miami, Florida – Reconstruction of 0.6 miles of urban arterial roadway between NE 67th and NE 78th Streets for FDOT District 6.

South Dade Busway, Miami, Florida – Senior CADD for roadway and site storm drainage and stormwater management systems for 7.3 miles of roadway and bike path to be used for commuter bus services. Responsible for the drafting of all plans in MicroStation.

Other Experience:

Master Utility Location – Coordinate between utility location sub consultant and client's surveyor. Determined areas throughout the airport and produce drawings for utility locator. Produced master plan for the Luis Munos Marin International Airport, San Juan, Puerto Rico

Air Rescue Fighting Facility (ARFF) – Coordinate between, civil, architectural, mechanical, electrical and plumbing the design and operation of the building.

Dual Midfield Taxiway – This project consisted on the widening of the existing single taxiway connecting the two main runways, to two taxiways. All buildings and utilities within the free area will have to be removed. Work was divided into landside/airside electrical and landside/airside utilities.

South General Aviation (SGA) – This project consisted in providing utility services to new south general aviation building, parking facilities for tenants and small planes at Luis Munos Marin International Airport, San Juan, Puerto Rico

MIA 1000 Vehicle Parking Lot Phases I and II – This project consisted of demolition and reconstruction of a parking lot, lighting, landscape and re-design of entire parking facility.

Palm Beach International Airport North County Airport Hangar – Senior CADD designer on the design for an airport hangar, parking lot, paving and grading, landscape, irrigation system and utilities.

Town of Surfside Remodeling, Florida– Senior CADD designer on the remodeling of a town hall building.

ABBOTT Avenue Reconstruction – Senior CADD designer on the reconstruction of Abbott Avenue located between 94th and 95th Street. Responsible for paving and grading, pavement marking and signalization.

Water Park at Community Center – This project consisted on providing different options design for a future Water Park for the Town of Surfside.

Traffic Circle on Byron Avenue and 95th Street – Senior CADD designer on the design of a traffic circle, paving and grading, landscape and irrigation system.

Traffic Island on Bay Drive and Dickens Avenue– Senior CADD designer on the design of a traffic circle, paving and grading, landscape and irrigation system.

Traffic Island on Hawthorne Avenue and 89th Street – Senior CADD designer on the design of a traffic circle, paving and grading, landscape and irrigation system.

ATLAS – This project consisted on the making of specific Atlas for water, sewer, drainage, and gas lines for the Town of Surfside.

A1A Corridor Master Plan – This project consisted on producing a master design drawing standard from 88th Street to 95th Street between Harding Avenue and Collins Avenue. This master design will show new landscape, sidewalks handicapped ramps and crosswalks.

SR-973 Galloway LOA17 – Senior CADD producing existing and proposed lay out plans in MicroStation.

Perimeter Road package I – Drainage structures, general drafting.

SR-953 LeJeune Road – Draw in Micro Station J. proposed and existing lay out. Pavement marking and signage, existing utilities, notes.

Miami International Airport, Terminal "H" Improvements – Create cover sheets, sections, details, tabulation of quantities, xref. Base drawings general drafting.

Indian Creek Drive A1A – Draw in Micro Station J. create 4 new sheets at 50 scale showing prop. Baseline and Existing elevations.

Phillis Wheatley Tower and Transmitter Building – Create base drawing and begin drainage design.

Perimeter Road – Create base drawing for future Fuel Farm at MIA.

E.N Bechamps and Associates, Inc., Senior CAD Operator, Design Technician, June 1987 to October 2000, Responsible for:

Restriping of Lower Vehicular Drive. Miami International Airport (DCAD) – Pavement Marking and Signage Design

Package C-2 Upper and Lower Drive Modifications Widening and Auxiliary Curbside Lanes, Miami International Airport (DCAD) – Pavement marking and signage distribution, general drafting.

Package B-1 Central Collection Plaza – In charge of pavement marking and signage distribution design, general drafting.

Package A Additional Lanes through Parking Garages, Miami International Airport (DCAD) – Pavement marking and signage design, relocation of existing signage, general drafting.

Package A-1 Upper Vehicular Drive Ramp and Extension (DCAD) – General drafting and design of new pavement marking and signage

Package B-2 New Park 1 Building, addition and modification of existing Park 5. Miami International Airport (DCAD) – Duties: Design of pavement markings and signage distribution for proposed Park 7 garage.

Package A-3 – Responsible for designing pavement marking and signalization to direct traffic.

Package B-1 Park 7 – In charge of all pavement marking and signage and mounting types for each sign. Also did some geometry and handicap ramps. Typical detail sheets.

Package C-1 – Responsible for upper and lower drives pavement marking and signalization plus layout of geometry and grading plans. Typical detail sheet. Drive Extension South Side and Drive Modifications (Phase One) - Responsible for complete pavement marking and signage base lien curve, data, curve data coordinates, geometry and grading plan, typical detail sheets and profiles.

SR 811 from Commercial Boulevard to SW 2nd Street (5.24 miles highway design) – General drafting, pavement markings and signage.

Pan American Bridge – Responsible for creating sheets for Geometry layout and general structural detail, dimensions and notes, layout of drainage and water and sewer.

701 Waterford at Blue Lagoon Drive – Responsible for creating sheets for Geometry layout and complete civil details plus water and sewer plans. Plan and profile. Paving and drainage, general notes, paving and drainage details, cover sheet.

Tamiami Branch Post Office – Responsible for creating cover sheet and sheets for project layout all geometry and grading plan and profile plans. Water and Sewer. Milam Dairy Branch Post Office - Cover sheet, general notes, and geometry. Water and Sewer Plans.

Fair Expo – Responsible for generating accurate location for new signs along Coral Way and adjacent street to direct people to Youth Fair. Design signs and Specific dimension and mounting details. Plan entire Youth Fair and F.I.U.

N.W. 199 Street Culvert Storm Water Utility Capital – Complete layout of water and Sewer plans plus plan and profile and geometry and grading.

Single Parent Family Housing and Resource Center – Responsible of layout of columns, columns locations by coordinate, general notes and schedules, detailing of general structural sections and detail (different scales same sheet). Layout of steel plan. Roof plan and ventilation details, complete details and Foundation plan, including pile detail, dimensions and notes and also typical Details.

Package C-4 Holding Lots and Access Roads – Layout geometry, baseline, pavement marking and signalization.

Lincoln Road Development Group, Proposed Miami Beach Theater – General structural details.

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JAIME TOVAR
Designer

SR-836 / I-395 from NE 2nd Avenue to West of MacArthur Causeway Bridge – Assisting in the preparation and completion of structural plans for the widening of 4 existing bridges. The project also included multiple MSE walls. **Client**: FDOT, **Contact:** Vilma Croft, P.E., 305-470-5100, **Begin/End Dates:** April 2011 to present.

