



Routine Engineering Services for Streets Projects

Jefferson Parish
SOQ No. 23-017
Res. No. 142010
August 25, 2023

submitted by

EXP U.S. Services Inc.
3650 Poydras St, Suite 550 | New Orleans, LA 70130 |
USA t: +1.305.631.2208 | exp.com



TABLE OF CONTENTS

A.	Cover Page	Page 1
B.	Organization Chart	Page 2
C.	TEC Questionnaire	Pages 3 - 16
D.	Personnel Resumes	Pages 17 - 86
E.	LA Licenses	Pages 87 - 88
F.	Project Sheets	Pages 89 - 98



August 25th, 2023

Jefferson Parish Purchasing Department
200 Derbigny Street
General Government Building, Suite 4400
Gretna, LA 70053

re: SOQ No. 23-017 To Provide Routine Engineering Services for Street Projects

Dear Members of the Selection Committee,

EXP U.S. Services Inc. (EXP) is grateful and excited for the opportunity to submit our Statement of Qualifications to the [Jefferson Parish Technical Evaluation Committee To Provide Routine Engineering Services for Streets Projects](#). As a trusted services provider, the EXP team has partnered with numerous Louisiana firms on meaningful projects of similar scope and complexity. EXP has a reliable depth of resources, recognized experience and technical expertise to ensure project and program success. The EXP team has firsthand experience developing road maps to improve communities with more resilient, robust, environmentally responsible Streets engineering solutions.

EXP is a full-service privately-owned engineering firm with the mission is to understand, innovate, partner, and deliver the highest level of engineering, design and consulting services for our clients. We excel in the world's built and natural environments. [Our heritage dates back to 1906 when the earliest of EXP's predecessor companies started its engineering infrastructure practice. Today, over 4,000 creative EXP professionals across 90 offices in North America \(two offices in Louisiana\) provide the passion and experience necessary to deliver successful streets projects.](#) Our comprehensive team is extremely well positioned to provide Jefferson Parish the depth of resources, care, passion and technical expertise necessary for all of your projects. By submitting this Statement of Qualifications, we agree and acknowledge to provide a full complement of staff for the complete duration of the work.

[As a fully integrated design firm with a standard of transparent engagement through all project phases, we serve our clients in a broad spectrum of streets engineering services including but not limited to: civil, drainage, utilities, environmental, traffic flows, intelligent systems, signage, ADA compliance, mapping, and CAD.](#) With a demonstrated record working with all levels of agencies and regulators, we know what questions to ask, who to ask and how to evaluate your unique environmental challenges. [Each team member has been specifically selected for the abilities, enthusiasm, and expertise they bring.](#) The EXP team looking forward to working with Jefferson Parish and being your trusted advisor. If you have any questions, or require additional information, please do not hesitate to contact me at 305.631.2208 or by e-mail at Jonathan.Markle@exp.com

Sincerely,

A handwritten signature in blue ink, appearing to read "Jonathan Markle", with a long horizontal flourish extending to the right.

Jonathan Markle

Sr. Program Manager & Business Development

EXP
3650 Poydras St, Suite 1400
New Orleans, LA 70130 | USA
t: 305.631.2208 | exp.com

SOQ No. 23–017
To Provide Routine Engineering Services for
Street Projects



EXP Project Manager	QA/QC Manager
Jose Santiago, PE	John Flint, PE Jonathan Markle

Data Collection	Studies	Design & Engineering		Planning	Support Services
<u>TRAFFIC DATA COLLECTION</u> Qian (Cherry) Xiong, PE Chris Atkin Fiorella Asturrizaga <u>GIS & DATA ACQUISITION</u> Chris Atkin	<u>ACCESS MANAGEMENT</u> Roxana Matamoros, PE, ENV SP Jennifer Borges, PE, PTOE <u>TRAFFIC SAFETY EVALUATION</u> Jose Santiago, PE Jennifer Borges, PE, PTOE Elias Diaz <u>TRAFFIC IMPACT STUDIES</u> Qian (Cherry) Xiong, PE Jennifer Borges, PE, PTOE <u>SIGNALIZATION WARRANTY STUDIES</u> Qian (Cherry) Xiong, PE Jennifer Borges, PE, PTOE	<u>CIVIL ENG., DRAINAGE, & UTILITIES</u> Nicholas Karpathy, PE, ENV SP Miguel Lockward, PE, ENV SP Dronix Suarez, PE Ricardo A. Jimenez, PE Carlos A. Tijerino, ENV SP Fiorella Asturrizaga Ricardo Angulo <u>ROADWAY & SCHEMATIC DESIGN</u> Jose Santiago, PE Roxana Matamoros, PE, ENV SP Maria Ballestar <u>SIGNAGE & PAVEMENT MARKING</u> Jose Santiago, PE Roxana Matamoros, PE, ENV SP Maria Ballestar Valerie Parra	<u>TRAFFIC SIGNAL DESIGN</u> Jose Santiago, PE Jennifer Borges, PE, PTOE Elias Diaz Roxana Matamoros, PE, ENV SP <u>INTERSECTION DESIGN</u> Jose Santiago, PE Elias Diaz Roxana Matamoros, PE, ENV SP <u>CORRIDOR DESIGN</u> Jose Santiago, PE Nicholas Karpathy, PE, ENV SP Elias Diaz Roxana Matamoros, PE, ENV SP <u>ILLUMINATION & LIGHTING</u> Edmundo Rodriguez, PE Ricardo Gonzales Elias Diaz	<u>TRANSPORTAION PLANNING</u> Daphne Spanos, PE Jennifer Borges, PE, PTOE Amy Elmore, AICP Tyler Blair, PE, PTP, PTOE Ricardo A. Jimenez, PE <u>TRAFFIC CALMING</u> Qian (Cherry) Xiong, PE Ricardo A. Jimenez, PE Jennifer Borges, PE, PTOE <u>PEDESTRIAN & BYCYCLE SAFETY & MOBILITY PLANS</u> Daphne Spanos, PE Jennifer Borges, PE, PTOE Alyssa Goldberg <u>SUSTAINABILITY & RESILIENCE PLANNING</u> Carmen Olazabal, PE, PMP, LEED AP, ENV SP Nicole Barnett, ENV SP, LEED	<u>GRAPHIC RENDERINGS</u> Daniel Bearer Tung Lam Angelica Corredor Elizabeth Alcanatara <u>ESTIMATING & PROJECT CONTROLS</u> Jonathan Markle Carlos A. Tijerino, ENV SP Jose Santiago, PE Toni Bou Lattouf Ricardo A. Jimenez, PE <u>STRUCTURAL</u> Ishwarya Srikanth, Ph.D., FE



Technical Evaluation Committee (TEC) Questionnaire

Instructions

- The Technical Evaluation Committee (TEC) Questionnaire shall be used for professional services related to architecture, engineering, or survey projects.
- **The TEC Questionnaire should be completely filled out. Complete and attach ALL sections. Insert “N/A” or “None” if a section does not apply or if there is no information to provide.**
- Questionnaire must be signed by an authorized representative of the Firm. Failure to sign the questionnaire shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- All subcontractors must be listed in the appropriate section of the Questionnaire. Each subcontractor must provide a complete copy of the TEC Questionnaire, applicable licenses, and any other information required by the advertisement. Failure to provide the subcontractors' complete questionnaire(s), applicable licenses, and any other information required by the advertisement shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- If additional pages are needed, attach them to the questionnaire and include all applicable information that is required by the questionnaire.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

To Provide Routine Engineering Services for Streets Projects - SOQ No. 23-017
Resolution No. 142010

B. Firm Name & Address:

EXP U.S. Services, Inc.
3650 Poydras St., Suite 1400
New Orleans, LA 70130

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Jose Santiago, PE, ENV SP
Municipal Senior Manager / Project Manager
t: 786-801-6360

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Jose Santiago, PE, ENV SP
Municipal Senior Manager / Project Manager
t: 786-801-6360

E. Please provide the number of employees whose primary function corresponds with each category:

<u>30</u> Administrative	<u>20</u> Estimators	<u> </u> Specification Writers
<u>81</u> Architects (Licensed)	<u> </u> Geologists	<u>247</u> Structural Engineers
<u>1</u> Chemical Engineers	<u>136</u> Geotechnical Engineers	<u> </u> Graduate Engineers
<u>348</u> Civil Engineers	<u>1</u> Interior Designers	<u>97</u> Project Managers
<u>79</u> Construction Inspectors	<u>18</u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u>12</u> Land Surveyor	<u>3</u> Grant/Funding Specialist
<u>231</u> Electrical Engineers	<u>293</u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>23</u> Engineer Intern	<u>53</u> Environmental Engineers	
<u>1</u> Professional Land Surveyors		<u>1674</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES ☐ NO ☒

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1.
N/A

2.
N/A

H. Has this JOINT-VENTURE previously worked together? Please check:
YES ☐ NO ☐

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2. N/A		
3. N/A		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

589 _____

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Jose Santiago, PE, ENV SP

Project Assignment:

Project Manager

Name of Firm with which associated:

EXP U.S. Services, Inc.

Years' experience with this Firm:

2.5

Education: Degree(s)/Year/Specialization:

- B.S., Civil Engineering, University of Miami, Miami, FL
- IMSA Traffic Signal Technician Level 1, 2020
- FDOT Local Agency Program & Federal Highway Administration Certification, 2019
- Temporary Traffic Control (TTC) Advanced, No. 43440

Active registration: Year first registered/discipline:

LA PE.0047773 active in 2023

Other experience and qualifications relevant to the proposed Project:

Jose Santiago has more than 26 years of experience in the design and management of transportation engineering projects from intersection improvements to complex interchanges. He has experience involving conceptual, preliminary and final design including highway geometry, right-of-way, signing and pavement marking, signalization, lighting, roadway drainage, milling and resurfacing and reconstruction projects. Project Management responsibilities have included client point of contact, sub-consultant management, development of project design schedules and budgets, community involvement and contract development. Before joining EXP, Jose held various management positions at the Florida Department of Transportation (FDOT).

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
John Flint, PE Senior Vice President
Project Assignment:
QA/QC Manager
Name of Firm with which associated:
EXP U.S. Services, Inc.
Years' experience with this Firm:
3.5
Education: Degree(s)/Year/Specialization:
B.S., Civil Engineering, SUNY at Buffalo, 1977
Active registration: Year first registered/discipline:
PE License (first registered in NY in 1982) - discipline: Civil/ Structural Engineering
Other experience and qualifications relevant to the proposed Project:
Mr. Flint has over 41 years of experience in planning, feasibility studies, detailed design engineering, inspection and rehabilitation design. He is also experienced in the planning, study, and design of major projects. His engineering abilities are rivaled only by his experience in managing and controlling project scope and cost, obtaining team consensus on difficult issues, and applying visionary thinking to project challenges in a practical, detail-oriented manner. Mr. Flint has served as Principal in charge and Project Manager on projects with construction budgets in excess of \$2 Billion, and his experience spans all phases of project delivery.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Nicholas Karpathy, PE, ENV SP Project Manager
Project Assignment:
Civil Engineering, Drainage, and Utilities Lead
Name of Firm with which associated:
EXP U.S. Services, Inc.
Years' experience with this Firm:
1
Education: Degree(s)/Year/Specialization:
<ul style="list-style-type: none">• B.S., Civil Engineering, University of Miami• M.S., Civil Engineering, University of Miami
Active registration: Year first registered/discipline:
LA PE.0047788 active in 2023
Other experience and qualifications relevant to the proposed Project:
<p>Mr. Karpathy is an accomplished civil engineer who holds both a bachelor's and master's degree in civil engineering from the University of Miami in Coral Gables, Florida. With his expertise in various fields, including land development, drainage, and utility project management, he brings a wealth of knowledge to every endeavor. His skill set extends beyond engineering, encompassing subconsultant management, contract negotiation and administration, value engineering, and technical production review. Mr. Karpathy has a solid technical background, having been involved in the planning, design, modeling, permitting, and construction administration of numerous site development and public infrastructure projects. This includes extensive experience with stormwater drainage networks, collection and transmission sewer mains, distribution and transmission potable water mains, pump stations, and traffic calming improvements throughout the United States. With his diverse skill set, technical expertise, and commitment to sustainability, Mr. Karpathy is well-equipped to tackle complex projects and provide valuable insights and leadership to ensure successful outcomes.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Roxana Matamoros, PE Project Manager
Project Assignment:
Roadway, Signage & Pavement Marking, Signal, and Corridor Design Lead
Name of Firm with which associated:
EXP U.S. Services, Inc.
Years' experience with this Firm:
2.5
Education: Degree(s)/Year/Specialization:
B.S., Civil Engineering, University of Detroit Mercy, 1998
Active registration: Year first registered/discipline:
PE Florida No. 77979, 2014 PE Ohio No. 88751, 2022 PE Georgia No. 50461, 2023
Other experience and qualifications relevant to the proposed Project:
Roxana Matamoros brings 22 years of experience in roadway and highway design including roadway design and operations, pedestrian and bicycle facilities, and transportation safety. Her areas of specialization include roadway signing and pavement markings, development of engineering cost estimates and specifications, signalization and drainage analysis, civil and site development. In addition, she has experience as a Project Engineer for Construction Engineering Inspections (CEI) Maintenance of Traffic (MOT), Utility Coordination, and Permitting. She has experience working on roadway projects for both the Florida Department of Transportation (FDOT) and various municipalities throughout the State of Florida and is a licensed Professional Engineer.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Carmen Olazabal, PE, PMP, LEED AP, ENV SP Sustainability and Resilience Director
Project Assignment:
Sustainability and Resilience Planning Lead
Name of Firm with which associated:
EXP U.S. Services, Inc.
Years' experience with this Firm:
2.5
Education: Degree(s)/Year/Specialization:
<ul style="list-style-type: none"> • BS (Civil Engineering), Massachusetts Institute of Technology, Cambridge, MA • MS (Structural Engineering) University of California, Berkeley • MBA, Harvard Business School, Boston, MA
Active registration: Year first registered/discipline:
PE Florida No. 69589 PE Puerto Rico No. 19838 LEED AP # 0010444929 PMP #3223782
Other experience and qualifications relevant to the proposed Project:
<p>Ms. Olazabal is a committed sustainability professional leading in engineering and project management in both the public and private sector. For over 24 years, she has effectively managed technical teams and stakeholders to develop creative solutions and advance discussions into a cohesive and comprehensive strategy. She has worked directly for local municipalities in South Florida including the City of Coral Gables, Town of Miami Lakes, and City of Miami Beach. Ms. Olazabal has successfully managed sustainable projects and initiatives by actively tracking progress and effectively communicating with critical stakeholders, including extensive outreach to build up public support.</p>

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.

PROJECT NO. 1

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Citywide stormwater + roadway improvements</p> <p>Village of Biscayne Park, FL USA</p> <p>Village of Biscayne Bay</p> <p>Albert Dominguez, PE</p> <p>t: +1.305.893.4346</p>	<p>The scope of work included investigation of existing conditions, design and permitting, and construction of all improvements associated with the new stormwater management system and roadway improvements. The five locations included in this project were the following;</p> <ul style="list-style-type: none"> • NE 111th Street from NE 10th Avenue to NE 11th Place • NE 113th Street from NE 9th Court to NE 10th Avenue • NE 115th Street from NE 6th Avenue to NE 7th Avenue • NE 11th Avenue from NE 119th Street to NE 121st Street • NE 121st Street from NE 11th Avenue to NE 11th Court 	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing (Estimated 2025)	\$1,000,000 USD(Construction Cost)	Stormwater Design, Flood Mitigation, Roadway Improvement, Project Sequencing, Optimization, MOT, Environmental permitting, Bidding assistance, Construction Management, Drainage, Community engagement

PROJECT NO. 2

Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Stormwater + roadway Neighborhood Improvements Program</p> <p>Miami Lakes, FL USA</p> <p>Town of Miami Lakes</p> <p>Omar Santos Baez</p> <p>t: +1.305.364.6100 x 1182</p> <p>e: santoso@miamilakes-fl.gov</p>	<p>The Town of Miami Lakes is performing drainage improvements in the Genesis Oak Gardens, Sevilla Estates, Florinda Estates and Royal Garden Estates neighborhoods. These improvements are designed to improve the level of service of the roadways in the neighborhoods in addition to providing relief from flooding. These projects are part of the ongoing drainage improvement program co-managed by EXP and the Town and are fully funded under the Stormwater Utility System Revenue Bond Series 2021 and the America Rescue Plan.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Apr 2022 – Ongoing (Estimated 2025)	\$8,000,000 USD(Construction Cost)	Stormwater Design, Flood Mitigation, Roadway Improvement, Grant Management, Bond Management, Program Management, Multi-agency coordination and permitting, Bidding assistance, Community engagement

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
<p>SR-5/US-1 from 59th Street to SR 850/Northlake Blvd</p> <p>Florida Department of Transportation (FDOT) District 4</p> <p>Damaris Williams t: +1.954.777.4679 e: damaris.williams@dot.state.fl.us</p>	<p>EXP is providing transportation design services in this two phase project. The first phase was to develop a study documenting the feasibility of implementing safety and bicycle/pedestrian improvements along SR 5/US 1 from 59th Street to Northlake Boulevard. The report analyzed the existing conditions and corridor characteristics within the Right of Way as it pertains to mobility.</p> <p>The second phase is to design the recommended main improvements which will consist of the addition of 4' bicycle lanes in each direction, a new pedestrian crossing at 16th Street, reconstruction of substandard curb ramps and a raised median from Silver Beach Road to Palmetto Drive within the Town of Lake Park. It also includes the milling and resurfacing of the 3 mile corridor. Project scope also includes ADA compliance, signing and pavement markings, and roadway lighting.</p>	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Ongoing	Professional Services: \$2,097,369 USD	Roadway Design, Signing and Pavement Markings, Signalization, Lighting, Pedestrian and Bicycle Facilities

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>SR 817/NW 27th Avenue from Burlington to NW 166th Terrace/Miami, FL</p> <p>Florida Department of Transportation (FDOT) District 6</p> <p>Carlos Castro, PE t: +1.954.777.4499 e: carlos.castro@dot.state.fl.us</p>	<p>This project is a Resurfacing, Restoration, and Rehabilitation (RRR) project along SR 817/NW 27th Avenue from Burlington Street to NW 168th Terrace. The scope of work included milling and resurfacing, reconstructing sidewalk and curb and gutter, upgrading existing deficient pedestrian curb ramps including detectable warning surfaces, pedestrian detector assemblies, pavement markings and pedestrian crossing signs. Scope of work also included the upgrade all substandard ground mounted signs to comply with the latest edition of the TEM, MUTCD and FDOT Standard Plans.</p> <p>Signalization upgrades include new pedestrian signals at Ali Baba Avenue, new pedestrian detectors (pushbuttons) and detector signs, and the update to the existing TMS system with a permanent installation including inductive loops, axle sensors, cabinets, pull boxes and conduits. Conditionally, all existing signalized intersections will also be updated to full actuation with video detection and retroreflective backplates will be installed on all signals at signalized intersections. Lighting pull boxes will be replaced as required.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completed 8/2022	Professional Services: \$507,246 USD	Roadway Design, Signing and Pavement Markings, Signalization, Lighting, Pedestrian and Bicycle Facilities