District IV I-95 Broward Express – Assisting in the preparation and completion of structural plans for the widening of 5 existing bridges. The project also included multiple MSE walls and Temporary Sheet Pile walls. **Client**: FDOT, **Contact:** Donovan Pessoa, P.E., 305-777-4350, **Begin/End Dates:** March 2011 to present.

NW 42nd Avenue Bridge Replacement, Miami Dade County – Assisting in the preparation and completion of preliminary structural plans for the bridge replacement, which will carry NW 42nd Ave over Carol City Canal. **Client**: City of Miami Gardens, **Contact:** 305-622-8000, **Begin/End Dates:** May 2011 to present

SR 112 / Arthur Godfrey Road, from Alton Road to Collins Avenue, FDOT District VI – Assisting in the preparation and completion of Structural Rehabilitation plans for two bridges along this RRR project. Also responsible for the development of deficiency schedules and corresponding details for the two bridges in the project. **Client:** FDOT District VI, **Contact:** Adriana Manzanares, P.E. 305-470-5283, **Begin/End Dates:** November 2010 to present.

SR 874 Don Shula Expressway from Kendall Drive / SW 88th Street to Miller Drive / SW 56th Street. MDX – Assisting in the preparation and completion of structural plans for the widening and rehabilitation of 5 existing bridges. The project also included multiple MSE walls, Temporary Sheet Pile walls, Noise Barrier walls and Traffic Barrier walls. **Client**: MDX, **Contact:** Alfred Lurigados, P.E., 305-637-3277, **Begin/End Dates:** March 2010 to December 2010.

Alexander Orr, Jr. Water Treatment Plant Improvements, MDWASD – Assisting in the preparation and completion of Civil, Architectural and Structural plans for two facilities that will house the Chlorine On-Site Generation (OSG) system equipment and tanks. Also responsible for other tasks such as: water analysis data collection, assisting in the testing of three wells, gap analysis, among others. This project also includes the remodeling of a structural building and the design of another that will house lime/slurry aging tanks, pumps and equipment. **Client:** Miami-Dade Water and Sewer Department, **Contact:** Brian Trujillo, PE (305) 588-4565, **Begin/End Dates:** June 2009-June 2010.

EDUCATION:
Bachelors of Science in Civil Engineering, Universidad de la Salle, Bogota Colombia, 1996

YEARS OF EXPERIENCE:
15 years

PROFESSIONAL EXPERIENCE:
Mr. Tovar has over 15 years of engineering experience in roadway construction, assisting with the preparation and development of contract plans for projects consisting of all structural/ roadway/site civil work for FDOT, Miami-Dade County, and other municipalities. Most of his experience was gain in the Country of Colombia.

METRIC ENGINEERING
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ANTONIO DIAZ, P.E.
Senior Project Engineer/Project Adminstrator

PROFESSIONAL EXPERIENCE:

July 2010 – Present: CEI Services Keys 2010: Senior Project Engineer in charge of the CEI services contract for the adminstration of approximately 15 projects scheduled as part of the FDOT Keys Residency Contract through January 2012. Total value of construction projects is approximately 21 million in which 16 milliion is primarily roadway milling and resurfacing projects with some drainage and widening of SR 5/US1 with the remaining 5million spread among bridge rehabilitation projects. The scope of the repairs to the bridges primarily consists of concrete spall repair work and the installation of cathodic protection (impressed and galvanic, including bulk zinc anode and zinc metalizing applications) systems to pilings and drilled shafts that are either galvanic or impressed current. **FDOT Reference: Charlie Phinizy 305-481-0064. (Start: 7/2010 – End: pending)**

March 2009 – July 2010: CEI Services for 7 Mile Bridge Tendon Replacement Project. Work on the Seven Mile Bridge includes removal and replacement of three tendons that were identified by previous inspection to have corrosion. Work also includes the repair of eleven expansion joint diaphragms by construction of internal reinforced concrete buttresses. The concrete used for the buttress construction was a Self Consolidating Concrete (SCC) mix. In charge of overseeing the contractor's operations required for the cutting and replacement of the bridge tendons at span 265, 243 and 61. Reviewed contractor's work plan in order to ensure proper MOT, sequence of work, means and methods for strand replacement and all required coordination for emergency service access and public information procedures. **FDOT Reference: Charlie Phinizy 305-481-0064. (Start: 4/2007 – End: Aug 2010)**

March 2009 – May 2010: CEI Services for Grove Isle Bridge Rehabilitation. In charge of overseeing the rehabilitation of the Grove Isle Bridge over Biscayne Bay. Improvements to the bridge consist of repairs to concrete deficiencies along concrete piles using a wet lay-up procedure (pile wrapping procedure), repairs to bent caps and along the underside of both prestressed and cast-in-place deck slab units. Concrete repairs also include traffic barriers and the cleaning and sealing of concrete deck. Replacement of the navigational lighting and repair of corroded section of sanitary pipe are also included. **Reference: Sergio Gonzalez 305-235-5098 (Start: 03/2009 End:07/2009)**

January 1997 - January 1998: Peter Kiewit Sons', Inc., Omaha, Nebraska (Gilbert Southern Corp.) Project Engineer. S.R. 76 Bridge Replacement Project – Indiantown, Florida. Approximate dollar amount of the work = $3,200,000. The scope of the project included replacement of eleven low level bridges with either round, elliptical or concrete box culvert sections for drainage service for a 600 acre orange grove. In charge of all cost tracking, quantities, submittals, correspondence and subcontract agreements for the project. Assisted the project manager in the planning, safety and implementation of field operations. Prepared all requests for payment and coordinated with the owner for the review of monthly quantities and pay requests. **Reference: Joe Pappitto 954-835-2228 (Start: 01/1997 End:01/1998)**

January 1995 - January 1996: Project Engineer (Gilbert Southern). Sheridan Street Draw Bridge Rehabilitation – Hollywood, Florida. Approximate dollar amount of the project = $3,000,000. The scope of the project included replacement of major structural steel, grating, electrical wiring and controls and changing of existing machinery with a hydraulic system. In addition, new rip rap slope and sea wall was required along the east side of the intracoastal waterway. In charge of all cost tracking, quantities, submittals and subcontract agreements for the project. Assisted the project manager in the planning and implementation of field operations. Prepared all requests for payment and coordinated with the owner for the review of monthly quantities and pay requests. **Reference: Joe Pappitto 954-835-2228 (Start: 01/1995 End: 01/1996)**

EDUCATION:

University of Miami, Coral Gables, Florida. Bachelor of Science in Civil Engineering (1994)
Professional Engineer P.E. 65149 (Florida)
Fundamental of Engineering Exam Certificate NO. 20901 INE (Puerto Rico)
State Certified General Contractor CGC 1505833 (Florida)
State Certified Roofing Contractor CCC 1326269 (Florida)
State of Florida Independent Adjuster E105579 (Florida)

PROFESSIONAL CERTIFICATIONS:

TIN # D200000711790
Wind Loads for Buildings (ASCE-7) West Palm Beach, FL Dec 2005

Xactimate Advanced Estimating Los Angeles, CA June 21-22, 2004

Kiewit Superintendents School Omaha, NE 2001

Kiewit Scheduling School Omaha, NE 2000

Kiewit Superintendents School Atlanta, GA 2000

Kiewit Shoring School Omaha, NE 1997

PTI – Certified Post-Tensioning Installer Level 1

FDOT Critical Structures Contraction Issues – Self Study Course

CTQP – QC Manager

ATSSA MOT Advanced

SSPC C3 Course Lead Paint Removal

YEARS OF EXPERIENCE: 15 Years

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FELIX RODRIGUEZ
Project Administrator

PROFESSIONAL EXPERIENCE: Mr. Rodriguez has 20 years of civil engineering, roadway construction, I.T.S. implementation, and canal dredging experience as a Project Administrator. He worked for 15 years with the Florida Department of Transportation. During his highly rewarding tenure with FDOT, Mr. Rodriguez served as Contract Manager, Executive Assistant, Administrative Services Director, and I.T.S. Implementation Engineer. Additionally, he worked for the Florida's Turnpike Enterprise as the Facilities and Telecommunications Director and for FEMA as Construction Manager. During Hurricane Wilma, Mr. Rodriguez assisted in the organization, inspection and documentation of the District-wide Emergency Consultant Engineering and Inspection Services in for FDOT Dist 6. Currently, Mr. Rodriguez is serving as the Project Administrator on three highly visible roadway improvement projects for the FDOT District 6.

EDUCATION:
Broward Community College, Davie, FL, Completed 1½ years Associate of Arts in Business Administration before accepting a management position with the Florida Department of Transportation

PROFESSIONAL CERTIFICATIONS:
TIN #R362721753490
IMSA Work Zone Safety Specialist
IMSA Traffic Signal Technician L 1 & 2
Troxler Nuclear Safety Gauge
CMEC ACI Concrete Field Testing
FDOT Construction Academy
CTQP Earthwork Level 1&2
CTQP Concrete Field Technician

March 2008 – Present: FDOT D6 Florida Keys CEI Residency. Project Administrator. Responsible for the complete oversight and administration of various roadway projects within Monroe County. Responsibilities include providing constructability reviews of assigned projects; preparing a community awareness plan for each project and coordinating with stakeholders in the project; interpreting contract documents (contract, special provisions, plans, etc.) and ensuring contractor compliance therewith; coordinating between the engineer of record, contractor, and other affected parties; providing the testing and documentation required by FDOT specifications and procedures; and, recommending acceptance of assigned projects. FDOT Reference: Charlie Phinizy, (305) 481-0064

July 2007 – March 2008: City of Miami Capital Improvement Department Project, Project Manager. Manage multiple construction projects in a non-limited access urban setting for the City of Miami Capital Improvement Department. Serve as a direct Construction Contract Administrator on some projects and direct Construction Engineering Inspection Consultants in the management of day-to-day activities of construction projects. Provide financial project analysis of assigned projects, as well as process work orders, review action on change orders, and recommend course of action to the City's upper management for approval of the City Commission. Construction value of projects: $25 million. Reference: David Mendez, P.E. (305) 416-1240

July 2005 – July 2007: City of Miami Project, Downtown Infrastructure St. Phase I & II ($6 million), Virginia Key Beach Park Parking Lot & Road Reconstruction ($3.5 million), Project Administrator. Scope of work involved roadway milling & resurfacing, curb & gutter and sidewalk reconstruction, remove & replace ADA ramps, landscaping, drainage system in a highly urbanized area requiring substantial coordination with businesses and governmental agencies. Reference: Lionel Zapata (305) 216-2056.

November 2005 – December 2005: Hurricane Wilma Districtwide Inspection & Documentation, Sr Inspector. Emergency Consultant Engineering and Inspection Services for FDOT D-6 in Miami-Dade County for the restoration of traffic signals. Reference: Gonzalo Guerra, P.E., (305) 796-4091.

September 2004 – May 2005: FEMA Canal Repair, Restoration & Sediment Handling Project, Miami-Dade Department of Environmental Resource Management, Construction Manager. Canal dredging program in conjunction with the Federal Government and the Department of Environmental Resources Management (DERM). Primary responsibilities included project administration on various canal dredging projects throughout Miami-Dade County and managing multiple contractors. Established the monitoring and reporting protocols of production activities to ensure project objectives are achieved. Represented the client (DERM-DORM) in issues involving contractor performance. DERM Reference: Marina Blanco-Pape, P.E., (305) 372-6875.

October 2003 – September 2004: Various Administrative and Management duties for Metric Engineering.

May 2000 – October 2003: Florida's Turnpike Enterprise, Ft. Lauderdale, Florida, Director, Facilities and Telecommunication. Establish methodologies to efficiently maintain assigned assets including in excess of 500 buildings, motorist aid call box system, UHF radio system, and microwave telephone system. Managed an annual budget in excess of $26 million. Directed activities of an in-house & consultant staff of over 60 persons. FDOT Ref: Mr. Chris Warren, P.E., 407-532-3999.

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RAUL DRIGGS, Ph.D., P.E.
Senior Transportation Engineer

Districtwide Traffic Operations Studies Consultant Services - The general purpose of this contract is to provide traffic engineering services through the development of various traffic operations studies that will be identified for intersections, arterials, etc., and related improvement recommendations and evaluations. **Client:** FDOT – District 6, **Contact:** Eman Gomaa, EI (305)470-5314, **Begin/End Dates:** January 2010 – Ongoing

Districtwide PD&E Consultant - PD&E Study to perform miscellaneous engineering and environmental studies on specific portions of transportation improvement projects and others associated tasks such as implementation of the ETDM and Socio-cultural effects, etc. **Client:** FDOT – District 6, **Contact:** Bao Ying Wang, PE (305)470-5211, **Begin/End Dates:** April 2009 – Ongoing

I-395 PD&E Study in Miami-Dade County for FDOT District 6 – The PD&E Study entails the preparation of EIS for a proposal to improve Interstate Route I-395 in Miami-Dade, Florida. The proposed improvement would involve the reconstruction of I-395 from I-95/Midtown Interchange to Biscayne Bay, a distance of 1.2 miles. Improvements to the corridor are considered necessary to provide for the existing and projected traffic demand. Alternatives under consideration include 1) taking no action; 2) elevated reconstruction with ramps at Midtown Interchange; 3) elevated reconstruction with ramps at Miami Avenue; 4) a tunnel design and 5) an open-cut design (depressed expressway). The project will be developed following the **ETDM** methodology. The project will be screened via the EST by the ETAT members and we will be in constant communication with them throughout the duration of the study to ensure we have a buildable and permitable project at the completion of the study. **Client:** FDOT District 6**, Contact:** Vilma Croft, PE, 305-470-5240, **Begin/End Dates:** June 2006-July 2010