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Route 15/Harrisville Blvd. Interchange Upgrades/Moncton, NB NB Dept. of Transportation & Infrastructure (NBDTI) Heather Pugh t: +1.506.476.8172 e: Heather.Pugh2@gnb.ca	As part of the upgrades, the existing underpass structure was rehabilitated and widened, the signalized ramp terminals were replaced with two multi-lane teardrop-shaped roundabouts, new pedestrian facilities were extended over the interchange, a double left turn lane was added on the westbound exit ramp, and an eastbound exit ramp was added from Route 15 directly into the Dieppe Industrial Park. In conjunction with the design, EXP developed a comprehensive traffic management plan and communication strategy to mitigate impacts to the travelling public during construction. Other design challenges/constraints included the need to accommodate Long Combination Vehicles, avoiding underground gas and water mains, relocating an overhead transmission tower, providing guide signage for 13 different destinations, widening of a CN rail structure, and maintaining minimum bridge clearances. In 2019, this project received an ACEC-NB Award for Engineering Excellence.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Completed 10/2018	\$13,800,000 USD(Construction Cost)	Roadway Design, Traffic Engineering, Civil, Bridge Design

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
NW-NE 36th Street Multimodal Corridor Study Florida Department of Transportation (FDOT) District 6 Daniel Lameck t: +1.305.470.5238 e: Daniel.Lameck@dot.state.fl.us	SR-948/NW-NE 36th Street is an east-west corridor in Miami-Dade County that goes from SR-826/Palmetto Expressway to I-195/SR-112/Julia Tuttle Causeway for about 8.626 miles and traverses the Village of Virginia Gardens as well as the Cities of Miami Springs, Hialeah, and Miami. This corridor serves the Miami International Airport (MIA) and the Florida East Coast Railroad (FEC)'s Hialeah Yard; as well as major recreational and community centers such as the Miami Springs Golf and Country Club, Casino Miami, Tropicana Flea Market, Miami Jackson Senior High School, and The Shops at Midtown Miami. EXP is currently documenting existing conditions required for the development and evaluation of multimodal improvements to address existing and future mobility, operational, social, economic, and safety needs along the corridor.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
03/2020 - 2023	\$2,500,000 USD	Transportation Planning, Transit Operations Planning, Facilities Planning, Public Participation, Environmental + Sustainability, Visualization + Graphics

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>NW 154th Street and Miami Lakeway North Intersection Safety Study</p> <p>Town of Miami Lakes</p> <p>Carlos Acosta, PE t: +1.305.364.6100 e: acostac@miamilakes-fl.gov</p>	<p>EXP was retained by the Town of Miami Lakes to conduct an intersection safety study at the high-profile location of NW 154th Street (Miami Lakes Drive) & Miami Lakeway North. The study's purpose was to reduce crashes, most importantly fatalities and serious injuries, by evaluating the intersection and providing recommendations for improvement.</p> <p>EXP's study included day and night-time site visits to assess visibility, signage and striping, and driver behavior. Our team visited the field to conduct a spot-speed analysis to address speeding concerns identified by the residents. The analysis included assessing speeds for over 400 vehicles. Our team also conducted an operational analysis to review any kind of turn lane constraints, spillback into the thru lanes, turn lane warrant analyses, and deficiencies in signal timing. Our assessment also included a crash history analysis to review trends and driver behavior patterns. The team compiled all the data reviewed and provided the town a signed and sealed engineering report recommending both short- and longterm improvements for the Town to incorporate. Improvement recommendations included enhanced striping and signage, median adjustments, bollards for pedestrian safety, and signal timing adjustments.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
4/2022 - 9/2022	Professional Services: \$20,000 USD	Traffic Engineering

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Miami-Dade Transportation Master Plan (In-House Support)</p> <p>Miami-Dade Department of Transportation and Public Works</p> <p>Lisa Colmenares, AICP t: +1.786.469.5394 e: MariaElisa.Colmenares@miamidade.gov</p>	<p>The Miami-Dade County Department of Transportation and Public Works (DTPW) is developing the first ever Countywide Transportation Master Plan. This Transportation Master Plan will establish a clear vision and prioritization of projects for all transportation modes and networks within Miami-Dade County in the next 20 years, while improving collaboration with internal County, municipal, and agency plans to cohesively program improvements for the transportation system.</p> <p>To enhance the planning process, EXP is assisting DTPW with In-House project management and public involvement support, acting as the liaison between DTPW and the Master Planning consultant team.</p> <p>To expedite the plan development process, the EXP team is also assisting DTPW's consultant team with leading the development of the future framework, modal plans, project prioritization / needs planning, and overall plan implementation.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
11/2022 - 04/2024	Professional Services: \$500,000 USD	Master Planning, Project Management, Public Involvement, Transportation Planning, Transit Operations Planning, Facilities Planning, Financial Planning + Analysis, Environmental + Sustainability, Transit Intermodal Facilities, Transit Oriented Development, Urban Design

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>Peel Street Geometric Redevelopment</p> <p>City of Montreal</p> <p>Ms. Anjali Mishra, Urb. Dev. t: +1.514.872.3449 e: anjali.mishra@ville.montreal.qc.ca</p>	<p>Services in civil engineering, electricity, landscaping, urban planning, transportation, traffic maintenance and traffic lighting as part of the project regarding the geometric redevelopment, the improvement of public space and the integration of cycling facilities on Peel Street, from Smith Street to René-Lévesque Boulevard in Montréal.</p> <p>The project aims to redevelop the street and enhance public space in order to promote active and public transportation as well as to showcase the importance of Peel Street as the main institutional and commercial hub downtown. It also aims to integrate innovative cycling facilities along Peel Street in order to establish future standards for the City of Montréal regarding the implementation of the "Réseau Express Vélo" (REV Biking Network).</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2018 - 2021	Professional Services: \$961,100 CAD	Civil, Transportation, Landscape Architecture, Electrical

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
<p>SUN Trail Extensions Feasibility Study</p> <p>Charlotte County Metropolitan Planning Organization</p> <p>Lakshimi N. Gurram t: +1.941.883.3535 e: gurram@ccmpo.com</p>	<p>Charlotte County received a SUN Trail grant to conduct a feasibility study along the SR 776 corridor to link into Sarasota County. The feasibility study was conducted for the extension of a Shared-Use Nonmotorized (SUN) Trail between Myakka River Forest in Gulf Cove along SR/776/S. McCall Rd to the intersection of US 41/Tamiami Trail.</p> <p>The study included recommendations for gaining stakeholders engagement for future planning and implementation, while evaluating existing conditions for potential segmentation and economic impact analysis; as 35% of the length is located within residential land use and the rest (along SR 776/S McCall Rd.) fall within commercial and business districts.</p>	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
2020 - 2021		Transportation Planning, Public Involvement, Visualization + Graphics, Urban Design, Transit Oriented Development

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. N/A		
2. N/A		
3. N/A		
4. N/A		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

N/A

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature:  **Print Name:** Jonathan Markle

Title: Senior Program Manager **Date:** 08/25/2023



Jose Santiago, PE

Project Manager

Professional Registrations

- PE – LA (#47773)
- PE – FL (#60248)
- Temporary Traffic Control (TTC) Advanced, No. 43440
- FDOT Local Agency Program & Federal Highway Administration Certification, 2019
- IMSA Traffic Signal Technician Level 1, 2020

Education + Training

- B.S., Civil Engineering, University of Miami, Miami, FL

Jose Santiago has more than 26 years of experience in the design and management of transportation engineering projects from intersection improvements to complex interchanges. He has experience involving conceptual, preliminary and final design including highway geometry, right-of-way, signing and pavement marking, signalization, lighting, roadway drainage, milling and resurfacing and reconstruction projects. Project Management responsibilities have included client point of contact, sub-consultant management, development of project design schedules and budgets, community involvement and contract development. Before joining EXP, Jose held various management positions at the Florida Department of Transportation (FDOT).

Noranda Parking Lot, Private Developer, Garysville, Louisiana/Pavement Design Engineer

This ongoing project scope consists of the redesign of +/- 120 stall parking lot serving an industrial facility to add parking spaces, formalize traffic movements, and implement a new pavement material designed for heavy-duty traffic applications. The project is being delivered with an expedited schedule to meet client needs. EXP services provided include civil engineering design and construction administration.

SR 5 US 1/Broadway from 59th Street to Northlake Blvd. | FDOT District 4 | Project Manager/Engineer of Record: Mobility project in Palm Beach County adding bicycle lanes in a 3.1-mile corridor along SR 5. Responsibilities included the final roadway design, updating the engineering report, production of roadway and signing and pavement marking plans, development of engineering estimate, and specifications. This design included the addition of bicycle lanes and a shared-use path. (2023)

SR 710/Warfield Blvd. | FDOT District 4 | Project Manager/Engineer of Record: Major reconstruction project for SR 710/Warfield Blvd. from FPL Martin Power Plant Road to CR 609/Allapattah Road. Responsibilities included the final roadway design, including establishing a typical section, roadway horizontal and vertical geometry, engineering report, drainage analysis and report, production of roadway and drainage plans, development of engineering estimate, and specifications. This design included bicycle lanes and a shared-use path. (2012-2019)

Adaptive Signal Control Technology Implementation | FDOT District 4 |

Project Manager: Implementation and integration of an adaptive signal control system (Centracs) along SR 5/US 1 (12 intersections) within the City of Fort Pierce. Responsibilities included project management, roadway and signalization design, utility coordination, and public involvement. (2016)

St. Lucie County's Advanced Transportation Management System (ATMS)

Phase 1 | FDOT District 4 | Project Manager: Development of a Design/Build Criteria Package for the design, construction and integration of St. Lucie County's ATMS Phase 1 project, which consists of installing a Fiber-Optic Communications Network for 46 signalized intersections, installing and integrating the ATMS software, installing and integrating 40 Closed Circuit Television (CCTV) cameras and travel-time detection devices. Responsibilities included project management of the development of the RFP and Concept Plan Set for the Design/Build Criteria Package. Project performed under (2016-Ongoing)

Hollywood Blvd. Complete Streets | FDOT District 4 | Project

Manager/Engineer-of-Record: Decorative signalization and lighting improvements for this Complete Streets project along Hollywood Blvd. from City Hall Circle to Dixie Highway. This project entailed the reconstruction of Hollywood Blvd. into a multimodal facility for automobiles, bicycles, and pedestrians. Responsibilities included the production of signalization and lighting component plans. (2016-2017)

SR 882/Forest Hill Boulevard Intersection | FDOT District 4 | Project

Manager: Intersection safety improvement project at the Forest Hill Boulevard and South 16th Place. This project included a new mast system, internally illuminated signs, pedestrian signalization and a fully actuated video detection system. It also had a median modification that required an access management review and a public hearing. (2016-2019)



John Flint, PE

QA/QC Manager

Professional Registrations

- Professional Engineer - FL, KY, NY

Education + Training

- B.S., Civil Engineering, SUNY at Buffalo, 1977

Affiliations + Memberships

- American Railway Engineering and Maintenance-of-Way Association (AREMA)
- American Public Transportation Association (APTA)
- National Society of Professional Engineers (NSPE)
- American Society of Civil Engineers (ASCE)

Mr. Flint has over 41 years of experience in transportation planning, feasibility studies, detailed design engineering, inspection and rehabilitation design. He is also experienced in the planning, study, and design of major rail and highway transportation capacity and corridor improvement projects. His engineering abilities are rivaled only by his experience in managing and controlling project scope and cost, obtaining team consensus on difficult issues, and applying visionary thinking to project challenges in a practical, detail-oriented manner. Mr. Flint has served as Principal in charge and Project Manager on projects with construction budgets in excess of \$2 Billion, and his experience spans all phases of project delivery.

Project Experience

Monroe County Pedestrian Activity Safety Study, Monroe County, NY

The first project of its kind for the area; work was focused on identifying problem areas and providing recommendations to both enhance the pedestrian and bicycle environment throughout the County and eliminate the occurrence of accidents. Mr. Flint served as Principal-in-Charge for this project. The study area for the project included twenty-five intersections within Monroe County, with the highest occurrence of accidents occurring in the urban areas, specifically the City of Rochester. The study examined accident records acquired from 911 emergency responses to determine the cause and severity of each accident cluster. A specific design analysis was conducted for each significant occurrence location, with the analysis resulting in design recommendations to prevent similar accidents from occurring.

Routes 5 & 20 Corridor Study, Lima to Canandaigua, NY

Mr. Flint served as Principal-in-Charge for this work. FRA's role for this planning study was to assess traffic/transportation impacts associated with the proposed build-out scenario; conduct a thorough inventory of natural and cultural resources, and scenic views; develop a vision for the corridor along with goals and objectives for future development; provide specific recommendations needed to implement the development vision identified; identify and develop access and traffic management techniques and improvements that would minimize safety hazards; present the recommendations and improvements in a format suitable for adoption by municipalities as addendums or amendments to their current comprehensive plan; and incorporate the interests of the counties, municipalities, involved agencies, business owners, residents, commuters, and other interested organizations or individuals. This study involved a significant public participation effort, visualization, and GIS mapping as well as land use planning, transportation planning and access management.

Priority Investigation Locations, & Traffic Engineering & Safety Studies, NYSDOT, Region 4

Principal-in-Charge of priority investigation locations (PIL) and other traffic engineering and safety studies to the NYSDOT to be used in highway safety investigations in various counties in Region 4.



Jonathan E. Markle

QA/QC Manager

Education + Training

- Executive Leadership, International Focus, Cornell University, 2016
- B.S., Construction Engineering, University of Louisiana, 2005
- OSHA 30-Hour & TWIC Holder
- PADI Licensed Scuba Diver (24 years)
- DEP (Storm Water Erosion & Sediment Control Inspector)

Jonathan has over 17 years of professional experience in development and management initiatives in marine, heavy civil, commercial, and oil & gas industries. Divergent thinker, implements innovative solutions to limit risk, streamlines budgets, propels revenue growth, and delivers measurable results while championing quality and safety. Builds strong multicultural teams in national and international markets.

Project Experience

Senior Program Manager, EXP U.S. Services, Inc., Miami, FL, USA

Support of two Port Miami EDP agreements; one to provide Owner's representative services including program management, contract management, and claims management/analysis support services for Port Miami in relation to MSC's new terminal development, and the second for Port Miami facility wide utility assessment. Conducted Miami-Dade County Courthouse facility assessment and engineer's estimate on structural and fireproofing elements throughout the 27-story downtown building.

***Project Estimator, Colman Dock Multimodal Terminal Project, Pacific Pile & Marine, Seattle, WA, USA**

Led 30% and 60% value engineering and estimating efforts for one of the world's busiest ferry terminals. The project replaces aging and seismically vulnerable wood piles and trestle foundations, adds overhead loading and walkway ramps, a 8,500 SF passenger-only ferry building, and a new 23,000 SF terminal building, with LEED Silver certification.

***Project Estimator, LPV 107 Lincoln Beach Levee and Gate Replacement (USACE), Orion Marine Group, Plaquemines, USA**

The project consisted of demolishing existing I-walls, T-walls and earthen levee to construct a new wall system matching the new LPV 106 pump station alignment. Work also incorporated the replacement of the floodgate and dolphin structures.

***Project Estimator, Mandeville & Piety Wharf, Orion Marine Group, New Orleans, LA, USA**

The 1.4-mile linear park repurposed a maritime/industrial brownfield into 20-acres of indigenous landscaping, a network of paths, picnic areas, a dog park, and the adaptive reuse of two industrial wharves. Both structures were stabilized and repurposed to accommodate public gatherings, festivals and the host of artistic exhibitions.

***Project Estimator, WBV 21 Westwego Pump Station (USACE), Orion Marine Group, Westwego, LA, USA**

The project involved the extension of discharge pipes, backflow prevention system, and modifications which will include the construction of higher floodwalls at the discharge point.

Jonathan E. Markle – *Cont.*

***Project Estimator, WBV 37 Ames & Mt Kennedy Pump Station (USACE), Orion Marine Group, New Orleans, LA, USA**

The project consisted of demolishing existing I-walls, T-walls and earthen levee to construct a new 1,204 linear foot T-wall system and modifications to the two pump stations which included three 48" vertical pumps, two 84" vertical pumps and one 132" horizontal pump.

***Senior Project Manager, Port Tampa Bay Berth 219 Wharf Extension, Shoreline Foundation Inc., Tampa, FL, USA**

Oversaw the 100' x 300' wharf extension project supported by 295ea 24" pre-cast concrete piles with steel stingers, and 274ea precast slabs and caps. Project was performed in coordination with an active wharf, shipping channel, and cold storage facility while utilizing crane barges and material supply barges.

***Project Executive, SR520, Pacific Pile & Marine, Seattle, WA, USA**

Oversaw SR520 West Approach Bridge Project - \$27M install contract including large deep foundation substructure elements and 4,800' trestle platform for access. The project incorporated limiting/eliminating impacts to environmentally sensitive areas, tribal lands and local communities.

***Director, 210K-Barrel LPG Export Terminal, Navigator Gas, New York, NY, USA – London, GB**

Spearheaded Fast track \$120M development of 210k-barrel LPG export terminal for handysize vessels. Developed terminal throughput agreement / lease terms with primary LPG products client, regional port authorities, and longshoreman.

***Senior Project Engineer, Bayou Lafourche 6-mile Dredging Project Phase I, Orion Marine Group, LA, USA**

- Developed new overall project design due to faulty Lidar survey, bringing the project in before initial schedule and \$4 million in client savings
- Project liaison for engineers, project owners, and state / government officials
- QC representative, safety representative, HR representative, subcontracts manager, & personnel manager

***Senior Project Engineer, Belle Chasse Pump Station WBV-11 (USACE), Orion Marine Group, Plaquemines, LA, USA**

The project consisted of constructing a continuous line of hurricane flood protection across the discharge basin at the pumping station on the east side of the Algiers Canal. This protection incorporates pile founded reinforced concrete T-wall monoliths, new butterfly gates installed within the steel discharge tubes, and site work including modifications to existing pumping station utilities, dewatering systems, and construction of temporary retaining structures with work platforms

- CQC manager and SSHO alternate

***Sr Project Engineer, Progress Energy Underground Power Duct Bank, Kiewit, St Petersburg, FL, USA**

The project consisted of placing and encasing 5 miles of power distribution system in a 6'x6' concrete duct bank inclusive of 12 underground premanufactured concrete servicing structures. The project incorporated limiting/eliminating impacts to protected mangrove habitats, tribal lands and commercial infrastructure.



Nicholas Karpathy, P.E., ENV SP

Project Manager / Design Lead

Professional Registrations

- PE Louisiana No. 47788
- PE Florida No. 93659

Education + Training

- B.S., Civil Engineering, University of Miami
- M.S., Civil Engineering, University of Miami

Affiliations + Memberships

- American Society of Civil Engineers (ASCE) Miami-Dade Branch Board of Directors
- American Society of Civil Engineers (ASCE) Florida Section Government Relations Committee Chair
- Florida Engineering Society (FES)
- Institute for Sustainable Infrastructure (ISI) Envision Sustainability Program
- Leadership Miami Cohort 44, Greater Miami Chamber of Commerce

Languages Spoken

- English

Mr. Karpathy is an accomplished civil engineer who holds both a bachelor's and master's degree in civil engineering from the University of Miami in Coral Gables, Florida. With his expertise in various fields, including land development, drainage, and utility project management, he brings a wealth of knowledge to every endeavor. His skill set extends beyond engineering, encompassing subconsultant management, contract negotiation and administration, value engineering, and technical production review. Mr. Karpathy has a solid technical background, having been involved in the planning, design, modeling, permitting, and construction administration of numerous site development and public infrastructure projects. This includes extensive experience with stormwater drainage networks, collection and transmission sewer mains, distribution and transmission potable water mains, pump stations, and traffic calming improvements throughout the United States. With his diverse skill set, technical expertise, and commitment to sustainability, Mr. Karpathy is well-equipped to tackle complex projects and provide valuable insights and leadership to ensure successful outcomes.

Project Experience

Noranda Parking Lot, Private Developer, Garysville, LA USA (2023)

This project scope consisted of the redesign of +/- 120 stall parking lot serving an industrial facility to add parking spaces, formalize traffic movements, and implement a new pavement material designed for heavy-duty traffic applications. The project is being delivered with an expedited schedule to meet client needs. EXP services provided include civil engineering design and construction administration.

Genesis Oak Gardens Drainage Improvements, Town of Miami Lakes, Miami Lakes, FL USA (2022-Present)

Scope consists of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Genesis Oaks neighborhood. The project is bounded by NW 91st Court (West), NW 169th Street (North), NW 89th Place (East), and NW 167th Street (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,800 LF of drainage improvements, including HDPE pipes and exfiltration trench.

Sevilla Estates Phase 1, Town of Miami Lakes, Miami Lakes, FL USA (2022-Present)

Scope consists of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 169th Terrace (North), NW 87th Court (East), and NW 168th Street (South). The project includes approximately 5,000 LF of roadway milling and resurfacing, and

Nicholas Karpathy, P.E., ENV SP – Cont.

Select Presentations + Publications

- “Site Civil Engineering Design Development”. University of Miami College of Engineering Civil and Architectural Engineering Department, Senior Design Class, 2022.
- “Site Civil Engineering Construction Documents”. University of Miami College of Engineering Civil and Architectural Engineering Department, Senior Design, Class 2023.
- “Water Collection and Management Strategies”. University of Miami College of Architecture, Environmental Building Systems Class, 2023.
- “The Relationship between the Curve Number and the ϕ -Index”. ASCE Florida Section Annual Conference, 2021
- Karpathy, N. and Chin, D. (2019). “The Relationship between the Curve Number and the ϕ -Index”. Journal of Irrigation and Drainage Engineering, ASCE.
- Chin, D., Jacketti, M., Karpathy, N., and Sahwell, P. (2019). “Accounting for Tropical Cyclones in Extreme Rainfall Distributions in Florida”. Journal of Hydrologic Engineering, ASCE.

approximately 3,750 LF of drainage improvements, including HDPE pipes, exfiltration trench and an outfall structure connecting other drainage basins to a regional canal.

Sevilla Estates Phase 2, Town of Miami Lakes, Miami Lakes, FL USA (2022-Present)

Scope consists of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 167th Street (North), NW 87th Court (East), and NW 166th Terrace (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,200 LF of drainage improvements, including HDPE pipes and exfiltration trench.

***Liberty Street Drainage Improvements, City of Hollywood, Hollywood, FL, USA (2020-2023)**

Scope consisted of providing professional engineering services for the design and permitting of roadway drainage and sidewalk improvements within a residential neighborhood. Design utilized a combination of swales, piping, and connection to an existing outfall to manage stormwater generated by the area. Permitting included coordination with the City of Hollywood and Broward County Resilient Environment Department and Traffic Engineering Department.

***NE 153rd Street Right-of-Way Improvements, City of North Miami Beach, North Miami Beach, FL USA (2019-2023)**

Scope during his tenure included the design, permitting, and bidding assistance for multiple improvements to a two-block section of City Right-of-Way in an industrial area. The original project scope included pavement replacement and stormwater management improvements via the installation of a gravity drainage well. Following partial design and a project reevaluation by the client, the project was revised to also include Right-of-Way reconfiguration with new on-street parking and sidewalks along with an approximately 1,200 LF water main extension.

***NE 35th Avenue Right-of-Way Improvements, City of North Miami Beach, North Miami Beach, FL USA (2018-2023)**

Scope included the design, permitting, bidding assistance, and construction administration for improvements to the main roadway serving the Eastern Shores Neighborhood. The project originated as roadway surface improvements to narrow existing vehicle travel lanes and install bicycle lanes along a +/- 2350 LF segment of the roadway. After the design of roadway improvements, the project scope was augmented by the client to add the replacement of the existing distribution and transmission water mains throughout the whole segment. These replacement water mains were installed using a combination of pipe-bursting (+/- 4100 LF of 8-12 inch HDPE) the distribution water mains and horizontal directional drilling a transmission main (+/- 3400 LF of 20 inch HDPE) parallel to the existing pipe. Construction was completed in one phase.

*Work performed at previous firm.

Nicholas Karpathy, P.E., ENV SP – Cont.***NE 183rd Street Bicycle Lanes and Water Main, City of North Miami Beach, North Miami Beach, FL USA (2016-2021)**

Scope included the design, permitting, bidding assistance, and construction administration for improvements to a 5300 LF roadway segment to widen the existing pavement and install bicycle lanes to serve the adjacent residential neighborhood. Following design and permitting of the roadway improvements, the project scope was augmented by the client to add the installation of a new 8-inch HDPE water main in select portions of the corridor totaling approximately 3300 LF. Construction was completed in one phase and utilized multiple local and state funding sources. This project was awarded the ASCE Miami-Dade Branch Project of the Year (Category I) in 2022.

***Hollywood Boulevard Streetscape Improvements, City of Hollywood, Hollywood, FL USA (2022)**

Scope included the construction of an existing and proposed site condition pollution loading model based on designed roadway improvements such as Right-of-Way reconfiguration and the installation of permeable pavers.

***SW 2nd Avenue Parking Improvements, City of Fort Lauderdale, Ft. Lauderdale, FL USA (2018-2020)**

Scope included the design, permitting, and construction administration of 700 LF of roadway improvements consisting of the reconfiguration of the existing Right-of-Way to add on-street parking within the medians. The design also included an exfiltration trench-based stormwater management system and traffic calming along SW 2nd Avenue via the installation of raised pedestrian crossings between the existing sidewalks and the new medians.

***NW 15th Avenue Improvements, City of Fort Lauderdale, Ft. Lauderdale, FL USA (2020-2022)**

Scope during his tenure included the design and permitting of 6800 LF of Right-of-Way improvements along NW 15th Ave from W Sunrise Blvd to Mills Pond Park. The design included a multi-use path along the western side of the existing roadway, swales to manage runoff generated by the multi-use path, and multiple raised intersections throughout the corridor. Limited drainage improvements were also proposed at raised intersections accommodate changes in runoff patterns caused by the roadway alteration.

**Work performed at previous firm.*



Roxana MATAMOROS, PE

Project Manager

Roxana Matamoros brings 22 years of experience in roadway and highway design including roadway design and operations, pedestrian and bicycle facilities, and transportation safety. Her areas of specialization include roadway signing and pavement markings, development of engineering cost estimates and specifications, signalization and drainage analysis, civil and site development. In addition, she has experience as a Project Engineer for Construction Engineering Inspections (CEI) Maintenance of Traffic (MOT), Utility Coordination, and Permitting. She has experience working on roadway projects for both the Florida Department of Transportation (FDOT) and various municipalities throughout the State of Florida and is a licensed Professional Engineer.

Expertise

Roadway/Highway Design
Complete Streets

Education

BS Civil Engineering
University of Detroit Mercy, 1998

Registrations

PE Florida No. 77979, 2014
PE Ohio No. 88751, 2022

Certifications

Temporary Traffic Control (TTC),
Advanced No. 43438, 2022

Envision Sustainability Professional
12/05/2021-12/05/2022 #47470

FDOT Local Agency Program & Federal
Highway Administration Certification,
2019

Affiliations + Memberships

American Society of Civil Engineers

Spanish, English

Relevant Experience

Five Points MARTA Station Transformation | Skidmore, Owings & Merrill LLP (SOM) | Project Engineer

This project includes the analysis and design for structural and civil engineering portions in the Five Points Station Transformation Project. Structural tasks include the existing canopy deconstruction and a new entrance canopy design. Civil Engineering tasks include preparing conceptual and final geometry for vehicular access and bus bays in the East and West Plaza, as well as Alabama 143 and the opening of Broad Street to connect from Marietta to Alabama Street. (2022-On-going)

Reference: Marla Gayle, marla.gayle@som.com (212) 298-9447

Sevilla Estates Phase 1 Drainage Improvements Project | Town of Miami Lakes | Engineer of Record

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 169th Terrace to the North, NW 87th Court to the East, NW 168th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going) Reference: Omar Santos, PE, (305) 364-6100

Sevilla Estates Phase 2 Drainage Improvements Project | Town of Miami Lakes | Engineer of Record

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 167th Street to the North, NW 87th Court to the East, NW 166th Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Reference: Omar Santos, PE, (305) 364-6100

ROXANA MATAMOROS, PE – Cont.

Genesis Oak Gardens Drainage Improvements Project | Town of Miami Lakes | Engineer of Record: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Genesis Oak Gardens neighborhood area which is bounded by NW 91st Court to the West, NW 169th Street to the North, NW 89th Place to the East, NW 167th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going) Reference: Omar Santos, PE , (305) 364-6100

Florinda Estates Drainage Improvements Project | Town of Miami Lakes | Engineer of Record: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Florinda Estates neighborhood area which is bounded by NW 88th Place to the West, NW 140th Lane to the North, Palmetto Frontage Road to the East, NW 138th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going) Reference: Omar Santos, PE , (305) 364-6100

Royal Garden Estates Drainage Improvements Project | Town of Miami Lakes | Engineer of Record: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Royal Garden Estates neighborhood area which is bounded by NW 88th Place to the West, NW 164th Street to the North, NW 87th Court to the East, NW 162nd Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going) Reference: Omar Santos, PE , (305) 364-6100

EWE Warehouse Investments, Doral, FL | Senior Engineer: Providing Civil Engineering services which included drainage, lighting and grading design as well as signing and pavement markings located at 2525 NW 82nd Avenue, Doral FL 33122. The project also included support in the permitting process. It also includes the widening of NW 82nd Ave. from NW 25 St. to NW 27th. It includes Milling and resurfacing, Mast Arm Replacement in the NE Quadrant and Signing and Pavement Markings. (2021-Present)

Farm Stores, Florida (10231 Memorial Highway, Tampa; 2711 Skyline Blvd. Cape Coral) | Senior Project Manager: professional Civil Engineering Consulting services and permitting services including paving/grading design, underground utilities design for drainage, potable water, sanitary sewer, and Fire Main. And the photometric analysis and lighting design for the site. The scope included civil design, engineering permits, secondary construction phase services, and certification services.

***Fuchs Park Improvements | South Miami | Senior Engineer and EOR:** Providing contract documents to construct a new perimeter asphalt trail around the existing lake at Fuchs Park. All improvements within this project shall be in accordance with the American for Disabilities Act (ADA), including providing access to the existing pavilion areas, restroom facilities, and lakeside benches. This project included construction administration (CEI) as well. (2018-Ongoing)

Reference: Quentin Pough, (305) 668-3876

***Kayak Dock, Canoe Launch and Parking Lot Design | Cutler Bay | Project Engineer and EOR:** Design services for the conversion and rehabilitation of the existing vacant land located at Lakes by The Bay in Cutler Bay, Florida, into a new park which includes a handicap accessible canoe and kayak launch, fishing pier, one educational pavilion and two recreational pavilions. Services included construction administration services (CEI) (2017-2021)

Reference: Etienne Bejarano, (305) 238-4166

***AD Barnes Park | Miami-Dade County | Senior Roadway Engineer:** Project included design, permitting, and construction administration for various trails identified in both the south Miami-Dade and north Miami-Dade greenway plans, and spur trails and trailheads located on adjacent park properties. Scope of work included site work; paved and unpaved trail surfaces; signage; road crossing signalization; information kiosks; pedestrian, bicycle, equestrian bridges; shelters and site furnishings; landscaping; lighting; utilities; parking; right-of-way planning; analysis and acquisition. (2011-2017)

Reference: Adelfa Martinez, (305) 755-7815



Carmen Olazabal, PE, PMP, LEED AP, ENV SP

Sustainability and Resilience Lead

Professional Registrations

- Professional Engineer
PE- FL (#69589)
PE- PR (#19838)
- LEED AP # 0010444929
- Project Management
Professional (PMP #3223782)

Education + Training

- MBA, Harvard Business School,
Boston, MA
- MS (Structural Engineering)
University of California, Berkeley
- BS (Civil Engineering),
Massachusetts Institute of
Technology, Cambridge, MA

Affiliations + Memberships

- Coral Gables Sustainability Board
Member
- Greater Miami Chamber of
Commerce Resilient Solutions
Summit Panelist
- 305 Resilient Working Groups
- Florida Engineering Society
- Southeast Regional Compact for
Climate Change

Awards + Recognition

- Ford Mujer Legendaria for
Environmental and Human
Sustainability (2022)

Languages Spoken

- English
- Spanish

Ms. Olazabal is a committed sustainability professional leading in engineering and project management in both the public and private sector. For over 24 years, she has effectively managed technical teams and stakeholders to develop creative solutions and advance discussions into a cohesive and comprehensive strategy. She has worked directly for local municipalities in South Florida including the City of Coral Gables, Town of Miami Lakes, and City of Miami Beach. Ms. Olazabal has successfully managed sustainable projects and initiatives by actively tracking progress and effectively communicating with critical stakeholders, including extensive outreach to build up public support.

Project Experience

Sustainability

Sustainability Planning and implementation

City of Coral Gables, Sustainability Action Plan, Coral Gables, FL

Created interdepartmental working teams to develop a plan that guided our sustainability initiatives. Worked with teams to define the City's green goals, strategies and performance indicators so the City could track its progress and integrate sustainability into all levels of decision making.

City of Coral Gables, Tree Master Plan, Coral Gables, FL

Presented and received approval from the City Commission for a plan that evaluated existing trees, created an inventory, comprehensively replaced dead, sick and missing trees throughout the City and outlined future tree monitoring and maintenance plan. The implementation resulted in an improved urban environment with better shading in sidewalks, improved air quality, and stormwater mitigation.

Improving Energy Efficiency and Building Performance

Town of Miami Lakes, LED Streetlight Conversion Program, Miami Lakes, FL

Managed the evaluation, procurement and implementation of a LED Streetlight conversion program which consisted of converting approximately 915 streetlights to LED fixtures.

Village of Key Biscayne, Key Biscayne Facility Assessment, Key Biscayne, FL

Provided facility condition assessment including proposed remedial action and pro-active maintenance work to enhance the energy efficiency of the facility. Cost estimating services were provided for the maintenance and remedial work which was prioritized based on need and budget availability.

Carmen Olazabal, PE, LEED AP, PMP – Cont.

Miami Dade Public Library, Miami Lakes LEED Library, Miami Lakes, FL

Project managed the civil/site engineering design for approx. 5,330 sf expansion on existing Miami Lakes Library. Scope of work includes site layout, grading, utility, stormwater management, erosion and sediment control, and permitting. Project is anticipated to meet LEED Silver designation.

Improving Mobility

City of Coral Gables, Mobility Hub Project, Coral Gables, FL

Provided project management and public outreach services for this \$42M mixed-use facility that will host multiple transportation and mobility activities for people visiting, living and working in Coral Gables. Our team was tasked to create an innovative building that will be able to adapt the technologies, mobility forms and optimal uses of the future, while also responding to current mobility and parking needs.

Town of Miami Lakes, Complete Street Implementation of Business Park East, Miami Lakes, FL

Led the design team for the client by promoting other forms of mobility via wider sidewalks, dedicated bike lanes, better lighting and increased tree canopy. Evaluated different scenarios for the Client based on their technical efficacy, economic impact and benefit to the public and implementing the public engagement plan.

City of Coral Gables, Bike Master Plan Presentation and Adoption, Coral Gables, FL

Worked on the development of the Bicycle and Pedestrian Plan adopted by the Commission. After the plan, Miami-Dade County identified the City as an emerging leader for creating and promoting safe-cycling initiatives in South Florida.

Town of Miami Lakes, FDOT Transportation Alternative Program (TAP) 60th Ave., Miami Lakes, FL

Managed the design and construction phase for the client. The project included the creation of a shared use path, drainage design, cross walks and milling and re-surfacing of the road. Worked with EOR to find value engineering options, to secure permit and performed quality assurance review on plans. During the construction phase, documented daily work activities and inspection findings, providing quality assurance on construction, and review and approval of payment applications.

**Work performed at previous firm.*

Carmen Olazabal, PE, LEED AP, PMP – Cont.

Resiliency

Increasing Drainage Capacity to Better Adapt to Sea Level Rise projections

City of Coral Gables, Miracle Mile and Giralda Streetscape Project, Coral Gables, FL

Led the design, permitting phase and construction contract negotiation of the project together with the Public Works Director, Steering Committee and design team. The approximately \$24M project created a new wider promenade, increased drainage capacity and planted new trees and native landscaping which improved pedestrian mobility, increased stormwater resilience and air quality. The project was completed and well received by the community that enjoys the new civic promenades with extensive gardens and landscaping, decorative LED streetlights, way finding signs and outside dining spaces.

Town of Miami Lakes, Canal Bank Stabilization Project Phase I & II, Miami Lakes, FL

Led the design, public outreach, permitting and construction management of canal stabilization project. The project consisted of installing a stacked geoweb system resulting in a stable, sustainable and more effective canal system. The design reduced the amount of debris and vegetation entering the canal, improving the stormwater capacity through the SFWMD C-8 canal system.

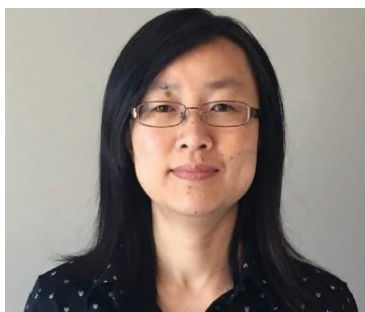
Town of Miami Lakes, Lake Sarah Drainage and Roadway Improvement, Miami Lakes, FL

Managed the construction phase for the project which included increasing stormwater capacity and the restoration and resurfacing of the existing roadway surfaces. Responsible for documenting daily work activities and inspection findings, providing quality assurance on construction, directing weekly progress meetings, and review of payment applications. Assisted EOR with permit coordination.