SR-836 PD&E Study from NW 17th Avenue Interchange to Midtown Interchange in Miami-Dade County for FDOT District 6. The project involves the potential realignment, capacity and geometric improvements to State Road 836 (SR-836), an elevated expressway that traverses approximately 1.4 miles within the City of Miami. More specific improvements potentially involved the provision of a minimum of six continuous mainline lanes and the provision of parallel collector distributor facilities. The project will be developed following the **ETDM** methodology. The project will be screened via the EST by the ETAT members and we will be in constant communication with them throughout the duration of the study to ensure we have a buildable and permitable project at the completion of the study. **Client:** FDOT-District 6, **Contact:** Vilma Croft, PE (305-470-5240), **Begin/End Dates:** January 2007-Ongoing

EDUCATION:
Ph.D. Transportation Engineering
University of Miami
M.S. in Civil Engineering (Traffic)
Villanova University
BSCE, University of Miami
Value Engineering Certification (91001)

PROFESSIONAL REGISTRATIONS:
Florida P.E. #17218 (1982); Pennsylvania

YEARS OF EXPERIENCE:

45 years

PROFESSIONAL EXPERIENCE:
Mr. Driggs has directed or actively participated in numerous projects in the fields of Traffic Engineering, Transportation Planning and Environmental Studies.

OFFICE LOCATION:
Miami

Krome Avenue PD&E Study in Miami Dade County for FDOT District 6 – The study investigated the proposed widening of Krome Avenue, one of South Florida's most rural corridors. The project included a detailed safety analysis of the corridor and comprehensive alternative generation and selection process. Furthermore, the study required the preparation of preliminary engineering reports and master plans as well as extensive environmental work and coordination with all the regulatory agencies. The project was developed and completed following the **ETDM** methodology. The project was screened via the EST by the ETAT members and we were in constant communication with them throughout the duration of the study to ensure we had a buildable and permitable project at the completion of the study. **Client:** FDOT-District 6, **Contact:** Vilma Croft, PE (305-470-5240), **Begin/End Dates:** August 2003-August 2006

City of Homestead Downtown Area Transportation Plan Update – The study's purpose is to update the City's 1997 Homestead Traffic & Mobility Study to include recommendations for truck movement accommodations, bicycle way alignments, traffic calming treatments, and utilizing the new Miami-Dade County Busway within Homestead's urban core. Furthermore a comprehensive parking study was completed as part of this study. **Client:** City of Homestead **Contact:** Dan Wick, 305-224-4484**, Begin/End Dates:** March 2004-April 2005

NW 14th Street Access Improvements to I-395 PD&E Study in Miami-Dade County for FDOT District 6 – PD&E Study for the addition of on/off ramps to I-95 and I-395. Study requires a comprehensive PD&E analysis and IJR. The project includes preliminary and final engineering reports and master plans, traffic modeling and technical memorandum and extensive public involvement with the Overtown area. Client: **FDOT-District 6, Contact:** Vilma Croft, PE, 305-470-5240**, Begin/End Dates:** April 2001-September 2005

N.W. 87th Avenue from N.W. 58th Street to just north of Okeechobee Road in Miami Dade County, FDOT District VI. PD&E Study for a three-mile segment of this primary north/south urban arterial roadway. Study requires a comprehensive PD&E analysis to continue the four lanes from NW 58th Ave to NW 103rd Street in Hialeah Gardens. The project includes a thorough access management study and documentation, public involvement, the production of a traffic technical memorandum, preliminary and final engineering reports and master plans. **Client:** FDOT-District 6, **Contact:** Vilma Croft, PE, 305-470-5240**, Begin/End Dates:** January 2000-November 2004

Eller Drive Grade Separation PD&E Study, FDOT District IV. Study for the grade-separation of Eller Drive, the primary access route into Port Everglades in Fort Lauderdale, FL. The study requires a comprehensive analysis and the development of alternatives for providing an overpass over an important FEC rail spur to the Southport area of the port. It also includes improving the flow of traffic circulation between Port Everglades and Ft. Lauderdale International Airport. **Client:** FDOT-District 4**, Contact:** Richard Young, PE, 954-777-4323, **Begin/End Dates:** April 2000-May 2004

Florida's Turnpike Interchange at Commercial Blvd. (SR-870) in Broward County for FDOT Turnpike District. Full PD&E services involving the revamping of an existing substandard trumpet interchange serving a highly congested major arterial facility. Over 30 different interchange configurations were generated for evaluation including the provision of a "system concept" with contiguous collector-distributor facilities and complementary additional interchanges. **Client: Florida's Turnpike Contact:** Carl Gibilaro, PE, 407-532-3999, **Begin/End Dates:** June 1998-June 2000

US-1/SR 5 Widening from Key Largo in Monroe County North to Florida City in Dade County for FDOT District VI. PD&E study for the proposed widening of an environmentally sensitive 20-mile rural section of US-1. More than 40 different roadway and structural alternatives were generated for evaluation. Project involved the preparation of a safety evaluation report, traffic report, preliminary and final engineering reports, and master plans. Additional studies were performed and documented in various reports dealing with on going project issues and concerns after the PD&E study phase of the project was concluded and during the final design phase of the proposed project. **FDOT PM Javier Rodriguez, PE, 305-470-5100**

SR 836/I-395 Widening and Reconstruction from just West of N.W. 17th Avenue to the MacArthur Causeway Bridge in Downtown Miami for FDOT District VI. Study required a comprehensive PD&E analysis for widening SR 836 and I-395. Along I-395, several interchange alternatives were considered including an open-cut tunnel section at Biscayne Boulevard in Downtown Miami. The project also included potential interchange modifications at I-95 and other minor interchange locations along the SR 836 and I-395 corridors. Reports included a traffic technical memorandum, existing conditions report, alternatives considered report and preliminary engineering report. The project involved a very dynamic public involvement program including active coordination with local government planning agencies, civil activist groups and affected community representatives. **FDOT PM Ana Arvelo, PE, 305-470-5210**

US-41/SR 90/Tamiami Trail from SW 152nd Avenue to SW 127th Avenue in Dade County for FDOT District VI. PD&E study for a 2.5 mile segment of this primary east-west urban arterial roadway. Study required a comprehensive PD&E analysis to continue the six-laning from SW 127th Avenue to the western fringes of the urban development boundary at about SW 152nd Avenue. The project included a thorough access management study and documentation, public involvement, the production of a traffic technical memorandum, preliminary and final engineering reports, and master plans. **FDOT PM Javier Rodriguez, PE, 305-470-5100**