Increasing Resiliency During High Wind Events

City of St. Pete Beach, Utility Undergrounding Project, St. Pete Beach, FL

Led the project management to underground over one mile of existing overhead utilities in the City's main corridors which will reduce the City's propensity to power outages during hurricanes. Oversaw the design process, permitting, review of bid packages and assisted in the bid evaluation.



Cherry Xiong, P.E.

Professional Registrations

- PE – Maryland

Education + Training

- M.S., Civil Engineering, Specialization in Transportation Engineering, University of Illinois at Chicago

Affiliations + Memberships

- Member – TRB Committee on Public Transportation Planning and Development – AP025
- Member – TRB Committee on Intermodal Transfer Facilities – AP045

Select Project Awards

- FHWA SHRP2 Reliability Tool Testing Technical Assistance - 2019 ACEC New York Excellence Awards Silver Medal

Languages Spoken

- English

Select Publications

- Transit Planning: Myths, Techniques and Trends, ITE/ASCE Conference, 2015
- Collaborative Mechanisms in HSR Hub Design-Opportunities and Challenges, Urban Transport of China, 2013
- What can China learn from Vancouver's Transit Planning Process, Chongqing Jiaotong University Journal, 2013
- Planning of Vancouver's Transit Network with an Operations-Based Model, 55th North

Ms. Xiong has 20 years of extensive experience in transportation planning/transit ridership forecasting, and multimodal micro-simulation in the US, Canada, UK, Central/South America and China. Her principal expertise is Intermodal transfer hub planning, pedestrian modeling and simulation, rail operations planning/rail traffic simulation (RTC), transit ridership forecasting, visualization, etc. Ms. Xiong is highly experienced in project/team management and presenting results to clients/stakeholders.

As a technical expert, Ms. Xiong managed numerous large scale and challenging projects for both public and private clients. She led the team to help Port Authority New York & New Jersey review the PABT bus terminal replacement pedestrian model developed by ARUP, and provided oversight/review service to Cayman Island National Road Authority during the development of the agency's regional travel demand model/simulation model. Between 2011 and 2014, Ms. Xiong managed multiple high-speed rail station design review projects in China.

As a former product manager and project manager at PTV, Ms. Xiong was directly involved in VISSIM traffic/pedestrian simulation software development and provided training courses to many consulting firms/public agencies. Ms. Xiong is deeply involved in the research community and currently serves as a member on two TRB standing committees.

Project Experience

Pedestrian Modeling/Transport Hub Design Review

***The Port Authority Bus Terminal Replacement Simulation Model Development Review/Oversight, New York, NY**

Worked as the Port Authority's technical advisor/ pedestrian simulation modeling expert and reviewed the simulation model that was developed by another consultant. Conducted thorough review, identified errors, and provided suggestions on how to improve the model setup to better represent pedestrian behavior. The model parameters and pedestrian behaviors near express elevators and boarding gates were thoroughly checked to ensure the model can provide meaningful input in decision making.

***Sutphin-Archer Blvd. Station Enhancement Feasibility Study, New York, NY**

Passenger flow analysis task lead to support feasibility study, preliminary engineering design and the final design for the Enhancement of Sutphin-Archer Station Interconnections to the LIRR/AirTrain Terminal Complex in Jamaica Queens. High-resolution 3D pedestrian models were developed to analyze all design alternatives and provide feedback to architects and structural design team for design optimization purpose. The model helped

Cherry Xiong, P.E. – Cont.

American Regional Science Association Meetings, New York, NY, 2008.

- Linking Atlanta's Regional Planning Model with Microscopic Traffic Simulation, 54th North American Regional Science Association Meetings, Savannah, GA, 2007.
- Forecasting Travel for Very Large Cities: Challenges and Opportunities for China, Transportmetrica 3 (1), 1-19, 2007.
- The Relationship Model between Traffic Volume and Traffic Conflict at the Merging Points of Urban Tunnel Entrance, First International Conference of Transportation Engineering (ICTE), Shanghai, P. R. China, 2007.
- User-Optimal and System-Optimal Route Choices for a Large Road Network, Review of Network Economics 3 (4), 371-380, 2004.

with the development of construction phasing plan to minimize the negative impact on passengers. Based on the pedestrian modeling results the concepts were developed and vetted for most optimal and constructible option.

***Fuling Mountain Bay Transfer Hub Design Traffic Analysis, Fuling District, Chongqing, China**

Pedestrian modeling lead to Worked with Perkins & Will on this project. Evaluated and optimized all conceptual schemes from transportation functionality point of view to ensure that the hub provides "seamless transfers" for passengers.

***Huangshan North HSR Station Design Review/YiChun HSR Station Design Review/ West Chongqing Rail Station Design Review/ RongChang HSR station Design Review**

Ms. Xiong served as project manager (TYLI China) and led the team to perform fine grained vehicle and pedestrian circulation analysis for design review purpose. The pedestrian flow analysis has been integrated into the design process to reveal the bottlenecks and conflict areas for design optimization purpose and to evaluate various travel demand management strategies during special events and during emergency evacuation.

***Tocumen International Airport, Landside Airport Engineer - Roadways, Civil and Utilities Design, Panama City, Panama**

Ms. Xiong led the efforts to perform traffic analysis for related landside multimodal transportation facilities. Ms. Xiong developed a VISSIM simulation model for the area in front of the terminal main entrance. Interactions between vehicles and passengers crossing streets were fully modeled. Statistics such as average travel speed, delays and queueing were estimated for both vehicles and pedestrians based on various signal control methods (fixed timing, pedestrian activated signal control and unsignalized) according to MUTCD standard.

***Peachtree Corners Pedestrian Study, GA.** Worked as Pedestrian planning specialist and prepared a pedestrian study to determine the propensity of pedestrians to use the new bridge spanning a major arterial between two commercial/retail venues based on land use type, area and floor area ratio (FAR). Special events were considered for sensitivity analysis. The analysis result was used to determine the bridge width that would provide sufficient comfort for pedestrians.

***Multimodal Corridor Enhancement TIGER VI Grant Project, Champaign-Urbana, IL**

Served as transit operations/ travel demand model/ micro-simulation specialist and providing transit support for improvements in Champaign-Urbana, IL. Use macro-micro integration approach to understand existing and future year travel pattern of all modes in the study area. Performing alternative analysis using high resolution micro-simulation to show how bus-

**Work performed at previous firm.*

Cherry Xiong, P.E. – Cont.

only lanes may improve efficiency and suggest operations improvements at segment and intersection level. Using simulations of vehicles, bikes and pedestrians to support implementation of complete street concept.

***Downtown Atlanta Bus Circulation Study, Atlanta, GA**

Served as lead network and micro-simulation modeler. Applied a Macro-Micro Integration approach to develop downtown Atlanta sub-area travel demand model from ARC's regional travel demand model. The study area was defined based on the project and zones were disaggregated based on traffic generation/attraction pattern in downtown area. The network was refined, and detailed zone connectors were added based on field check and aerial photos. Peak hour demand was calibrated against link and turn counts. Detailed signal timing information was also integrated into the demand model for micro-simulation preparation purpose. The model was then used for downtown area bus circulation study in a micro-simulation environment. Feedback from simulation results to demand model was used to update macro model settings.

***Pre-Feasibility Study Of "High Viaduct", Lima, Peru**

Ms. Xiong led the traffic analysis team and developed a VISSIM simulation model for the 12-KM long corridor to demonstrate the sustainability of the facility over a period of 30 years. Various design alternative of the elevated toll facility (i.e., on/off ramp location, number of lanes) were tested for design optimization. Toll road demand forecast from the spreadsheet model was validated from traffic operations point of view to ensure reasonableness of toll traffic/revenue forecast.

Travel Demand Forecasting Transit Planning

***Cayman Island Travel Demand Model and Microsimulation Model Development Review/Oversight, Cayman Island**

Worked as National Roads Authority's technical advisor and demand modeling/ traffic operational simulation expert. Conducted thorough review of the base year and future year models that were being developed by a consultant and identified errors and provided suggestions on future model structure improvements when additional data become available.

***Regional Transit Model Development, Vancouver, Canada**

Worked as network modeling lead. Developed a model that can support decision making and comprehensive analysis for the implementation of the regional transit plan. The tasks performed included the development of the comprehensive regional transit network; calibration/validation of the ridership model; calibration/validation of an operations model including fleet assignment, scheduling, line blockings; formulation and integration of zone-based or distance-based fare structure across all public transportation modes for cost-revenue analysis; development of an automated transit schedule update system for model update purpose; and, applications of the model in

**Work performed at previous firm.*

Cherry Xiong, P.E. – Cont.

various planning and operations scenarios such as operations planning for the future extensions of the rapid transit network and bus service adjustments around new rail lines.

***DVRPC Model Improvement and SEPTA Thorndale Extension Ridership Forecasting, Delaware Valley Regional Planning Commission, Philadelphia, PA**

Ms. Xiong served as the project manager on this project to help Chester County, SEPTA, Amtrak and DVRPC to evaluate various Thorndale/Paoli line extension operations alternatives in year 2035 to meet future demand increase in Chester County and to understand the impact of such extension on trip distribution and mode shift. Ms. Xiong worked closely with the transit agency South Eastern Pennsylvania Transportation Authority (SEPTA) to test the impact of different operating frequencies (between Parkersburg/Atglen and Philadelphia Center City) and route alignment on ridership and operating costs. Such sensitivity analysis can help the transit agency to understand the feasibility of rail extension. Ms. Xiong also reviewed and improved Amtrak modeling components in the DVRPC regional demand model and made necessary short-term improvements.

***DVRPC SHRP2 Wider Economic Benefit Tool Testing Technical Assistance, Philadelphia, PA**

T.Y. Lin International (TYLI) was selected by the Delaware Valley Regional Planning Commission (DVRPC) to provide technical assistance in the process of testing a series of spreadsheet-based tools estimating Wider Economic Benefits (WEB) of transportation projects. Ms. Xiong served as the project manager. The scope of work performed by TYLI includes:

- Comparison of two planning tools for travel reliability benefit analysis: Transportation Economic Development Impact System (TREDIS) and the improved economic analysis tool C11 by Strategic Highway Research Program 2 (SHRP 2 C11 Reliability Module).
- Analysis of Reliability Improvement due to the Port Authority Transit Corporation's (PATCO's) Speedline and the proposed Highway Shoulder Running (HSR) project along the I-76 corridor near Philadelphia.
- Provided suggestions on future C11 reliability tool improvements.

***The Quantification of Economic Benefit Resulting From Public Investments In Transportation For Virginia Department Of Rail And Public Transportation (DRPT), Washington DC and VA**

Ms. Xiong managed the team to provide travel demand modeling support on the economic benefit analysis for Virginia Department of Rail and Public Transportation (DRPT) in 2017. Tasks provided by TYLI include: 1) Thorough review of VDOT and MWCOG travel demand model to determine specific transit modes to be included in both base year and future year for alternative

**Work performed at previous firm.*

Cherry Xiong, P.E. – Cont.

analysis; 2) Development of definition of scenarios based on various transit operations characteristics, study years and different times of day; 3) Development of transit service change scenarios using headway as the key variable; 4) Travel demand model run and output data compilation. Performance measures such as passenger miles (hours) traveled by transit sub-mode, VMT/VHT by vehicle type, transit share and etc.; 5) SHRP2-C11 reliability Analysis data Preparation. Based on INREX corridor peak period congestion data, Rt-7, I-95, I-395 and I-66 were selected for travel time reliability analysis. Input data such as free flow speed, number of lanes, capacity, and passenger vehicle/commercial vehicle value of time were extracted from the model.

***Chicago Skyway Traffic and Revenue Study, Chicago, IL**

Lead EMME modeler. Performed the following tasks: 1) Calibrated and validated a multi-class toll diversion model developed from the MPO traffic model; 2) Performed toll scheme tests for toll rate optimization purpose; 3) Forecasted future year traffic and revenues.

***Jordan Bridge Traffic and Revenue Study (Phase I), Chesapeake, MD**

Lead CUBE modeler. Developed and calibrated the Elizabeth River crossing Logit choice model. The work involved forecasting future year trip tables and river crossing volumes under different toll schemes and network assumptions.

***Sistrunk Boulevard Streetcar Feasibility Study Ridership Forecast, Fort Lauderdale, FL**

Served as Transit ridership forecasting specialist to help The City of Fort Lauderdale and the Northwest CRA to determine whether a streetcar service – an extension of the Downtown Wave streetcar project that is underway - would be feasible and/or viable. Prepared peak hour forecasts for three alignment alternatives and two operating plans using an Excel spreadsheet model. The spreadsheet model incorporate the data from the FDOT district travel demand model, the new economic development associated with a significant upzoning of the study area and also integrates the current fixed route and Community shuttle bus services.

***Staten Island Ferry Study, New York City Department of Transportation, New York**

Served as lead TransCAD modeler. Used the New York Best Practice Model (NYBPM) to evaluate the impact of highway network congestion on Staten Island Ferry ridership and to determine whether the “unconstrained” forecast derived from an econometric model should be revised. The work involved estimating the modal shift from express bus to ferry when different ferry operating characteristics are considered.

**Work performed at previous firm.*



Miguel A. Lockward, PE, PMP, ENV SP

Professional Associations

- American Society of Civil Engineers (ASCE), Miami-Dade Branch

Professional Registrations

- PE Florida No. 88552
- PE Texas No. 145354
- PMP No. 3204956

Education + Training

- Bachelor of Science: Civil Engineering – Instituto Tecnológico de Santo Domingo
- High School Diploma: Architecture, Design and Architecture Senior High, Miami FL

Areas of Expertise

- Sanitary Sewer Pump Station
- Site Grading and Drainage Design
- Water and Wastewater Utility Design
- Roadway Design
- Project Management
- Budgeting and Estimating

Projects Experience

- Land Development
- Water & Wastewater
- Roadway
- Masterplan/Municipal Services

Technical Skills

- AutoCAD
- Civil 3D
- Excel

Civil Engineer with over seven years of experience in engineering design and construction management. Areas of expertise include stormwater management design, water distribution, sanitary sewer collection systems, sewer pump stations, land development, transportation, work zone traffic control, construction management, inspections, budget/cost control, estimating, quality assurance, bidding and permitting. Work experience, military background and degree from a highly competitive educational institution attest to self-motivation and drive to succeed as a team player in a fast-paced environment.

Project Experience

Roadway

Sevilla Estates Phase 2 | Miami Lakes, FL | Engineer of Record (EOR): Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 167th Street (North), NW 87th Court (East), and NW 166th Terrace (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,600 LF of drainage improvements, including HDPE pipes and exfiltration trench.

Sevilla Estates Phase 1 | Miami Lakes, FL | Engineer of Record (EOR): Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 169th Terrace (North), NW 87th Court (East), and NW 168th Street (South). The project includes approximately 5,000 LF of roadway milling and resurfacing, and approximately 3,750 LF of drainage improvements, including HDPE pipes, exfiltration trench and an outfall structure.

Genesis Oak Gardens Drainage Improvements | Miami Lakes, FL | Engineer of Record (EOR): Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Genesis Oaks neighborhood. The project is bounded by NW 91st Court (West), NW 169th Street (North), NW 89th Place (East), and NW 167th Street (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,800 LF of drainage improvements, including HDPE pipes and exfiltration trench.

***NW 96th Redesign | Medley, FL | Engineer:** Scope consisted of providing professional engineering design services for the design, permitting, bidding assistance, and limited construction services for the roadway reconstruction and drainage improvements along NW 96th Street from SW River Drive to NW 87th Avenue. The project includes

Miguel A. Lockward, PE, PMP, ENV SP – Cont.

- Cascade 2001
- SewerCAD
- ICPR 4
- GIS

Languages Spoken

- Spanish
- English

approximately 2,650 LF of roadway reconstruction and 2,620 LF of HDPE pipe drainage improvements and an outfall structure.

***Highland Drive Roadway Improvement | North Miami Beach, FL | Associate Engineer:** Scope consisted of providing professional engineering design services for the design, permitting, bidding assistance, and limited construction services for the roadway improvements along Highland Drive from Biscayne Boulevard to NE 137th St. The project includes 800 LF of roadway widening with bike lanes and landscape median.

***Highland Drive Roundabout Roadway Improvement | North Miami Beach, FL | Associate Engineer:** Scope consisted of providing professional engineering design services the design, permitting, bidding assistance, and limited construction services for a roundabout roadway improvement at the Highland Drive and NE 137th Street Intersection.

***NE 13th Avenue Traffic Calming | North Miami Beach, FL | Associate Engineer:** Scope consisted of providing professional engineering design services the design, permitting, bidding assistance, and limited construction services for approximately 1,350 LF of roadway traffic calming improvements along NE 13th Avenue from NE 159th Street to NW 155th Street.

***NE 183rd Street Bike Lanes | North Miami Beach, FL | Associate Engineer:** Scope consisted of providing professional engineering design services for the design, permitting, bidding assistance, and limited construction services of approximately 5,500 LF of roadway milling & resurfacing, bike lanes, pavement markings, and landscape improvements along NE 183rd Street, from NE 11th Avenue to NE 19th Avenue.

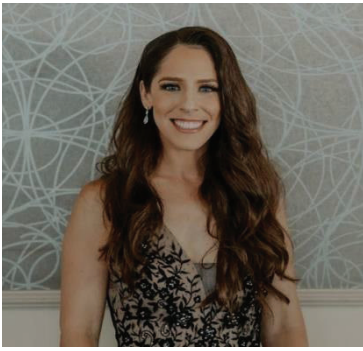
***Aviation Boulevard Roadway & Hardscape | Marathon, FL | Associate Engineer:** Scope consisted of providing professional engineering design services for the design, permitting, bidding assistance, LAP consulting, and limited construction services for the Aviation Boulevard, from SW 107th Street to Overseas Highway. The project is approximately 11,000 LF of roadway reconstruction, pavement markings, bike lanes, shared-use path, drainage, hardscape and landscape improvements.

Masterplan/Municipal Services

***City of Opa-Locka Stormwater Master Plan | Opa-Locka, FL | Engineer:** Scope consisted of the stormwater master plan design for the City of Opa-Locka. SWMP was intended to provide the City with a decision-making tool that facilitates the management of infrastructure while providing the adequate level of service to residents and properties within the City.

***MS4 NPDES Annual Report permitting | Monroe County, FL | Associate Engineer:** Scope Consisted on providing professional engineering services for the preparation of NPDES MS4 permitting renewal documents for the County.

**Work performed at previous firm.*



Jennifer Borges, PE, PTOE, MS

Professional Registrations

- Professional Engineer License No. 78660 - FL
- Professional Transportation Operations Engineer License No. 4383)

Education + Training

- B.S., Civil Engineering, Florida International University, Miami, FL
- M.S., Engineering Management, Florida International University, Miami, FL

Affiliations + Memberships

- President – American Society of Civil Engineers, Miami-Dade Branch
- Engineer of the Year (2020-2021) – American Society of Civil Engineers, Miami-Dade Branch

Languages Spoken

- English
- Spanish

Ms. Borges has extensive experience in traffic operations, specifically traffic studies and pedestrian/bicyclist evaluations. She has worked as a traffic analyst with the Florida Department of Transportation evaluating public requests, conducting traffic studies, coordinating project implementations and working to acquire state funding for new projects. She also worked as an in-house consultant at FDOT District 6, where she continued a traffic analyst's line of work and additionally provided support for the ped and bike coordinator, completed plans reviews, and coordinated new projects from design phase to construction. Prior to being a traffic analyst, Ms. Borges did roadway design for two years which helped establish a strong foundation of criteria and standards applicable to providing feasible traffic recommendations.

Project Experience

Miscellaneous Assignments – Traffic Operations Manager – Miami, FL

- Review project design conceptual designs and provide comments for feasibility of implementation and additional pedestrian and bicyclist improvement considerations.
- Provide pedestrian recommendations and recommend additional evaluations for MARTA's Five Point Station in Atlanta, Georgia
- Assemble multi-disciplinary teams and provide write-up information and content for local, state, and federal contract pursuits.
- Participated in the Miami Dade County Value Engineering review of the proposed transit line for the Northeast Corridor as part of the Strategic Miami Area Rapid transit (SMART) Program.
- FDOT District Six, NW 36 Street Multimodal Corridor Study in Miami-Dade, FL – As a traffic engineer, assisted the planning team with reviewing the corridor study and providing feedback, comments, and recommendations to address operational deficiencies and improve safety along the corridor.

Traffic Engineering Support Services Contract – District 6, Miami, FL*

Project Manager for contract to provide the Traffic Operations office miscellaneous traffic support services such as signal warrant analysis, left turn phase warrant analysis, speed zone studies, etc. Responsible for assembling team for contract, preparing letter of response, participating in interview process, and negotiations.

Jennifer Borges, PE, PTOE, MS – Cont.

Florida Department of Transportation (FDOT) - District 6, Miami, FL*

Communicated with the local community for operational and safety concerns raised. This resulted in conducting in-house field reviews, operational and safety studies for intersections and corridors to address the community's concerns including Road Safety Audits (RSAs), crash data analysis, review of Safety Review studies, speed studies, and more. Also managed consultant contracts, reviewed traffic studies, and provided comments on studies conducted by others. Coordinated implementation of study recommendations through the FDOT's maintenance department or internally as pushbutton projects – including design and construction phases. For large scale project, responsible for preparing exhibitions and presenting to the Scoping Committee to obtain funding and introduce new projects into the five-year Work Program.

SR 9 / SW 27 Avenue at SW 24 Terrace, Miami, FL*

Prepared traffic study analyzing the existing functionality and safety of the intersection. Met and informed local constituents of findings and coordinated with local police for enforcement to increase driver compliance with regulations.

SR 90 / SW 8 Street from west of SW 74 Court to east of SW 27 Avenue - Corridor Pedestrian Study, Miami, FL*

Project included approximately five miles of pedestrian evaluation to recommend improvements for increased safety. Coordinated with Consultant Management Department to implement minor improvements such as signal timing modifications, signing and pavement marking upgrades, and leading pedestrian signal phases into upcoming RRR Work Program project. Coordination with safety office, right-of-way department, and consultant management were required to create new projects in the Work Program for the implementation of six signalized new midblock crossings. This project was presented at the Department's Scoping Committee and awarded state funding.

SR 907 / Alton Road at 1300 Block, Miami, FL*

Reviewed traffic study completed at this intersection. Also, evaluated location following citizen complaints. Conducted daytime and nighttime field reviews to assess intersection. Identified malfunctioning equipment that included Rectangular Rapid Flashing Beacons (RRFBs) and lighting for pedestrian crossing at intersection. Coordinated with proper agencies to address deficiencies. Also coordinated long term intersection improvements with FDOT's internal design department to upgrade RRFB enhanced crossing with a signalized crossing due to increased pedestrian activity. Presented project to Scoping Committee and secured state funding and received approval to add project to the Department's Work Program.

Project Engineer – Miami, FL*

Completed multiple assignments as project engineer. Worked as a Utility Coordinator for Miami International Airport's Central Boulevard project coordinating with various utility agencies and consultants working on the design plans for the reconstruction project. Additionally, prepared typical sections and pavement design packages for various projects for FDOT's District 6 office. Prepared design plans for FDOT pushbutton projects including sidewalk reconstruction, ADA curb ramps, signing and pavement marking upgrades, signalization improvements, and maintenance of traffic plans. Prepared design variation and exception packages for projects, as needed. Additionally, prepared corresponding pay item quantity summaries and completed construction cost estimates for projects.

*Work performed at previous firm.



Edmundo Rodriguez, P.E.

Professional Registrations

- Professional Engineer – FL
(PE Number – 91400)

Education + Training

- B.S., Electrical Engineering, Florida International University, Miami, FL
- A.S., Automatic Engineering, Superior Polytechnic Institute Jose A. Echeverria, Havana, Cuba
- Specifications Package Preparation Training for Consultants, FDOT (Oct 2020)

Affiliations + Memberships

- Cuban American Association of Civil Engineers

Key Experience

- MEP Engineering System Design
- Power Systems Design
- Lighting (Interior, Exterior and Roadway)
- Energy Modeling, Tunnel and Daytime Lighting Analysis.
- Signalization
- Intelligent Transportation Systems

Languages Spoken

- English
- Spanish

Engineering Software Experience

- AutoCAD, MicroStation, ORD and Revit
- AGI32, AmpCalc

Edmundo Rodriguez, PE has over 6 years of experience delivering electrical designs for horizontal and vertical projects. His strongest design and knowledge skills are related Transportation field including Roadway Lighting, Signalization, and ITS design for roadway improvement projects. Mr. Rodriguez has also been actively involved on all phases of project development including planning, design, construction supervision and construction inspection in the Transportation, Building and Water/Wastewater industries. Edmundo's expertise has been used to perform several peer reviews of code compliance issues on Transportation projects for multiple entities including FDOT, FTE and MDX to ensure client quality controls standards were met. He has been instrumental in developing electrical designs for Conventional and D/B projects, in coordination with other disciplines and trades, supporting the development of Roadway Illumination Services Agreement (RISA) and helping to expedite electrical permits acquisition through the AHJ.

Project Experience

FDOT D3, SR 30 (US 98) from Bayshore Rd to Portside Drive (D/B Project Contract E3S76), Santa Rosa, FL

Role: Roadway Lighting and ITS Design Engineer.

Key Elements: SMFOC integration ECOC and Chipley TMC; development of RISA, ConOps, PSEMP, RTVM, ITS Risk Assessment & TSP.

FDOT D6, Three (3) Contracts, District-wide Lighting Retrofit at Signalized Intersections, Miami, FL.

Role: Project Manager (PM) Support and Lead Designer

Key elements: Involved three FDOT D6's contracts (C-9S96, C-9S97 & CA192) that extended over 250 signalized intersections within 8 major state roads.

FDOT D6, SR A1A (Collins Ave) RRR from North of Haulover Inlet to South of Bayview Dr., Miami, FL

Role: Lighting and Traffic Operations Design Project Engineer.

Key Elements: CCCL, Turtle Lighting, RISA, Dist. Lines relocation and multi-public entities coordination (PROS, MDC, FPL, FDOT and FWC)

FDOT D4, SR 842 (Broward Blvd) from SR-817 (University Dr) to East of SW 54th Avenue, Broward, FL

Role: Lighting Design and Traffic Operations design Engineer.

FDOT D5, SR 600 Resurfacing from N. Alabama Ave to East of CR 4101/N. Kepler Road, Volusia, FL

Role: Lighting Design Engineer.

Edmundo Rodriguez, P.E. – Cont.

FDOT District 4, Districtwide Plans Review Support Services CA278 (BDI), Multiple Counties, FL **Counties: Broward, Palm Beach, Martin, St Lucie & Indian River**

Lighting, Signalization, ITS, and Electrical Plans Reviewer for multiple projects in all counties in FDOT District 4.

Miami-Dade County Expressway Authority (MDX), Consultant GEC Work Programs FY 2018-2022, Miami, FL

Role: Project Engineer responsible for MDX Work Program projects plan reviews, RFP's, preliminary cost estimate and in-house design of projects development to the client.

Miami-Dade County Expressway Authority (MDX), Work Programs projects involvement:

- **MDX Work Program No. 83634, Design Build of Dolphin Park & Ride**
 Role: Concept Plans and RFP Signalization Design Engineer for this Transit Terminal Facility's entrance and exit roads connection with future SR 836 and Florida's Turnpike ramps.
- **MDX, Work Program No. 30042, SR 836 High Mast Retrofit.**
 Role: Lead Project Design Engineer responsible for retrofitting of 10 high mast light poles installed in 1978.
- **MDX, Work Program No. 92404, SR 924 (Gratigny Parkway West Extension) to the Homestead Extension of the Florida Turnpike (HEFT)**
 Role: Lead lighting design engineer for the Design Build RFP of two sections of the corridor and in-house lighting design engineer of the third section (FTE bridge).
- **MDX, Work Program No. 30049, System-wide Lighting Upgrades**
 Role: Design group engineer for the retrofit of the existing system-wide lighting system to LED scheduled as part of Miami-Dade Expressway Authority (MDX) Long-Range R&R program. Scope included providing hundreds of existing light poles along all mayor MDX State Roads with new LED lighting

Florida's Turnpike Enterprise (FTE), Turnpike GEC Contract, Miami, FL.

Role: Project Engineer part of the Engineering Group accountable to review multiple Lighting plans, ITS Electrical plans, and Shop Drawings to ensure client design requirements and expectations were met.

Florida's Turnpike Enterprise (FTE), HEFT Bridge Underdeck Lighting Upgrades (Revision 4), Miami, FL.

Role: Task Support Design Engineer for HEFT Underdecks from NW 41st St to Port St. Lucie. Scope included the modification of existing design with HPS luminaires to be upgraded with LED luminaire.

MDX, NW 87th Avenue Interchange Reconstruction at SR 836, Miami, FL.

Role: Task Support Design Engineer involved on MDX Work Program 83629, (NW 87th Avenue Interchange Reconstruction of SR-836. Project revision included the LED lighting improvement of the initial High-Pressure Sodium (HPS) lighting design for cobra head light poles and relocation of proposed high mast to meet FAA clearance requirements for airplane corridors, while comply with FDOT Lighting Design Criteria.

Miami-Dade County Expressway Authority (MDX), MDX Work Program 83629 - 87th AVE ORT Electrical, Miami, FL.

Role: Lead Task Engineer accountable of electrical design and ITS conduits layout of proposed Permanent Gantry, relocation of exiting temporary Gantry, provision of ITS shelter and addition of an emergency Stand-by Generator.



Dronix Suarez, E.I.

Professional Registrations

- E.I. License Number:
1100016911

Education + Training

- B.S., Civil Engineering, Florida International University, 2012

Languages Spoken

- English

Employee Civil Engineer with over 7 years of construction management experience in both municipal and private sectors. Proven track record of turning around challenging projects and applying problem solving skills to resolve obstacles. Experienced at leading projects and teams to successfully meet established goals.

Project Experience

Subhead 2 (i.e. Aviation)

***City of Fort Lauderdale, Pump Station Run Times & Capacity Analysis Optimization, Fort Lauderdale, FL, USA**

The City of Fort Lauderdale encompasses over 200 pump stations for various neighborhoods which each provide continuous data on run times. These run times are used for determining availability of sewer services. The City of Fort Lauderdale requires all new development projects to obtain a Water and Sewer Availability Letter from the Public Works Department prior to any permitting. The letter will either state that the site has adequate capacity, or it will specify required improvements to the surrounding network as a part of the development effort. 2020- Present.

Project Management & Data Analysis Engineer

***City of Fort Lauderdale, River Oaks Preserve, Fort Lauderdale, FL, USA**

The River Oaks Preserve is Fort Lauderdale's first artificial wetland, budgeted at \$2.2M through both a grant by FDEP and matching funds from the City of Fort Lauderdale in collaboration with FDOT. The project began construction during the beginning of the COVID-19 Pandemic. 2017-2020.

Project Management Engineer – Risk Management, Community Relations

***City of Fort Lauderdale Police Department, SW 21st Street Stormwater Improvements, Fort Lauderdale, FL, USA**

The 21st Street Project Area ran along an industrial warehouse area which contained heavy groundwater contamination. Prior to discovering the contamination, the project was planned to utilize exfiltration trenches and swales. After discovery of the contamination, significant redesigns were required to prevent any disturbances to contaminated groundwater. The final design included swale reclamations to mitigate the heavy flooding due to rain events. 2018.

Project Management & Design Engineer

Dronix Suarez, E.I. – Cont.***Various Stormwater Improvements, Broward County, FL, USA**

The Public Works Department was responsible for working on, overseeing, and improving the level of service on many stormwater improvements projects. While they were similar in many ways, each had its own challenges. Three of the most notable stormwater improvement projects were:

The 9th Avenue Project Area ran alongside a commercial development. This project's planned drainage improvements included exfiltration trench and valley gutters to route flooded areas.

The Silver Car Project Area was located along Andrews Avenue and Eller Drive. Drainage improvements included exfiltration trench and valley gutters to route flooded areas, as well as milling and resurfacing of the adjacent road to maintain drainage patterns.

Stormwater improvements were also required on SE 6th St, SE 7th St, US1 and SE 3rd Ave within a local residential area to mitigate flood conditions. This project required creative problem solving to overcome the challenges related to existing pipe conflicts in the area while still maintaining appropriate clear cover depths. Drainage improvements included flumes and connections to adjacent systems along with curbing and exfiltration trench. 2017.

Project Management & Design Engineer

***City of Fort Lauderdale, City of Fort Lauderdale Drainage Study, Fort Lauderdale, FL, USA**

Ross Engineering was contracted to conduct a drainage study for the residential area along NE 11 Court within the City of Fort Lauderdale to determine causes of the existing flooding and potential improvements. Flood levels were prohibitive to local traffic during storm events. The scope of the project was to include modeling, report generation, and proposed solutions. 2016.

Project Engineer

***City of Pembroke Pines, Franklin Academy Site-Civil Design, Pembroke Pines, FL, USA**

Franklin Academy was a new development project in the City of Pembroke Pines, FL. The scope of Ross Engineering's work on this project included site-civil utilities, drainage, pavement markings, and permitting in accordance with South Broward Drainage District's criteria. 2017.

Project Management & Design Engineer

Dronix Suarez, E.I. – Cont.***Acqua/Voda Site-Civil Design, North Miami Beach, FL, USA**

Ross Engineering was contracted by iCapital Architecture for site-civil design of the Acqua/Voda Luxury Apartments project in the City of North Miami Beach, FL. The scope of Ross Engineering's work on this project included design of site-civil utilities, pavement markings, and drainage with a drainage well. 2016.

Project Management & Design Engineer

***Grand Bay Harbor Hotel Site-Civil Design, Bay Harbor Islands, FL, USA**

The Grand Bay Harbor Hotel was a new development project in the Town of Bay Harbor Islands, FL. As a high-end luxury hotel, the design would need to meet the needs of a high rise while also addressing challenges from shallow existing utilities. Ross Engineering's scope of work on this project included design of site-civil utilities, a drainage plan, pavement marking, and oversight of civil engineering inspections. 2015.

Project Engineer

***Wetlands Rehydration Pilot Study**

The City of Miami contracted MWH for the definition of scope as well as implementation of the Wetlands Rehydration Pilot Study. This study was developed to evaluate flocculation, reverse osmosis, microfiltration, and UV disinfection combined as a method of groundwater recharge for the Biscayne Aquifer from the influent of the South District Wastewater Treatment Plant. 2009-2010.

Project & Data Analysis Engineer - Intern

**Work performed at previous firm.*



Ricardo A. Jimenez, PE

Civil Engineer with over seven years of experience in engineering design, master planning and construction management. Project experience includes master plans, alternative water supply initiatives, water treatment plants, water distribution systems, water conveyance pipelines, wastewater collection systems, wastewater conveyance pipelines, stormwater management design, site design, transportation, construction management, estimating, quality assurance, bidding and permitting.

Professional Associations

- American Society of Civil Engineers (ASCE)
- Florida Water Environment Association (FWEA)

Education + Training

- B.S. Civil Engineering - University of Miami

Areas of Expertise

- Project Management
- Water Supply Planning, Storage, Production, and Conveyance
- Wastewater Collection and Conveyance
- Stormwater Management
- Site Design
- Permitting
- Budgeting and Estimating

Technical Skills

- AutoCAD Civil 3D/Plant 3D
- ArcGIS Pro
- Infowater Pro
- WaterGEMS/SewerGEMS
- WaterCAD/SewerCAD
- Cascade
- ICPR 4
- Microsoft Office/Project

Project Experience

- Orange Bowl Field at Harris Park – Homestead, FL
 - Lead the design, permitting and construction observation for enhancements to an existing park used local high school residents. The existing football field was reconstructed with specialized turf along with new access paths, sidewalks, and seating areas.
- NE 35th Ave Roadway Improvements – North Miami Beach, FL
 - This project addressed safety concerns along the main access road for the Eastern Shores neighborhood of North Miami Beach. The project included milling and resurfacing, drainage improvements, sidewalk rehabilitation, and ADA accessibility improvements throughout the corridor.
- NE 159th Street Roundabout – North Miami Beach, FL
 - This project included a traffic analysis and traffic circle design at an intersection with vehicle circulation and pedestrian safety issues due to transitioning and shifting lanes. The design had to consider transitions, lane splits, and spacing constraints within a residential area.
- Highland Drive Roadway Improvements – North Miami Beach, FL
 - Provided design support for roadway improvements including re-grading, reconstructing medians, adding bike lanes, signage, and pavement markings. The project was located along a route that provides access for residential neighborhoods to Biscayne Boulevard, the main thoroughfare in the area.
- NE 13th Avenue Traffic Calming – North Miami Beach, FL
 - Provided design and permitting support for roadway improvements aimed to address safety concerns in a residential area. The improvements included speed tables, signage, and pavement markings.
- Windmill Gate Road Roadway Improvements – Miami Lakes, FL
 - Lead the design and permitting for a roadway reconfiguration. The design had to address vehicle circulation issues into a residential community adjacent to a heavily transited shopping center. The improvements included new asphalt pavement sections, re-grading, improved signage and markings, and drainage relocation.

Ricardo A. Jimenez, PE – Cont.