SR 90/Tamiami Trail from SW 127th Avenue to SR 826 and HEFT from Tamiami Trail to SR 836 in Dade County for FDOT District VI and Turnpike District. PD&E study for a five-mile urban arterial and one mile of Florida's Turnpike. **FDOT PM Rory Santana, PE, 305-470-5100**

Transportation Studies and Final Design of 14 Work Order Assignments for FONTUR, Republic of Venezuela, Occident Region – Six projects consisting of the Downtown Maracaibo area and other 18 roadways comprising over 100 kilometers. Municipality of San Francisco - Two projects consisting of seven roadways comprising over 50 kilometers. State of Falcon, Venezuela: City of Coro - Three projects consisting of 27 roadway segments comprising approximately 32 kilometers. City of Punto Fijo - Three projects consisting of three roadways comprising approximately 8 kilometers. Project tasks included surveys, environmental evaluations, socioeconomic evaluations, preliminary engineering, roadway and drainage design, pavement design, traffic analysis and signalization, signing and pavement markings, maintenance of traffic, and preparation of bid documents.

Maracaibo Mass Transit Study – Responsible for the development of 30 miles of corridors for the use of mass transit in a congested urban area. Duties included project management, corridor analysis, pedestrian and multi-modal analysis.

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SONIA L. SHREFFLER-BOGART, PE, PTOE

Senior Project Manager

Ms. Shreffler-Bogart's experience includes but is not limited to traffic impact analysis, transit studies, Development of Regional Impact (DRI), Preliminary Development Agreement for DRI PDA), Notice of Proposed Change to a DRI (NOPC), Land Use Change Amendments (LUA), Project Development & Environment Studies (PD&E), Major Use Special Permit Studies (MUSP), Traffic Signal Warrant Studies, Corridor/Arterial Analysis, Trolley/Transit Circulator Feasibility Studies, Safety and Operations Studies.

Metric Engineering, Inc. – January 2010 to Present

Districtwide Traffic Operations Studies Consultant Services, Project Manager - The general purpose of this contract is to provide traffic engineering services through the development of various traffic operations studies that will be identified for intersections, arterials, etc., and related improvement recommendations and evaluations. **Client:** FDOT – District 6, **Contact:** Eman Gomaa (305)470-5314, **Begin/End Dates:** January 2010 – Ongoing

- SR A1A (Collins Avenue) @ 16 Street
- SR A1A (Collins Avenue) @ 17 Street
- SR 5 (US-1) @ SW 62 Avenue
- NW 87 Avenue-NW 103 Street-US 27-SR 25-Okeechobee Road (RJB)
- SR5 US1 N Roosevelt Blvd Truman Ave at Simonton St Key West
- Coral Reef Drive @ SW 102 Avenue
- Coral Way btwn SW 37 Avenue and SW 13 Avenue
- Quail Roost Drive @ SW 192 Terrace
- Brickell Avenue Pedestrian Study
- Krome Ave @ NW 15 St. Delay Study (ATEC)
- US1 @ SW17 Avenue Intersection Delay Study (ATEC)
- NW 87 Avenue-NW 103 Street-US 27-SR 25-Okeechobee Road (RJB)
- SR A1A (Collins Avenue) @ 77 Street
- SR5 (Biscayne Blvd) @ NE 13 Street (ATEC)
- SW 87 Avenue @ SW 5 Street
- SR 860-Miami Gardens Drive @ Miami Carol City Sr HS
- NW 135 Street @ NW 17 Avenue QA
- NW 87 Avenue-NW 103 Street-US 27-SR 25-Okeechobee Road (RJB)
- SW 72 Street Sunset Drive (SW 107 Avenue -109 Place) Pedestrian Crossing
- SW 87 Avenue @ SW 4 Street QA
- SW 87 Avenue @ SW 85 Street Data Collection
- SR5 Biscayne Blvd @ NE 38 Street Left Turn Phase Warrant
- S Roosevelt Blvd at Seaside Dev Key West (ATEC)
- SR 860-Miami Gardens Drive btwn Biscayne Blvd & W Dixie Hwy
- Overseas Highway @ Anne's Beach

EDUCATION:
B.S. Civil Engineering, The Ohio State University, 1988

PROFESSIONAL REGISTRATIONS:
Florida PE #55679 - 2000
Ohio PE #60525

YEARS OF EXPERIENCE:
22 years

PROFESSIONAL EXPERIENCE:
Ms. Shreffler-Bogart experience includes assignments related to project management of traffic/transportation engineering, transportation planning and site development projects. Responsibilities included working closely with other disciplines on multi-discipline projects; establishing methodologies and performing analyses; writing technical reports; communicating findings with design and planning staff; giving presentations of findings to clients, agencies and the public. Projects completed were in private and public sectors at international, state, regional and local levels.

OFFICE LOCATION:
Miami

Miami Downtown Development Authority (DDA) Consultant for Professional Urban Design and Planning Services, Project Engineer - provide professional services throughout the DDA district which include transportation planning and traffic studies, planning and project feasibility studies, project options evaluations, preliminary site evaluations, feasibility analyses, and infrastructure investigative services, conceptual and final streetscape, public space, landscape design services, roadway, drainage and stormwater management analysis,

public meetings and community outreach. **Client:** Miami Downtown Development Authority (DDA), **Contact:** Cesar Garcia-Pons, 305-579-6675, **Begin/End Dates:** June 2011- Ongoing

SR 874 Ramp Connector PD&E Study, Miami-Dade Expressway Authority, **Traffic Engineer -** PD&E Study to evaluate a potential new ramp connection from SR 974 (Don Shula Expressway) to SW 136th Street at SW 137th Avenue. SR 874 currently ends at the interchange with SR 821/Florida's Turnpike/HEFT. This new ramp connection would provide an additional expressway access and mobility to the area. The study will confirm the need and benefits to be provided by this connection. Identify potential corridors and alignments as well as potential environmental impacts. A public involvement program will take place to inform and provide an opportunity to receive input from the stakeholders and the neighboring community. **Client:** MDX**, Contact:** Mayra Diaz (305)637-3277**, Begin/End Dates:** January 2010-Ongoing

SR 836 PD&E Study from NW 17th Avenue Interchange to Midtown Interchange in Miami-Dade County for FDOT District 6, Project/Traffic Engineer - The project involves the potential realignment, capacity and geometric improvements to State Road 836 (SR-836), an elevated expressway that traverses approximately 1.4 miles within the City of Miami. More specific improvements potentially involved the provision of a minimum of six continuous mainline lanes and the provision of parallel collector distributor facilities. The project will be developed following the **ETDM** methodology. The project will be screened via the EST by the ETAT members and we will be in constant communication with them throughout the duration of the study to ensure we have a buildable and permitable project at the completion of the study. **Client:** FDOT-District 6, **Contact:** Vilma Croft, PE (305-470-5240), **Begin/End Dates:** January 2007-August 2011.