- Central Bayshore South Neighborhood Improvements – Miami Beach, FL
 - Provided design support and construction observation for roadway and utility improvements in a community critically affected by sea-level rise. The improvements included water main replacements, lining of existing sewer mains, stormwater lift stations, and roadway reconstruction.
- City of Neptune Beach Development Review – Neptune Beach, FL
 - Provided ongoing development review assistance to the Community Development Director at the City of Neptune Beach. This included reviewing proposed commercial development plans and supporting documentation. Review comments were provided to the applicants and recommendations for permit approvals were forwarded to the city upon completion.
- Cypress Creek Surface Water Management Plan – Pasco County, FL
 - This project consisted in developing a stormwater master plan for the Cypress Creek Water Treatment Plant and obtaining a comprehensive Environmental Resource Permit for the entire facility. The existing stormwater measures were assessed to determine effective surface water management. Hydraulic modeling was performed to incorporate planned projects at the site and identify necessary improvements.
- Peace Creek Canal Stormwater Improvement Program – Polk County, FL
 - This is a phased, multi-jurisdictional stormwater improvement program that establishes a corridor of wetland treatment systems to reduce flood risk, protect lands along the canal, conserve the natural systems, improve drainage along the watershed, restore degraded wetland functions, and enhance water storage within the Peace creek Canal basin. The first phase consisted of a series of studies to identify potential locations to construct water quality structures that could rehydrate and enhance historic wetlands, and/or create new wetlands.
- McIntosh Preserve Trails, Phase I – Plant City, FL
 - This is the first phase of a collaboration between the City's Parks and Recreation Department and the Utilities Department. This project seeks to improve a natural preserve with existing recreational and wetland features. This phase focused on the design and construction observation for 2 miles of pedestrian trails, a wildlife observation tower, and a parking lot on the northwest portion of the site.
- McIntosh Preserve Wetlands, Phase II – Plant City, FL
 - This project includes the design and construction of a 150-acre wetland and enhancements to an existing 45-acre wetland at McIntosh Preserve. This seeks to increase storage and treatment capacity for improved flood control in the area. The site will also be supplemented by reclaimed water from the Plant City Water Reclamation Facility to support the wetlands during dry periods.

**Work performed at previous firm.*



Carlos A. Tijerino, ENV SP

With 15 years of construction management and project delivery experience with civil engineering projects, Mr. Tijerino has developed progressively larger, more complex, and more diverse skills in managing large and complex projects involving various civil engineering disciplines. He has been a key contributor to project management teams overseeing constructability and estimate reviews, project delivery and CEI inspections, for civil engineering infrastructure and municipal capital improvement projects. As a civil engineer, Mr. Tijerino has completed projects in excess of \$900M. Mr. Tijerino's portfolio includes construction projects in water/wastewater, drainage, utilities, tunnel, roadway and public works services. His commitment is to successfully execute projects by incorporating a pragmatic approach to reduce risks and liabilities while not sacrificing quality, budget, integrity, and safety. Mr. Tijerino's projects include:

Professional Associations

- American Society of Civil Engineers – Director
- ASCE Utility Engineering and Surveying Institute (UESI)
- Florida Water Works Association (AWWA)

Education + Training

- Bachelor of Science in Civil Engineering
- Envision Sustainability Professional (ENV SP)
- Temporary Traffic Control (TTC) Advanced
- Occupational Safety and Health Administration (OSHA 30)

Projects Experience

- Water & Wastewater Services
- Capital Improvement Projects
- Construction Management
- Utilities Services
- Public Works Engineering
- Vertical Construction
- Structural Restoration

Technical Skills

- Autodesk Civil 3D Design
- Arc GIS
- Microsoft Programs
- Adobe Acrobat
- Bluebeam Revu

Languages Spoken

- English – Fluent
- Spanish – Fluent

Project Experience

- FDOT District 7 & District 4 – Guardrail Inspections and Inventory Control
 - Provided inspections services, assessments, and inventory control for guardrails located within FDOT District 7 and District 4.
- NW 166th Street Drainage Improvements Project – Town of Miami Lakes
 - Provided Construction Engineering Inspection services for the NW 166th Street Drainage Improvement project
 - The scope of work includes the contract administration and inspections necessary to coordinate the activities of all parties involved in completing the project, assisting the Town with interpreting plans, specifications and construction contract provisions, making recommendations to the Town to resolve disputes and coordinating with the Town requirement compliance. (2022-On-going)
- NW 159th Terrace Drainage Improvements Project – Town of Miami Lakes
 - Provided Construction Engineering Inspection services for the NW 159th Terrace Drainage Improvement project
 - The scope of work includes the contract administration and inspections necessary to coordinate the activities of all parties involved in completing the project, assisting the Town with interpreting plans, specifications, and construction contract provisions, making recommendations to the Town to resolve disputes and coordinating with the Town requirement compliance. (2022-On-going)
- *Broward County Water and Wastewater Engineering Division
 - Performed civil engineering and inspections and facilitated field site visits for \$50M high service pump stations and ground storage tanks expansion and upgrade
- *Utility Analysis Zones (UAZ) 113A/113B – Resident Engineer
 - The project area of UAZ 113A and 113B includes approximately 557 acres of land comprised of 957 single family homes, over 3,000 multi-family units, and 32 commercial properties

Carlos A. Tijerino, ENV SP – Cont.

- *District 1B1 and District 3A High Service Pump Station and Ground Storage Tanks – Resident Engineer
 - The District 1B1 and 3A high services pump station and ground storage tank projects are part of Broward County programs of storage tanks, pumping stations and chemical feed systems that will be implemented in the next five years.
- *District 3A STEP Area 3 A-D – Resident Engineer
 - Septic Tank Elimination Program, District 3A STEP Area 3A-D, Project No. 104758 entails the complete design and construction of approximately five thousand feet (5,000') of eight-inch (8") gravity sewer main, maintenance access structures, and associated laterals and cleanouts to provide a complete wastewater collection system to the properties located between City of Dania Beach and City of Hollywood.
- *City of Pompano Beach – Reclaimed Water Main Expansion
 - Performed CEI services to The City of Pompano Beach owns and operates a reclaimed water system that needs immediate expansion. This project entails the expansion of approximately twenty-seven thousand (27,000') linear feet of 4-inch and 6-inch reclaimed water lines within the City of Pompano Beach and the City of Lighthouse Point.
- *SW 37th Court Water Main Replacement – Town of Davie
 - Inspected reclaimed water main system. Prepared Engineer's Opinion of Probable Cost. Regulatory Agency permitting and Certifications. Construction services coordination. Coordinated Legal Description Utility Easements
- *Playland Village Water Main Replacement – Project Engineer
 - Design and review water main pipe bursting design plans and details. Prepare Engineer's Opinion of Probable Cost. Coordination with survey, geotechnical and subsurface utility locate sub consultants. Regulatory Agency permitting and Certifications
- *Jenada Isles Utility Improvement Project – Field Project Engineer
 - Performed site inspections to ensure design is being delivered per contract documents. Reviewed contractor's payment applications, RFI's and change orders. Observed horizontal directional drill and pipe bursting installation methods
- *Lift Station #12 Improvement Project – Field Project Engineer
 - Performed site inspections to ensure design is being delivered per contract documents. Reviewed contractor's payment applications, RFI's and change orders. Observed horizontal directional drill and pipe bursting installation methods
- *The Bal Harbour 101 Condominium Association – Threshold Inspector
 - Collected investigation data for structural assessment. Prepared structural condition survey matrix. Prepared restoration plans and technical specification. Prepared cost estimate.
- *Biltmore II Condominium Building 40 Year Inspection – Field Engineer

*Work performed at previous firm.

Carlos A. Tijerino, ENV SP – Cont.

- Collected investigation data for structural assessment. Prepared structural condition survey matrix. Prepared restoration plans and technical specification. Prepared cost estimate.
- *New Riviera Nursing & Rehabilitation Center - Inspector
 - Performed field observations and collected assessment data. Provided repair recommendations for parking garage.
- *La Gorce Palace Condominium – Field Engineer
 - Performed field observations and collected assessment data. Provided assessment report and cost estimate for repairs. Inspected restoration repairs. Reviewed contractors' payment application
- *The Beach Club Tower – Field Engineer
 - Performed field observations and collected assessment data. Provided assessment report and cost estimate for repairs. Inspected restoration repairs. Reviewed contractors' payment application.
- *Port Miami Tunnel Project – Resident Engineer
 - Oversaw the production of underground tunnel lining segments, optimization, and monetary budget. Coordinated logistics control and deliveries with concrete mix supplier, steel manufacturer and tunnel construction site. In Charge of quality assurance and quality control tracking of concrete mix design, reinforcing steel integrity, mold vibrating and hydro-curing chemical process for casting of underground tunnel segments.
- *Palm Beach County Solid Waste Authority – Field Engineer
 - Assisted with coordinating management strategies for planning, resource allocation, and manpower modeling and production methods for project execution. Developed comprehensive cost projections and budget strategies, including constructability reviews and value engineering improvements. Coordinated with field personnel to monitor QA/QC; accomplished resolution to challenges as they occurred during of project timeline.

*Work performed at previous firm.



Fiorella Asturrizaga

Professional Affiliations

- American Society of Civil Engineers (ASCE) – Miami, FL
- Miami Dade Branch Membership Committee Chair
- Society of Women Engineers (SWE) – Miami, FL

Education + Training

- Bachelor of Science in Civil Engineering

Certifications

- Temporary Traffic Control (TTC)-85271
- Asphalt Paving- Level 1- 3017240
- Earthwork Construction Inspection- Level 1- 3017243

Areas of Expertise

- Water/Wastewater
- CEI
- Roadway Design

Technical Skills

- AutoCAD
- Outlook
- Microsoft Office

Languages Spoken

- English
- Spanish

Fiorella Asturrizaga is a Civil Engineer with over 3 years of experience in Water resources. Fiorella helped with project management and worked alongside senior management on the design and construction of projects for Miami Dade Water and Sewer. Pump station and drainage design projects are among her design credits. Design experience includes pump station projects and drainage design projects. Currently focusing on transportation to use comprehensive, analytical, and calculative skills to implement solutions in the civil engineering field.

EXP US Services, Inc. NW 166th Street Drainage Improvements Project | Town of Miami Lakes | CEI Inspector

Provided Construction Engineering Inspection services for the NW 166th Street Drainage Improvement project. The project limits are along NW 166th Street, between NW 82nd Avenue and NW 79th Avenue, and along NW 79th Avenue, between NW 166th Street and NW 166th Terrace. The scope of work includes the contract administration and inspections necessary to coordinate the activities of all parties involved in completing the project, assisting the Town with interpreting plans, specifications, and construction contract provisions, making recommendations to the Town to resolve disputes, and coordinating with the Town requirement compliance. (2022-On-going)

EXP US Services, Inc. NW 159th Terrace Street Drainage Improvements Project | Town of Miami Lakes | CEI Inspector

Managed roadway construction including earthwork and grading operations, drainage and utility work, aggregate base, asphalt, and concrete pavements. Provided project administration, daily inspections, material testing, and field measurements. The project limits are along NW 159TH Terrace and NW 79th Avenue. Worked with the Town to ensure required compliance. (2022)

Miami Dade Water and Sewer Produced feasibility reports for engineering projects and designs drawings, organized data and wrote results summaries based on the polymer trials and critical reading on the water treatment plants. Providing weekly updates to professional engineers about lab productivity, equipment status, and upcoming tasks.

Florida Department of Transportation Evaluated a transportation system and identified and documented any deficiencies or improvements both operational and physical to accommodate current or projected traffic volumes, skills used surveying, transportation engineering, environmental engineering, and construction engineering, working with senior team members in undertaking specifications, cost estimates and construction planning for projects.



Ricardo ANGULO

Roadway Designer

Ricardo Angulo has more than 9 years of experience serving as a Construction Inspector (CEI) providing field engineering services and as a roadway designer. His experience includes providing CEI services for roadway and infrastructure projects in Florida and Venezuela. Ricardo's responsibilities have included oversight of construction operations, project administration, quality control, utility coordination, final estimates and as well as roadway design, signing and pavement markings and quantities. He has a thorough understanding of FDOT Specs and construction procedures.

Expertise

CEI Inspections
Threshold Inspections
Roadway Design
Utility Coordination
Microstation SS10
Openroads Designer (ORD)
Autocad civil 3D
Microsoft Office
GuideSign

Education

BS Civil Engineering
Rafael Urdaneta University
Venezuela, 2007

Registrations

Certifications

ACI Concrete Field-Testing Technician
Grade 1, 2021
CTQP Asphalt Paving, Level 1, 2027
CTQP Earthwork Construction
Inspection, Level 1, 2027
MOT Advanced Course, 2026
OSHA Training
Level 1 Unbounded PT Installation,
2019

Affiliations + Memberships

American Society of Civil Engineers

Spanish, English

Relevant Experience

MTA C&D Rockaway Line Resiliency and Rehabilitation Design Build, Utility Coordinator: The Rockaway Line connects Queens with the Rockaway peninsula. This Design-Build includes design and construction for viaduct rehabilitation at the Hammels Wye Campus and viaduct repairs along the east and west branches. Also includes the design and installation of flood mitigation elements at the locations along the Rockaway Line, as well as the design and installation of a new signal tower, track crossover and related traction-power, signal system and utility work at the Beach 105th Street Station. The installation of the signal tower will require new connections and relocations of utilities along Rockaway Freeway between Beach 104th Street and Beach 105th Street. The relocations are required to provide clearance for the footings and access stairs of the new structure. The westbound lane of Rockaway freeway will include the installation of two (2) shallow catch basins, three (3) 4-foot diameter manholes, a 5'-3" x 4'-6" storm sewer, an 18" diameter storm sewer, a 6" diameter sanitary sewer, and an 8" diameter water main including all ancillary valves and connections. The eastbound drive lanes of Rockaway Freeway will accommodate the installation of new electrical service conduits for the Beach 105th Street Station. (2022-Ongoing).

Sevilla Estates Phase 1 Drainage Improvements Project | Town of Miami Lakes | Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 169th Terrace to the North, NW 87th Court to the East, NW 168th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going).

Sevilla Estates Phase 2 Drainage Improvements Project | Town of Miami Lakes | Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 167th Street to the North, NW 87th Court to the East, NW 166th Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going).

RICARDO ANGULO – Cont.

Genesis Oak Gardens Drainage Improvements Project | Town of Miami Lakes | Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Genesis Oak Gardens neighborhood area which is bounded by NW 91st Court to the West, NW 169th Street to the North, NW 89th Place to the East, NW 167th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going).

Florinda Estates Drainage Improvements Project | Town of Miami Lakes | Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Florinda Estates neighborhood area which is bounded by NW 88th Place to the West, NW 140th Lane to the North, Palmetto Frontage Road to the East, NW 138th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going).

Royal Garden Estates Drainage Improvements Project | Town of Miami Lakes | Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Royal Garden Estates neighborhood area which is bounded by NW 88th Place to the West, NW 164th Street to the North, NW 87th Court to the East, NW 162nd Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going).

NW 166th Street Drainage Improvements Project | Town of Miami Lakes | CEI Project Manager

Provided Construction Engineering Inspection services for the NW 166th Street Drainage Improvement project. The project limits are along NW 166th Street, between NW 82nd Avenue and NW 79th Avenue, and along NW 79th Avenue, between NW 166th Street and NW 166th Terrace. The scope of work includes the contract administration and inspections necessary to coordinate the activities of all parties involved in completing the project, assisting the Town with interpreting plans, specifications and construction contract provisions, making recommendations to the Town to resolve disputes and coordinating with the Town requirement compliance. (2022-On-going).

NW 159th Terrace Drainage Improvements Project | Town of Miami Lakes | CEI Project Manager

Provided Construction Engineering Inspection services for the NW 159th Terrace Drainage Improvement project. The projects limits are along NW 159th Terrace, between NW 79th Avenue and NW 77th Place. The scope of work includes the contract administration and inspections necessary to coordinate the activities of all parties involved in completing the project, assisting the Town with interpreting plans, specifications and construction contract provisions, making recommendations to the Town to resolve disputes and coordinating with the Town requirement compliance. (2022-On-going).

EWE Warehouse Investments, Doral, FL | Senior Engineer: Providing Civil Engineering services which included drainage, lighting and grading design as well as signing and pavement markings located at 2525 NW 82nd Avenue, Doral FL 33122. The project also included support in the permitting process. It also includes the widening of NW 82nd Ave. from NW 25 St. to NW 27th. It includes Milling and resurfacing, Mast Arm Replacement in the NE Quadrant and Signing and Pavement Markings. (2021-Present).

SR845/Powerline Road from NW 30th Place to West Drive | FDOT District 4 | Designer: Powerline Road is a RRR that begins South of NW 30th Place and ends South of American Way in Broward County, Florida. The scope of the work includes milling and resurfacing of the asphalt pavement, ADA improvements, installation of pedestrian countdown signals as needed, signing and pavement markings and drainage. Other assignments include typical section development, cross-slope analysis, field reviews, sign inventory and preparing the RRR report. The Length of the project is 2.520 miles. Ricardo's responsibilities included utilities mark-ups plan preparation using Open Roads Designer. (2020 ongoing).

NW 151st Street/NW 153rd Street Roadway Improvements | Miami Lakes | Designer/Utility Coordinator: This project consists of designing roadway improvements within the limits at NW 151st / 153rd Street from Miami Lakeway N to Miami Lakes Drive, including 8'-5' shared use path/sidewalk on the north side and 5' sidewalk on the south side, milling and resurfacing, drainage improvements and crosswalk improvements. Ricardo's responsibilities included utility coordination, roadway plan and drainage plan labeling using Power Geopack, drainage analysis and roadway design using Autoturn. (2020 ongoing).

RICARDO ANGULO – Cont.

Citywide Sidewalk Improvements Phase 2 | Doral | Designer/Utility Coordinator: Design services and new construction plans for this \$1 million LAP-funded citywide sidewalk improvements Phase 2. Phase 2's components include sidewalk improvements, roadway design, survey and testing, drainage, utility coordination, American with Disabilities Act (ADA), and FDOT Standards. Ricardo's responsibilities included the plans production of the project as the lead designer and utility coordination (2020 Ongoing).

SR 710/Warfield Blvd. | FDOT District 4 | Designer: Major reconstruction project for SR 710/Warfield Blvd. from FPL Martin Power Plant Road to CR 609/Allapattah Road. Final roadway design included establishing a typical section, roadway horizontal and vertical geometry, engineering report, drainage analysis and report, production of roadway and drainage plans, development of engineering estimate, and specifications. The design includes bicycle lanes and a shared-use path. Ricardo's responsibilities included utility coordination, roadway plan and drainage plan labeling, MOT design and plans labeling using Power Geopak (2017-Ongoing).

NW 25th Street Traffic Design | Miami-Dade County | Designer: This project involves implementing a new lighting system to improve operations at the intersection of NW 117th Ave to NW 87th Ave in the City of Doral, Florida. The project includes signing and pavement markings, Maintenance of Traffic (MOT) analysis, lighting and signalization plans. Ricardo's responsibilities included Signing and pavement markings plan labeling, and internally illuminated sign design using GuideSign. 2019-Ongoing).

Saga Bay Drainage Improvements | Cutler Bay | Designer: MARLIN provides roadway and drainage design (closed French Drain system) in the Saga Bay Neighborhood located in the Town. The project involves site-field survey and investigation, utility coordination, and topographic survey, permitting. (2019-2020). Ricardo's responsibilities included Utility coordination with more than 10 utility owners as well as roadway plans production.

Roundabout Improvements at SW 97 Ave and SW 120 St | Miami-Dade County | Designer: This project entails design services for roundabout improvements at SW 97th Avenue and SW 120 Street within Miami-Dade County, Florida. The scope includes roadway plans, pavement marking and signing plans, signalization plans and School flashers, roadway lighting plans, drainage design, report and permit applications with sketchers, and construction services. Ricardo's responsibilities included existing signs inventory, signalization plans production and sign design using GuideSign. (2020-Ongoing).

NW 112th Avenue – CEI Services | Doral | CEI Inspector: This project consists of Construction Engineering and Inspection (CEI) services for the construction phase of the roadway improvements along NW 112th Avenue between NW 25th Street and NW 34th Street within the City of Doral, Florida. Ricardo's responsibilities included monitoring and overseeing contractor implementation and compliance with MOT plans, supervising and monitoring new drainage system installation and connections to existing structures, new curb and gutter and concrete installation, milling and resurfacing and widening; signing and pavement markings installation; signalization installation, lighting system, reports preparation and daily/weekly construction progress meetings. (2020).

Citywide Sharrows Greenway Plan | South Miami | CEI Inspector: This project entails engineering services for the post design and preparation of Construction Engineering and Inspection (CEI) documents for the installation of Citywide Neighborhood Greenway and Sharrows in South Miami. The scope of services involves project management, roadway MOT plans and analysis, signing and pavement and markings plans, permitting. Ricardo's responsibilities included monitoring and overseeing contractor implementation and compliance with MOT plans and signing and pavement markings installation. Also reports preparation and attended weekly pre-construction meetings. (2017 – Ongoing).

NW 21st Street (NW 84th Avenue to NW 82nd Avenue) Stormwater Improvements | Doral | CEI Inspector: CEI services for the stormwater improvements on NW 21st Street in Doral, Florida. Ricardo's responsibilities include monitoring and overseeing contractor implementation and compliance with MOT plans, supervising and monitoring new drainage system installation and connections to existing structures, new curb and gutter and concrete installation; milling and resurfacing; pavement markings installation. Also reports preparation and attended weekly pre-construction meetings. (2019).

NW 67th Avenue and SR 826 Improvements | Miami Lakes | CEI Inspector: Roadway widening project to incorporate an additional thru lane for the northbound movement at the south leg of the intersection of NW 67th Avenue and NW 167th Street.



**Elias
DIAZ**

Senior Designer

With more than 23 years of roadway design and production plans experience. Elias is proficient in signalization, lighting analysis and design with an in-depth understanding of local conditions and needs that has generated constructible signals and lighting systems. As the lead senior designer in Signalization, his expertise and experience entailed the design of multiple signal systems and all signals-related ancillary features, including but not limited to controller/cabinet, Interconnect, material selection, pre-emption, and video detection/microwave radar systems.

As the lead Lighting Senior Designer, Elias has developed expertise in all aspects of lighting design and construction plans. His expertise and experience cover all aspects from preliminary concepts plans to preparing photometric analysis and report, voltage drop calculations, panel circuit layout detail, lighting loads requirements, and pole, mounting arm, and luminaire selection. He also has a passion for complete street design in which he has been integrated with in the past several years. He is familiar with the standards and requirements of the FDOT and other municipalities.

Expertise

Lighting/Signals Design
Roadway/Highway Design
Complete Streets

Education

Miami Lakes Technical School, 1997
Hialeah-Miami Lakes Sr. High, 1989

Certifications

Temporary Traffic Control (TTC),
Advanced No. 57761, 2023

Skills

Microstation
AutoCad
ORD
Photoshop
InDesign
PowerPoint
AutoTurn
GuideSign
Agi32

Languages

Spanish, English

Relevant Experience

Five Points MARTA Station Transformation | Skidmore, Owings & Merrill LLP (SOM) | Senior Designer: This project includes the analysis and design for structural and civil engineering portions in the Five Points Station Transformation Project. Structural tasks include the existing canopy deconstruction and a new entrance canopy design. Civil Engineering tasks include preparing conceptual and final geometry for vehicular access and bus bays in the East and West Plaza, as well as Alabama 143 and the opening of Broad Street to connect from Marietta to Alabama Street. (2022-On-going)

Sevilla Estates Phase 1 Drainage Improvements Project | Town of Miami Lakes | Senior Roadway designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 169th Terrace to the North, NW 87th Court to the East, NW 168th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Sevilla Estates Phase 2 Drainage Improvements Project | Town of Miami Lakes | Senior Roadway designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 167th Street to the North, NW 87th Court to the East, NW 166th Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Genesis Oak Gardens Drainage Improvements Project | Town of Miami Lakes | Senior Roadway Designer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Genesis Oak Gardens neighborhood area which is bounded by NW 91st Court to the West, NW 169th Street to the North, NW 89th Place to the East, NW 167th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Miami Dade County A/E Services, Miami Dade County, FL | Senior Designer: Providing Architectural and Engineering services, with Civil Engineering Subconsultant Services for the renovation and improvements of various County facilities and building systems and parking facilities projects managed by the Internal Services Department (ISD)/ Facilities and Infrastructure Management Division (FIMD). Task assigned included CAD designs and detail development of

Elias Diaz – Cont.

findings and solutions of several buildings in the county: Jose Caleb Center Parking Garage, Overtown Transit North Tower, Overtown Transit South Tower, Overtown Transit Parking Garage, Miami Dade County Courthouse.

EWE Warehouse Investments, Doral, FL | Senior Roadway Designer: Providing Civil Engineering services which included drainage, lighting and grading design as well as signing and pavement markings located at 2525 NW 82nd Avenue, Doral FL 33122. The project also included the widening of NW 82nd Ave. from NW 25 St. to NW 27th. It includes Milling and resurfacing, Mast Arm Replacement in the NE Quadrant and Signing and Pavement Markings. (2021-Present)

Farm Stores, Florida (10231 Memorial Highway, Tampa; 2711 Skyline Blvd. Cape Coral) | Senior Designer: Professional Civil Engineering Consulting services and permitting services including paving/grading design, underground utilities design for drainage, potable water, sanitary sewer, and Fire Main. And the photometric analysis and lighting design for the site. The scope included civil design, engineering permits, secondary construction phase services, and certification services.

***NW 25th Street Roadway Reconstruction, FDOT District 6, Miami-Dade, FL, USA | Lead Senior Lighting and Signals Designer:**

Senior Signalization/Lighting Designer: Design services to reconstruct NW 25th street from NW 117th Ave to NW 87th Ave. Responsible for the preparation of the signalization plans, and traffic control. Scope of work includes new signalization upgrade of ten (10) intersections including school flashers and interconnect system. As the senior lighting designer, he prepared the lighting photometric analysis and complete lighting design for the entire corridor. Elias also assisted in the development of the signing and markings component. (2021 – Ongoing)

SR 997/Krome Avenue from SW 8th Street to Kendall Drive | FDOT District 6 | Lead Senior Signalization/Lighting Designer: Final roadway design for the reconstruction widening of a 5.564-mile corridor from a two to four-lane divided roadway. The project included signing and pavement marking plans and signalization, estimates, electronic delivery, and specification packages. Elias was responsible for the lighting design for the entire corridor and traffic signal systems at two major intersections. (2007-2018)

NW 67th Avenue at SR 826 Intersection Improvements | Miami Lakes | Lead Signalization Designer: The project consisted of roadway widening to incorporate an additional thru lane for the northbound movement at the south leg of the intersection of NW 67th Avenue and NW 167th Street. The project also included modifications to the existing median, traffic signals, crosswalk improvements, and pavement milling and resurfacing. Responsibilities included the production of signalization and lighting component plans. (2017-2020)

SR 5/US 1 at SR 70 Virginia Avenue | FDOT District 4 | Senior Designer: This safety project includes a southbound right turn lane from SR 5 to SR 70. The project scope of work included installing a new mast arm and intersection lighting, minor widening and minor signal modifications to the existing signal system. MARLIN also supported FDOT in developing right-of-way documents, including a temporary construction easement and a donation from St. Lucie County. The project was completed under MARLIN's Districtwide Minor Design Project Contract C9L17, FM No. 436868-1. (2019-Ongoing)

Districtwide Minor Design Projects | FDOT District 4 | Roadway Support and Lead Lighting and Signalization Designer: This districtwide minor design contract varies in task work order assignments, including design services and in-house support. Assignments included preparing contract plans for safety projects, signing and pavement marking, signalization and lighting, adaptive signal control, and developing the Design-Build/RFP scope package. (2006-2011; 2016-Ongoing).

Hollywood Blvd Complete Streets | FDOT District 4 | Lead Senior Signalization and Lighting Designer: Decorative signalization and lighting improvements for this Complete Streets project along Hollywood Boulevard from City Hall Circle to Dixie Highway. This project entailed the reconstruction of Hollywood Blvd. into a multimodal facility for automobiles, bicycles, and pedestrians. Responsibilities included the production of signalization and lighting component plans. The project was completed under MARLIN's Districtwide Minor Design Projects Contract C9L17, FM No. 434666-1. (2016-2017).

SR 882/Forest Hill Boulevard Intersection | FDOT District 4 | Senior Designer: Intersection safety improvement included a new mast system, internally illuminated signs, pedestrian signalization and a fully actuated video detection system. The project also involved a median modification that required an access management review and a public hearing. The project was completed under MARLIN's Districtwide Minor Design Projects Contract C9L17, FM No. 430608-2. (2016-2018).

SR 710/Warfield Blvd. | FDOT District 4 | Signalization QA/QC: Insert Major reconstruction project for SR 710/Warfield Blvd. from FPL Martin Power Plant Road to CR 609/Allapattah Road. Final roadway design included establishing a typical section, roadway horizontal and vertical geometry, engineering report, drainage analysis and report, production of roadway and drainage plans, development of engineering estimate, and specifications. The design includes bicycle lanes and a shared-use path. (2012-2016, 2017-Ongoing)

Adaptive Signal Control Technology Implementation | FDOT District 4 | Signalization QA/QC: Implementation and integration of an adaptive signal control system (Centracs) along SR 5/US 1 (12 intersections) within the City of Fort Pierce. Responsibilities include project management, roadway

Elias Diaz – Cont.

and signalization design, utility coordination, and public involvement. Project performed under MARLIN's current Districtwide Minor Design Projects Contract. (2016).

St. Lucie County's Advanced Transportation Management System (ATMS) Phase 1 | FDOT District 4 | Signalization QA/QCS: Development of a Design/Build Criteria Package for the design, construction and integration of St. Lucie County's ATMS Phase 1 project, which consists of installing a Fiber-Optic Communications Network for 56 signalized intersections, installing and integrating the ATMS software, installing and integrating 17 Closed Circuit Television (CCTV) cameras, and installing and integrating a video detection system at those intersections. Project performed under MARLIN's current Districtwide Minor Design Projects Contract. (2016-Ongoing)

Improvements for the Turnpike Mainline | Florida Turnpike Enterprise | Senior Designer: Project involved milling, resurfacing, and safety and design upgrade improvements for the Turnpike Mainline (SR 91) near Lake/Sumter County Line. Project also includes review and implementation of improvements identified in the ERCAR, milling and resurfacing, evaluation of pavement conditions and development of pavement design and MOT scheme, repair of all guardrail openings, and replacement of non-compliant signing. Responsible for signing and pavement marking design. (2016-2017).

SR 710/Northlake Blvd. Minor Design Safety Improvements | FDOT District 4 | Lead Senior Lighting Designer: Lighting improvements at the intersection of SR 710/Northlake Blvd in Palm Beach County. Responsible for the production of this safety project and implementation of the safety report. Project performed as a subconsultant under a Districtwide Minor Design Projects Contract. (2015)

SR 834/Sample Road & SR 811/Dixie Highway Minor Design Safety Improvements | FDOT District 4 | Senior Signalization Designer: This is a signalization improvement (mast arm upgrade) project at the intersection of SR 834/Sample Road and SR 811/Dixie Highway. Responsibilities include the production of this safety project and the implementation of the safety report. Project performed as a subconsultant under a Districtwide Minor Design Projects Contract. (2015).

SR 7/US 441 and NW 29th Street Minor Design Safety Improvements | FDOT District 4 | Senior Signalization Designer: Signalization improvements at the intersection of SR 7/US 441 and NW 29th Street. The project also included the production of this safety project and the implementation of the safety report. Project performed as a subconsultant under a Districtwide Minor Design Projects Contract. (2015)

SR 809/Military Trail RRR Project | FDOT District 4 | Roadway Support & Senior Signalization Designer: Milling and resurfacing project from SR 809/Lake Worth Road to the south of SR 80/Southern Blvd. This project included upgrades at signalized intersections (video detection, new pedestrian features to comply with ADA criteria), updates to safety features (pedestrian railing and guardrail), upgrades to existing signage, drainage improvements and enhancement of bicycle and pedestrian accommodations. This project is located within the City of Greenacres, the Village of Palm Springs, and unincorporated Palm Beach County, Florida. (2006-2010)

NW 67 Avenue & Perimeter Road | FDOT District 6 | Signalization Designer: Design, permitting, signing and pavement markings for the realignment and reconstruction of a major thoroughfare and intersection to Miami International Airports Cargo Area. (2011)

SR 809/Military Trail from Okeechobee Road to Oxford Street | FDOT District 4 | Signalization Designer: Responsible for designing signalization plans for this milling and resurfacing project. Improvements included pedestrian control upgrades, internally illuminated signs, and retrofit of existing loop assembly coordinated. (2006-2010).

SR 7/US 441 from Bailey Road to North of Boulevard of Champions | FDOT District 4 | Signalization Designer: Project included final signalization design for the milling and resurfacing of a 0.604-mile corridor. It also had to prepare signing and pavement marking plans, estimates, electronic delivery, specification packages, Community Awareness Plan, and the Resurfacing, Restoration, and Rehabilitation Report (3R). Performed under a Districtwide Minor Design Projects Contract. (2006-2009)

SR 805 - Dixie Highway from South of Southern Blvd to SR 80 to North of Belvedere Road | FDOT District 4 | Signalization Designer: Responsibilities included the final signalization design for the milling and resurfacing of a 1.052-mile corridor. It also had to prepare signing and pavement marking plans, estimates, electronic delivery, and specification packages. Project performed under a Districtwide Minor Design Projects Contract. (2006-2009).

SR 729 - State Market Road from SR 15 / US 441 to SR 15 / US 441 | FDOT District 4 | Signalization Designer: Milling and resurfacing project for District 4. Responsibilities included preparation of the roadway plans, signing and pavement markings plans, and electronic delivery. Project performed under a Districtwide Minor Design Projects Contract. (2006-2009)

Elias Diaz – Cont.

Townwide Bicycle and Pedestrian Improvements | Town of Miami Lakes | Senior Designer: Sidewalk and crosswalk improvements along each side of the existing typical section of four selected corridors in Miami Lakes. The sidewalk improvements will be by ADA requirements. Since this is a LAP-approved project, MARLIN will coordinate with FDOT to develop the NEPA documentation required for this project. LAP Project. (2017-Ongoing).

Greenway Biscayne Trail Segments C & D | Miami-Dade County | Senior Designer: This is a 36.2 mile-long multi-use trail study that includes a PD&E study, trail design, and construction management services. Involved in the engineering design of a 14-mile pedestrian/bikeway trail connecting Black Point Park and Homestead Bayfront Park, along Biscayne Bay, with the Greenways Trails System. The project also involved coordinating with permitting agencies such as FDOT, SFWMD, DERM, US Army Corps of Engineers, and US Wildlife and Fishing. LAP Project. (Ongoing).

SR 80 from Okeechobee Road to Oxford Road | FDOT District 4 | Signalization Designer: Responsible for the design of signals and pedestrian features at five intersections within this corridor and one lighting intersection improvement (2008)

SR 834-Sample Road from Perimeter Road to Rock Island Road | FDOT District 4 | Signalization Designer: Responsibilities included final signalization design for the milling, resurfacing and widening of a 1.808-mile corridor. He also prepared the signing and pavement marking plans, estimates, electronic delivery, specification packages, signals, and lighting. (2007-2008)

SR 90 - US 41 (Tamiami Trail) | FDOT District 6 | Senior Designer: This project encompassed the responsibilities that include final milling and resurfacing of the existing shoulder, placement of guardrails and high-tension cable barrier fence. Elias also prepared signing and pavement marking plans using Audible and Vibratory Pavement markings, estimates, electronic delivery, and specification packages. (2007)

North Bay Road Pedestrian and Emergency Bridge | Sunny Isles Beach | Senior Designer: Development of alternatives for a pedestrian and vehicular bridge. Responsibilities included project management, design, permitting, and public involvement. (2007)

Greenway Biscayne Trail Segment | Miami-Dade County | Senior Designer: This project was a non-motorized 10-foot wide paved shared-use path (multi-use trail) on an existing levee along the L-31E Canal, approximately 6.5-miles long and accommodated cyclists, pedestrians and equestrians. (2006).

NW 25th Street Roadway Reconstruction and New Construction of Viaduct | FDOT District 6 | Signalization/Lighting Designer: Design services to reconstruct NW 25th street from NW 67th Ave to NW 87th Ave. Responsible for preparing contract plans, traffic control signalization design for ten (10) intersections and the lighting analysis and design for the entire corridor (2.5-miles at grade, and 1.5-miles at the elevated viaduct), signing and markings components. (2000-2016).

SR 826 - Sunny Isles Boulevard Sidewalk Enhancement | FDOT District 6 | Senior Designer: Development of plans for roadway, drainage, signing & pavement markings, and signalization for FDOT. (2003-2006)

SR-A1A (Indian Creek Drive) Roadway Reconstruction | FDOT District 6 | Lead Lighting Designer: Responsible for the calculation, lighting design, and production of roadway, lighting, and traffic control plans. (1999-2004)

NW 14th Street Resurfacing and Widening, from NW 34th Avenue to NW 22nd Avenue | Miami | Roadway Designer: Responsible for the construction plans for the resurfacing of NW 14th Street, widening of shoulders, new pedestrian curb ramps, and new parking areas. The project included roadway, drainage, signing and pavement markings, and estimates. (2004)

SR 5/South Dixie Highway Signalization and Drainage | Signalization Designer: Project involved milling and resurfacing the road's asphalt pavement. Responsibilities included ADA upgrades, pedestrian signal updates, replacement of damaged inlet tops, repair of drainage leaks if present, replacement of existing sidewalk, and curb and gutter where needed. The overall project length was 2.122-miles located within Miami-Dade County. This drainage report aimed to find ADA issues, provide solutions, determine spread based on correct slope location, and replace the damaged structure. (2004).