West Grove Traffic Circle Feasibility Study B030041, Project Manager - All provision of traffic circles at several intersections in the West Grove neighborhood of Miami, Florida. The vicinity is generally bound by Bird Avenue to the north, Grand Avenue to the south, SW 27 Avenue to the east and Douglas Road (SW 37th Avenue) to the west. The intersections: Elizabeth Street at Shipping Avenue, New York Street at Shipping Avenue, Elizabeth Street at Day Avenue, New York Street at Day Avenue and McDonald Street (SW 32nd Avenue) at Day Avenue were selected by the City of Miami based on requests and concerns received from area residents. **Client:** City of Miami, **Contact:** Tatiana Acosta (305) 416-1263, **Begin/End Dates:** February 2010 – July 2010

September 1999 – January 2010 - David Plummer & Associates

- Riverbend DRI Fort Lauderdale
- Miami Downtown DRI NOPC
- Archstone at Dadeland Traffic Signal Warrant Study
- West Ave./11 Street Traffic Signal Warrant Study
- City of Miami MUSP Traffic Impact Studies
- Boca Raton Library Traffic Concurrency Analysis
- Park Square DRI NOPC
- Kendall Town Center DRI
- Lakes by the Bay South Commons Traffic Signal Warrant Study
- Okeechobee Rd/NW 186 St Operational Assessment & Safety Study
- LeJeune Rd/NW 103 St.Safety Assessment & LOS Analysis
- Ponce de Leon Boulevard Median Evaluation
- Killian Drive/SW 107 Avenue Safety Study
- MPO Miami Gardens Circulator Feasibility Study
- Miami Gardens Drive Extension Traffic Study
- Biscayne Boulevard Corridor Study
- MPO Locate Sites for Bus Shelter Installation Study
- Coral Gables Trolley Feasibility Study

June 1998 – September 1999 - Metric Engineering, Inc., Miami, Florida

Florida's Turnpike Interchange at Commercial Blvd. (SR-870) in Broward County for FDOT Turnpike District, **Traffic Engineer -** Full PD&E services involving the revamping of an existing substandard trumpet interchange serving a highly congested major arterial facility. Over 30 different interchange configurations were generated for evaluation including the provision of a "system concept" with contiguous collector-distributor facilities and complementary additional interchanges. Responsible for performing analysis, document coordination, participated in meetings for Public Involvement, Citizen AdvisoryCommittee and presentation of findings to agencies. **Client: Florida's Turnpike Contact:** Carl Gibilaro, PE, 407-532-3999, **Begin/End Dates:** June 1998 – September 1999

Transportation Studies and Final Design of 14 Work Order Assignments for FONTUR, Republic of Venezuela, Occident Region, Traffic Engineer - Traffic Operations Improvement Project Maracaibo, Venezuela. Conducted all aspects of traffic analysis for three separate corridors (isolated intersection and arterial analysis); presented analysis results and recommendations to FONTUR and IMTCUMA. Client: World Bank/Fontur, Republic of Venezuela **Begin/End Dates:** June 1998 – September 1999

METRIC ENGINEERING
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CARLOS RODRIGUEZ, PE

Transportation Planning Manager

Grove Area Traffic Calming in Miami-Dade County for City of Miami - The project involves the modification of existing intersections within the Coconut Grove Area of the City of Miami with Traffic Calming Circles and Flat-Topped Speed Hump. The design includes geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and pavement markings to meet Miami-Dade County Public Works and City of Miami Standards. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** November 2008-August 2009

Silver Bluff Traffic Calming Phases II and III in Miami-Dade County for City of Miami - The project involves the modification of existing intersections within the City of Miami with Traffic Calming Circles. The design includes geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and pavement markings to meet Miami-Dade County Public Works and City of Miami Standards. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** April 2009-August 2009(III), December 2007-May 2008(II)

Flagami Traffic Calming in Miami-Dade County for City of Miami - The project involves the modification of existing intersections within the City of Miami with Traffic Calming Circles. The design includes geometry re-alignment, grading, minor drainage improvements to prevent creating any drainage issues, and pavement markings to meet Miami-Dade County Public Works and City of Miami Standards. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** December 2008-July 2009

Bridgeport Avenue and SW 30 Ct. Traffic Study in Miami-Dade County for City of Miami - Traffic Study to resolve traffic cut through, speeding and other concerns reported at Bridgeport Ave and SW 30 CT between US1 and Bird Ave within the City of Miami. The study will include such issues as traffic circulation, geometry, crash analysis (years 2005 to 2007), trip generation and attraction, etc. In addition, a pre-meeting with FDOT to properly coordinate the objectives and procedures of the study will be conducted as the initial study task. The study area is bounded by NW 27th Ave. on the east, Bird Ave. on the south and US-1 along the north and west. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** February 2009-April 2010

La Pastorita Traffic Study in Miami-Dade County for City of Miami - Traffic Study to address numerous complaints previously received from residents of SW 36th Ave. regarding potential traffic cut through along this avenue between SW 8th St. and SW 16th St. Apparently, a large volume of traffic uses this residential segment to avoid potential delays at the SW 37th Ave./SW 8th St. intersection. The study will include such issues as traffic circulation, geometry, crash analysis (years 2005 to 2007), trip generation and attraction, etc. The study area is bounded by SW 8th St. on the north, SW 16th St. on the south, SW 32nd Ave. on the east and SW 37th Ave. on the west. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** February 2009-April 2010

Traffic Study at Mary Street/Grand Avenue and El Prado Boulevard in Miami-Dade County for City of Miami - This project covers two distinct assignments. The first entails the investigation of the feasibility of providing a traffic circle at the Grand Ave./Mary St. intersection in Coconut Grove. The second assignment includes the investigation of various traffic calming schemes along a segment of El Prado Blvd. between Douglas Rd. and LeJeune Rd. in Coconut Grove geared towards the reduction/elimination of the present traffic cut through and/or speeding problems in this area. The study will include such issues as traffic circulation, geometry, crash analysis (years 2005 to 2007), trip generation and attraction, etc. In addition, a pre-meeting with city officials to properly coordinate the objectives and procedures of the study will be conducted as the initial study task. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** March 2009-June 2010

EDUCATION:
B.S.C.E., Florida International University, 2004

PROFSSIONAL REGISTRATION:
PE # 72638 (2011)

YEARS OF EXPERIENCE:
9 years

PROFESSIONAL EXPERIENCE:
Mr. Rodriguez currently serves as Project Engineer for transportation planning and traffic operations projects

Traffic Calming Study at SW 28th Street between SW 32nd Avenue and SW 37th Avenue in Miami-Dade County for City of Miami - Traffic Study to evaluate the need of traffic calming devices on SW 28 St. The Study is bounded by SW 32 Ave. on the east and SW 37 Ave. on the west. **Client:** City of Miami, **Contact**: Tatiana Acosta (305)416-1263, **Begin/End Dates:** February 2009-July 2010

NW 14th Street Traffic Study from NW 7th Avenue to NE 2nd Avenue in Miami-Dade County for City of Miami - Traffic Study along NW 14th Street from NE 2nd Avenue to NW 7th Avenue to analyze the feasibility of removing existing left turn lanes to accommodate 4 ft. designated bike lanes in each direction. **Client:** City of Miami, **Contact**: Ricardo Castro, PE (305)416-1051, **Begin/End Dates:** April 2009-May 2010

NE 2nd Avenue Road Improvements in Miami-Dade County for City of Miami - Traffic Study along NE 2nd Avenue between NE 20th Street and NE 36th Street to compare how the future Level of Service will be affected if the roadway is maintained with 2 lanes in each direction, or if the roadway is reduced to 1 lane in each direction in order to provide on-street parking. **Client:** City of Miami, **Contact**: Ricardo Castro, PE (305)416-1051, **Begin/End Dates:** April 2009-April 2010

Port of Palm Beach Corridor Study Design Traffic Technical Memorandum, Project Engineer – The study focused on providing an efficient movement to and from the Port facility, while retaining and integrating the local access and traffic movements. Our traffic engineering effort required us to perform the requisite data collection (traffic counts, determination of major traffic generators, transit usage, signalized and unsignalized intersections) effort. The next step involved developing the future design traffic by determining the adequate growth rates and the K,D,&T factors. Once future year volumes were determined a trip assignment for each proposed corridor was conducted and an operational analysis using both HCS and Synchro 5 software was performed to determine the operational characteristics of each corridor. A Design Traffic Technical Memorandum was prepared as part of the Port of Palm Beach Corridor Study. **Client:** C3TS, **Contact**: Robert Carballo, PE (305)445-2900, **Begin/End Dates:** July 2005-October 2006

NW 14th Street Access Improvements to I-95 PD&E Study in Miami-Dade County for FDOT District 6 – PD&E Study for the addition of on/off ramps to I-95 and I-395. Study requires a comprehensive PD&E analysis and IJR. The project includes preliminary and final engineering reports and master plans, traffic modeling and technical memorandum, and extensive public involvement with the Overtown area. **Client:** FDOT – District 6, **Contact**: Vilma Croft, PE (305) 470-5400, **Begin/End Dates:** April 2001 – September 2005

Downtown Homestead Transportation Plan Update for the City of Homestead Community Redevelopment Agency – The study aimed at resolving a number of Downtown Transportation planning issues in the City's congested urban core. The study included recommendations for truck movement accommodations, bicycle-way alignments, traffic calming treatments and utilizing the new Miami-Dade transit Busway within Homestead's urban core. Furthermore a comprehensive parking study was completed as part of this study. **Client:** City of Homestead CRA, **Contact**: Julio Brea, PE (305) 224-4772, **Begin/End Dates:** March 2004-April 2005

NW S. River Drive Corridor Study, for the Town of Medley, Florida - This traffic study included the development of an estimate of future traffic volumes and future travel characteristics. Traffic modeling using the FHWA approved HCS and the Synchro 5 simulation model, develop and analyze the existing condition, opening year and design year traffic projections along the study corridor and at nine intersections within the study corridor and the preparation of a technical memorandum.

10th Street Connector Feasibility Study for Corzo Castella Carballo Thompson Salman, P.A. and FDOT District 4 - Traffic study along 10th street from just east of the Sawgrass Expresway toll plaza to just east of the I-95 exit/entrance ramps and 8 intersections were evaluated. Responsible for furnishing all existing traffic data along the corridor, including traffic counts and vehicle classification surveys, pedestrian and bicycle counts as well as heavy vehicle counts. Performed Traffic forecasting for future years based on the SERPM model. Also involved the preparation of a Traffic Technical Memorandum. **Client:** C3TS, **Contact:** Robert Carballo, PE, 305-445-2900, **Begin/End Dates:**

I-395 PD&E Study in Miami-Dade County for FDOT District 6 – The PD&E Study entails the preparation of EIS for a proposal to improve Interstate Route I-395 in Miami-Dade, Florida. The proposed improvement would involve the reconstruction of I-395 from I-95/Midtown Interchange to Biscayne Bay, a distance of 1.2 miles. Improvements to the corridor are considered necessary to provide for the existing and projected traffic demand. Alternatives under consideration include 1) taking no action; 2) elevated reconstruction with ramps at Midtown Interchange; 3) elevated reconstruction with ramps at Miami Avenue; 4) a tunnel design and 5) an open-cut design (depressed expressway). Involves the preparation of an Interchange Modification Report (IMR). Furthermore a comprehensive parking study was completed as part of this study. **Client:** FDOT District 6**, Contact:** Vilma Croft, PE, 305-470-5240, **Begin/End Dates:** June 2006-July 2010

Manuel G Vera, Jr., PSM / Surveyor & Mapper

Professional Registration:

Professional Surveyor & Mapper, Florida, #5291 (1999)

Office Location:

Miami, FL (30 Years with MGV)

Education:

B.A. / Legal Studies / Nova Southeastern University, 1994
A.S. / Land Surveying / Miami Dade College, 1988

Mr. Vera Jr., a registered Land Surveyor has 30 years of experience with the company and throughout the state of Florida. He has managed a variety of survey contracts and projects for the Florida Department of Transportation, Miami – Dade County, Miami-Dade Expressway Authority, City of Miami, and numerous Engineering and Design firms. Mr. Vera has performed and managed all types of surveying services including: Design Surveys, Right-of-Way Control Surveys, Right-of-Way Mapping, Platting, Construction Layout, As-built Surveys, Drainage Surveys, etc. Mr. Vera is a Surveyor and Mapper as well as our Senior Project Manager. He has extensive experience in the management and coordination of survey projects involving a variety of surveying techniques such as Aerial Surveys, Conventional Ground Surveying, Utilities designation, etc. Mr. Vera has managed such projects for Florida Department of Transportation, the Miami Dade Expressway Authority, City of Miami, Turnpike Authority, just to name a few. He has been involved either as a Party Chief, Supervisor or Project Manager for the Florida Department of Transportation since 1990, and has always maintained an approval rating of 95% or better.

Surveying Project Experience:

SR5/US-1 / Long Key V-Piers & Deviation Blocks Repair (Bridge #900094)-FDOT District 6

MGV established and/or recovered Horizontal Project Network Control and Vertical Project Network Control, for the purpose of establishing control on the Florida State Plane Coordinate System or datum of 1983/1990 adjustment; the existing survey baseline was established as part the FDOT right of way maps; surveyed the 12 V piers that are going to be replaces; spot elevations at the bottom of seabed elevation at each pier were located

Location: Monroe, FL — Date: 10/01/2010– 01/01/2011
Client: URS Corporation
Reference Name: Luis Vargas, PE — Reference No. 305-262-7466

SR-5/US-1, Overseas Highway from West Indies Road on Ramrod Key to 300' East of Palmetto Avenue on Big Pine Key-FDOT District 6

MGV was responsible for the preparation of a Topographic survey including the establishment of the Horizontal and Vertical Network Control, locating existing Right of Way survey baseline , perform cross sections at 500-ft intervals, and locate existing monuments.

Location: Monroe, FL — Date: 05/07/2010– 07/16/2010
Client: FDOT District Six
Reference Name: Scott Perkins, PSM — Reference No. 305-470-5248

North Roosevelt Blvd (SR A1A) from Eisenhower Drive to US-1

MGV completed a Full Design Survey with Right of Way Control Survey and Right of Way Maps for North Roosevelt Boulevard (S.R. A1A) in Key West.

Location: Monroe, FL — Date: 11/2008 thru 12/2010
Client: Consultech Engineers, Inc. — Agency: FDOT District #6
Reference Name: Evelio Chavez, PE — Phone No.: (305) 599-3141

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____
Robert Linares, PE

Sworn and subscribed before me this

18th day of July, 2012.

Diana Tomé
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: March 24, 2013

DIANA TOME'
MY COMMISSION # DD 864434
EXPIRES: March 24, 2013
Bonded Thru Notary Public Underwriters

SWORN STATEMENT UNDER SECTION 287.133(3)(a)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICE AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid, Bid or Contract No. RFQ No. 12-005 for General Engineering Services

2. This sworn statement is submitted by Metric Engineering, Inc.
(Name of entity submitting sworn statement)

whose business address is 13940 SW 136 St., Miami, FL 33186 _____ and (if applicable) its Federal Employer Identification Number (FEIN) is 59-168555-0 (If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement.)

3. My name is Robert Linares, PE and my relationship to
(Please print name of individual signing)

the entity named above is Sr. Vice President.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

   1. A predecessor or successor of a person convicted of a public entity crime: or

   2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural

person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)

_x_ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

___ There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate was placed on the convicted vendor list. Them has been a subsequent proceeding before a hearing officer of the Sate of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

___ The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

_____
(Signature)

July 18, 2012
(Date)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Robert Linares, PE who, after first being sworn by me, affixed his/her signature in the
(Name of individual signing)

space provided above on this 18th day of July, 2012.

My commission expires:
NOTARY PUBLIC
March 24, 2013

DIANA TOME'
MY COMMISSION # DD 864434
EXPIRES: March 24, 2013
Bonded Thru Notary Public Underwriters

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF FLORIDA)
: SS
COUNTY OF Miami-Dade)

I, the undersigned hereby duly sworn, depose and say that the firm of Metric Engineering, Inc. provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: _____
Robert Linares, PE

Sworn and subscribed before me this

18th day of July, 2012.

_____
NOTARY PUBLIC, State of Florida at Large

My Commission Expires: March 24, 2013

DIANA TOME'
MY COMMISSION # DD 864434
EXPIRES: March 24, 2013
Bonded Thru Notary Public Underwriters

THE CITY OF KEY WEST

3140 Flagler Ave
Key West, FL 33040

ADDENDUM NO. 1
RFQ NO. 12-005: GENERAL ENGINEERING SERVICES
July 19, 2012

This addendum is issued as supplemental information to the RFQ package for clarification of certain matters of both a general and a technical nature. The referenced RFQ package is hereby addended in accordance with the following items:

1. Page 4 lists that a firm may submit for 1 or more of 5 the categories. Please confirm that we can submit for all 5 categories in one submittal package (2 copies + cds, etc), and we do not need to submit one package for each category (ie 5 sets of packages).

   Only one proposal package is to be submitted which identifies any one of, or all of the various disciplines listed in the RFQ that the Proposer is proposing services for.

2. Is submittal of an SF330 sufficient?

   Use of SF330 form is not required. Proposer shall submit a complete qualifications package in a format that contains all required elements.

3. Does the city have an MBE goal?

   No.

4. Are we to include subcontractors in our RFQ or can we add them based on the particular task order?

   Proposers shall identify each subconsultant that they are proposing using as part of this contract. City approval would be required if Proposer wishes to make changes or adds to the list of subconsultants once contract is issued. The qualifications of all members of a Proposer's team will be considered in the selection process.

5. On page 6 of the RFQ, License Requirements, it states that the winning respondent will also be required to obtain and maintain a City of Key West Business Tax Receipt. Could you please clarify if this means that the winning firm must have an office location in Key West?

Firms selected as part of this contract are not required to maintain an office in Key West.

6. Public Entity Crimes Certification was identified as being three (3) pages in length.

   Public Entity Crimes Certification is two (2) pages in length

7. Under the Submission Details section on page 5 reference is made to "Architect firms should submit a complete qualifications package that includes:"

   This should read "Engineering firms should submit a complete qualifications package that includes:"

8. Is a page limit for the submission information listed on page 5?

   No. However firms should limit their proposals to a reasonable number of pages.

9. Who are the current contract holders?

   The City does not track this information. Proposer can contact DemandStar by Onvia at www.demandstar.com/supplier or call toll-free 1-800-711-1712.

10. How much was spent under the current contract, and on what kind of projects?

    This information is unavailable. Proposers are reminded that no minimum amount of service or compensation will be assured to the retained firm(s).

11. The existing language under Qualifications Criteria:

    "Other certifications including LEED and LAP (Federal DOT) certified staff professionals"

    Shall be modified to read:

    "Other certifications including LEED and FDOT certified staff professionals"

12. Please clarify the submittal requirements for "Past five (5) years of specific relevant experience" under the Submission Detail section.

    The existing language

    Past five (5) years of specific relevant experience. The examples should include the name of client, client's representative, client's address and telephone number, key personnel involved in design phase services, design services fee, estimate of construction cost, name of contractor awarded project contract award amount, contractor's representative, contractor's address and telephone number.

Shall be modified to read:

Past five (5) years of specific relevant experience. The examples should include the project description, name of client, client's contact and telephone number, design services fee, identify if project was constructed or not and project cost, name of contractor awarded project, and contractor's representative and telephone number.

All Proposers shall acknowledge receipt and acceptance of this Addendum No. 1 by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature	METRIC ENGINEERING, INC.
	Name of Business

Metric Engineering, Inc.
13940 SW 136 St., Suite 200
Miami, FL 33186
Phone: 305-235-5098
Fax: 305-251-5894

Contact: Manuel A. Sauleda, PE
msauleda@metriceng.com

METRIC ENGINEERING