Florida Keys Overseas Heritage Trail-Trail and Parking Lot Improvement | Department of Environment Protection (DEP) | Designer: Produced construction drawings for the development design of a new bicycle path; pavement and sign markings (2004)

FEMA, Miami-Dade County, Florida | Miami Lakes | Designer: Involved in developing drainage improvement construction plans. (2002)

Districtwide Traffic Ops Minor Design | FDOT District 6 | Roadway and Signals Designer: Intersection improvements for locations identified by the traffic operations department. Services included design, signalization, signing and pavement markings, and post-design. (2002)



Maria Ballester, EI

Professional Registrations

- EI – FL (#1100024019)
- Temporary Traffic Control (TTC)
Advanced, No. # 73397

Education + Training

- B.S., Civil Engineering, Florida International University, Miami, FL
- Years of experience: 3

Languages Spoken

- English
- Spanish

Maria is a well-structured and goal-oriented civil engineer, who has recently graduated with Honors from Florida International University. She has experience in working with other engineers to achieve the uttermost quality and effectiveness regarding the needs and expectations of a project. She continues to seek growth and knowledge with focus in different areas through the variety of projects she has worked on.

Municipal Project Experience

Sevilla Estates Phase 1 Drainage Improvements Project | Town of Miami Lakes | Project Engineer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 169th Terrace to the North, NW 87th Court to the East, NW 168th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Sevilla Estates Phase 2 Drainage Improvements Project | Town of Miami Lakes | Project Engineer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 167th Street to the North, NW 87th Court to the East, NW 166th Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Genesis Oak Gardens Drainage Improvements Project | Town of Miami Lakes | Project Engineer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Genesis Oak Gardens neighborhood area which is bounded by NW 91'1 Court to the West, NW 169th Street to the North, NW 89th Place to the East, NW 167th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

**Work performed at previous firm*

Maria Ballester, EI – Cont.

Florinda Estates Drainage Improvements Project | Town of Miami Lakes |

Project Engineer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Florinda Estates neighborhood area which is bounded by NW 88th Place to the West, NW 140th Lane to the North, Palmetto Frontage Road to the East, NW 138th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Royal Garden Estates Drainage Improvements Project | Town of Miami

Lakes | Project Engineer: Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Royal Garden Estates neighborhood area which is bounded by NW 88th Place to the West, NW 164th Street to the North, NW 87th Court to the East, NW 162nd Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

FDOT Project Experience

SR 5 US 1/Broadway from 59th Street to Northlake Blvd. | FDOT District 4 |

Project Manager/Engineer of Record: Mobility project in Palm Beach County adding bicycle lines in a 3.1-mile corridor along SR 5. Responsibilities included the final roadway design, production of roadway and signing and pavement marking plans, development of exceptions and variations and utility coordination. This design included the addition of bicycle lanes and a shared-use path.

I-95 (SR 9) at Copans Road Interchange Modification, Broward County,

FL, FDOT District 4, Project Engineer: Maria was responsible for addressing traffic control analysis and production on plans. This project included interchange improvements to address operational deficiencies associated with the I-95 (SR 9) at Copans Road interchange. Deficiencies included a high level of traffic congestion in the merge and diverge areas between the entrance and exit ramps. Northbound and southbound entrance ramps were combined into collector distributor (CD) roads to provide a less congested and slower speed merge condition that is separated from the I-95 (SR 9) general purpose lanes.

**Work performed at previous firm.*

Maria Ballester, EI – Cont.

SW 157th Avenue from SW 26th Street to SW 8th Street Roadway Improvements, Miami-Dade County, FL, Miami-Dade County, Project

Engineer: Maria was involved in the initial signing and pavement marking development of the plans and the addition of the 8th Street intersection roadway plans. Professional engineering design services and preparation of complete construction plans which included master planning, traffic study and public involvement for widening SW 157 Avenue roadway from SW 42 Street to SW 26 Street from two lanes to four lanes. The project included a new raised landscaped median, bike lanes, sidewalks, curb and gutters, storm drainage system, pavement markings and signage, intersection and signalization improvements, roadway lighting, and the design of a new canal. The project also included all permits, environmental assessments, utility coordination, geotechnical services, public involvement, and construction administration services.

SR 860/Miami Gardens Drive/NW 183 Street from East of NW 57 Avenue to West of NW 27 Avenue, Miami-Dade County, FL, FDOT District 6, Project

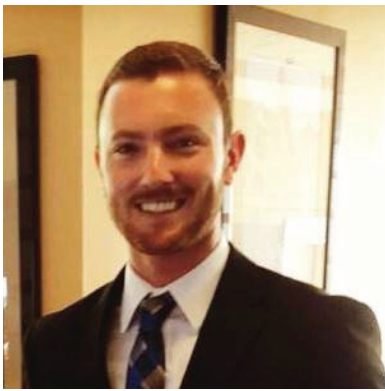
Engineer: Maria assisted in completing and addressing several comments to develop the final plans and several revisions that were included after. The purpose of this project was to provide resurfacing of SR 860/Miami Gardens Drive from east of NW 57 Avenue to west of NW 27th Avenue. The project included improvements and lighting retrofit at four intersections along the project corridor at NW 52 Avenue, NW 42 Avenue, NW 37 Avenue, and NW 32 Avenue, as well as ADA upgrades to the sidewalks and pedestrian ramps. Design services included milling and resurfacing of existing pavement along SR 860 and frontage roads, reconstruction of substandard pedestrian ramps, sidewalk extensions with detectable warning surface along frontage roads, reconstruction of uneven and damaged sidewalks, adjustment of storm drainage manholes, utility manholes, and water valves. Services also included design of signing and pavement markings, traffic control, signalization, lighting, utility coordination, landscape architecture, and environmental permitting.

Maria Ballester, EI – Cont.

Roadway Signs in the Vicinity of the Metrorail Stations, Miami-Dade County, FL, Miami-Dade County, Project Engineer: Maria was responsible for conducting field reviews along the different stations to find the most effective locations for the placement and replacement of roadway signs. Miami-Dade County upgraded the road guide signs in the vicinity of the existing 23 Metrorail stations. WGI developed aerial base maps of the roadway systems leading to each station including existing and proposed signage, and provided a report with appendices and recommendations for signage upgrades. WGI also developed the design criteria package for typical guide signs that will be installed at the roadways and expressway to direct motorist and pedestrians to each of the Metrorail stations.

SR 7/US 441 Transit Corridor Improvements, Broward County, FL, FDOT District 4, Project Engineer: Maria took lead in developing the 3D Model and design along the corridor of Prospect Rd, in addition to attending FDOT meetings and reviews to stay on top of project deadlines and developments. This project consisted of roadway widening and sidewalk construction aimed at improving pedestrian and bicyclist continuity along Prospect Road from SR 7 to SR 870/Commercial Blvd. and along Copans Road from SR 7 to Lyons Road in Broward County. This was an off-system project aimed at improving access to transit facilities on SR 7 as recommended in the SR 7 Multimodal Improvements Corridor Study Completed by the Broward Metropolitan Planning Organization. The improvements included roadway widening along Prospect Road to provide for buffered bicycle lanes and the construction of a raised separated bicycle facility within the swale along Copans Road. Services for this project included roadway widening, drainage engineering, signalization, landscape architecture, miscellaneous structures, lighting, utility coordination, environmental permitting, surveying, SUE, geotechnical exploration, and public involvement.

**Work performed at previous firm.*



Tyler Blair, PTP, PTOE, PE

Professional Registrations

Professional Transportation Planner
Cert No. 685

Professional Traffic Operations
Engineer No. 5299

TX Professional Engineer
License No. 146572

Advanced Maintenance of Traffic
Cert. No. 69214

Education + Training

M. Eng. Civil Engineering, University
of Florida, Gainesville, FL

B.S. Civil Engineering, University of
Florida, Gainesville, FL

Affiliations + Memberships

- Past President – First Coast
Institute of Transportation
Engineers
- Professional Liaison – University
of Florida ITE
- American Society of Civil
Engineers

Mr. Blair has extensive experience in transportation planning and traffic assessment but also carries a considerable understanding of roadway design and constructability through a blend of public and private experience. As the Senior Transportation Engineer for Nassau County, Mr. Blair oversaw several multi-million-dollar Capital Improvement Projects from the conceptual Planning/Feasibility stage to the ribbon cutting. As a part of these projects, he hosted several public workshops, worked with DOTs to acquire funding, and managed budgets and schedules through completion. In his time on the consulting side, he specialized in developing comprehensive transportation planning studies focusing on corridor and intersection capacity, safety, and operational analysis. Additional oversights included short- and long-range travel demand forecasting, concurrency management, technical and code compliance review, traffic study review, turn lane analysis, signal warrant and timing analysis, model simulation, maintenance of traffic, Client negotiations, and identification of opportunities for innovative design alternatives.

Project Experience

Agency Transportation Planning, Public Involvement, & Grant Writing

Nassau County BOCC, Legislative Appropriation*, Yulee, FL

Responsible for preparing legislative appropriation requests for \$45M in County transportation projects for FY 21-22. Crafted language provided to the State of Florida House of Representatives and Senate to earmark funds for key projects to support surging growth in Nassau County.

Nassau County BOCC, SR-200/A1A Corridor Master Plan, Yulee, FL

Provided Transportation Planning expertise in working with Planning Department to produce a Master Plan that promotes multimodal facilities, interconnectivity, mixed-use development, and congestion management BMPs. Mr. Blair presented, listened, and responded to residents at the public workshops helping guide the vision of the Master Plan.

Nassau County BOCC, CR-108 Resurfacing*, Nassau County, FL

Project included 9.5 miles of resurfacing and roadway improvements. As a federally funded Local Agency Program (LAP) contract, project required extensive coordination between FDOT, Nassau County, Consultants, and Contractors. As Project Manager, Mr. Blair oversaw Roadway Safety Audit (RSA) and assembled both, ITB Package for Construction and RFQ for CEI Professional Services consistent with Federal Requirements and County Legal, Procurement, and Engineering Policies.

*Work performed at previous firm.

Tyler Blair, PE, PTP – Cont.

Nassau County BOCC, Pages Dairy Rd. & Chester Rd. Intersection Improvements*, Yulee, FL

Mr. Blair oversaw the design phase of the Project. Upon taking over the project, immediately recognized opportunity to significantly enhance project ROI through minor plan adjustments and increasing intersection capacity. Project also involved close coordination with First Coast Railroad for ROW Permitting/construction easement, flagging operations, and maintenance agreement.

Nassau County BOCC, William Burgess Blvd. Extension*, Hilliard, FL, USA

Prepared Transportation Regional Incentive Program (TRIP) application to request funding toward \$15M new road connecting US-17 to Miner Road. The segment includes two lanes, on-street parking, and a 10'-wide multi-use trail.

Nassau County BOCC, Pages Dairy Road Extension*, Yulee, FL, USA

Prepared Small County Outreach Program (SCOP) grant application for the extension of Pages Dairy Road, a major thoroughfare paralleling SR-200. The project is intended to provide an alternate route to SR-200 by extending the existing terminus of Pages Dairy Road further east, tying into Blackrock Road.

Nassau County BOCC, Crawford Road Paving*, Callahan, FL, USA

SCOP Grant was obtained and used to fund \$4.5M Oversight Construction of the dirt-to-asphalt paving project from beginning to end. Actively engaged in bi-weekly meetings and site visits, provided support for CEI and Contractor for any RFIs, Change Orders, and any items that required additional coordination.

Nassau County BOCC, Transportation Studies*, Yulee, FL

Conducted various in-house operational and safety studies for intersections and corridors, recommend and implemented pedestrian and cyclist safety improvements, assessed residential developments for speed humps, signage upgrades, MUTCD compliance, and traffic calming opportunities.

Nassau County BOCC, Transportation Study Review*, Yulee, FL

Reviewed traffic impact analyses for various proposed commercial and residential developments ranging from small 17-unit single family developments to master-planned communities consistent of 14.4k DUs (Residential) and 1.2M SF (Commercial). Actively oversaw site plan review in consideration of optimal access configurations and site circulation.

Consulting Transportation Studies & Traffic Modeling (Regional & Micro)

Raydient Properties, LLC., East Nassau Community Planning Area (ENCPA)*, Yulee, FL

Responsible for preparing multiple comprehensive transportation impact analyses for master-planned communities, and overseeing delivery and phasing of Mobility Network improvements for 24,000 acres in eastern Nassau County. This included Regional Planning Model updates and meso- and microsimulation. Mr. Blair coordinated with Client, Nassau County, and FDOT to execute well-timed roadway enhancements for future development, while proposing mitigation strategies for existing facilities. Continually monitored overall network functionality for necessary improvements.

NW 154th St. & Miami Lakeway North Safety Study, Town of Miami Lakes, FL

**Work performed at previous firm.*

Tyler Blair, PE, PTP – Cont.

Engineer of Record for a comprehensive safety analysis at the intersection of NW 154th St. and Miami Lakeway North in the Town of Miami Lakes. The project included site investigation, geometric assessment, historical crash data assessment, vehicle volume and operational analysis, and a spot-speed study assessing over 400 vehicles. Recommended multiple short- and long-term safety improvements including striping and signing enhancements, median modifications, and signal retiming.

Sawmill Timber, LLC., Southeast Quadrant*, Jacksonville, FL

Modeled a series of transportation designs and development programs to assess impacts associated with multiple scenarios of development concepts of 1,000-acre project development, from Phase I to buildout (2040). Determined directional distributions and volumes for all roadway segments in all phases of project site. Coordinated with DOT on behalf of Client to address traffic concerns and spearheaded traffic study, interchange reconfiguration recommendation at SR-202 & Kernan Blvd., and submission of project for DOT Permit approval.

DR Horton, Treaty Ground PUD*, St. Augustine, FL

Performed traffic analysis to determine concurrency costs for various buildout scenarios. Produced Land Development Traffic Assessment report identifying needed future roadway improvements based on background traffic and expected project traffic in accordance with development schedule.

DR Horton, Rivergate Townhomes*, Jacksonville, FL

Worked closely with City of Jacksonville to coordinate mobility credits for Client. Utilized inventive strategies to produce traffic impact analysis with limited foundational data to deliver on deadlines promised to Client. Study approved without comment on first submittal.

Baptist Health, Oakleaf Medical Facility*, Fleming Island, FL

Executed detailed traffic impact analysis for the development of an 85,000 square foot medical facility. Worked with COJ to achieve agreement to remove unnecessary turn lane and incorporate a directional median opening adjacent to the project site. Also worked with FDOT to receive access on a Limited Access facility.

STL Jax, LLC., Industrial Park*, Yulee, FL

Coordinated with Buyer and Seller to deliver Traffic Impact Analysis for 1.5M SF industrial development in East Nassau County. Worked with FDOT and Nassau County to produce innovative access design for development.

St. Johns County, CR-210 Roundabout Analysis*, Ponte Vedra, FL

Acquired historical growth data, model volumes and count data used to project 2030 and 2040 volumes at CR-210 and Mickler Rd. Reviewed roundabout alternatives using Vistro software and shared information with team to assess for long-term solution to anticipated traffic congestion.

Various Clients, Cordova Palms Traffic Analysis*, St. Johns County, FL

Prepared comprehensive operational traffic impact analysis for FDOT plans submittal on unique Private Public Partnership (PPP) deal. Traffic analysis accounted for additional planned commercial and residential development and utilized fixed timing signal plans to simulate buildout functionality accounting for train delay.

**Work performed at previous firm.*



Education + Training

B.S. Geography and Environmental Studies, Florida State University

Julian Christopher Atkins, B.S

Mr. Atkins is a skilled GIS Technician with nine (9) years in GIS industry ranging from oil and Gas Pipeline construction and permitting to transportation infrastructure including transportation studies, rail, port and interstate construction. This includes private companies such as TransCanada, ExxonMobil and Kinder Morgan. Also included are the Upper Coastal Plains Council of Government transportation study and web mapper development.

Project Experience

UCPCOG Transportation Study, Multiple Counties, NC – Upper Coastal Plains Council of Government – Senior GIS Technician

The Upper Coastal Plains Council of Government had contracted us to acquire, create and edit data and Web Mapper Services for a transportation study they were doing in an attempt to give means of transportation to community members that could not afford a vehicle of their own. The study area consisted of five counties in the northeastern area of North Carolina. As Senior GIS Technician, provided mapping support and data procurement for UCPCOG to determine best public transportation routes for lower income and elderly community members.

Keystone XL Project, Multiple Counties for MT, ND, SD and NE – TC Energy - GIS Analyst

Provided program/project/task management services, engineering, environmental, and permitting services for 7 years. Depending on the phase, Responsible for routing, feasibility, regulatory support, environmental permitting, environmental surveys, geotechnical investigations, land acquisition, safety management, project management, detailed engineering, data management, route selection, route maintenance, project controls, quality, construction planning, as-built deliverables, and other project support functions. As GIS Analyst, provided spatial analysis and mapping support for pipeline routing and construction, performed route assessment and crossing analyses for current and alternative pipeline routes to determine best fit pipeline location, performed data collection, management, and analysis through a variety of datasets created in-house through digitizing, remote sensing, and outside sources.

Blue Marlin Offshore Port Project, Texas Gulf Coast – Energy Transfer – GIS Analyst

The 37 mile proposed pipeline will connect the existing Nederland Oil Terminal in Texas, USA, to the existing 36-inch-diameter Stingray Gas

Julian Atkin, B.S. – Cont.

Pipeline at Station 501 in Cameron Parish, Louisiana. The project includes converting the existing Stingray Gas Pipeline and affiliate stations from natural gas to crude oil and converting a platform complex in West Cameron 509 from natural gas to include both natural gas and crude oil.

Upland Pipeline Project, Multiple Counties for ND – TransCanada - GIS Technician

EXP served as prime environmental consultant for the new build of facilities across Canada/U.S. The Upland Pipeline Project consists of approximately 230 miles of 20-inch diameter National Pipe Size (NPS 20) new build pipeline designed to collect and transport approximately 300,000 BPD of crude oil from various production areas for delivery to Moosomin, Saskatchewan, or Cromer, Manitoba, Canada. There are approximately 124 miles in the United States and 106 miles proposed in Canada. In addition to the pipeline, the Project included installing seven aboveground receipt facilities, four with one 100,000 (bbl) storage tank and one with a 300,000 bbl storage tank. As GIS Analyst, provided spatial analysis and mapping support for pipeline routing and construction, performed route assessment and crossing analyses for current and alternative pipeline routes to determine best fit pipeline location, performed data collection, management, and analysis through a variety of datasets created in-house through digitizing, remote sensing, and outside sources.

NGPL Relocation Project, Jefferson County, TX, Sabine Pass, TX –Kinder Morgan– GIS Technician

The construction/expansion of the Golden Pass LNG facility in Jefferson County Texas, required the relocation of an approximately 6,000-foot section of two active NGPL LA 1 & 2 - 30" natural gas Kinder Morgan pipelines on property owned by Golden Pass Partners LNG export facility at Sabine Pass, TX. EXP was chosen by Golden Pass to perform all the environmental studies and permit fillings for the plant expansion. Golden Pass and Kinder Morgan agreed to utilize EXP to complete the pipeline reroute design and provide permit fillings with appropriate agencies.

Golden Pass Pipeline Project - Jefferson and Orange Counties, TX and Calcasieu Parish, LA – ExxonMobil– GIS Technician

The Golden Pass Pipeline Project involves the construction of new LNG liquefaction facilities to be constructed at the existing Golden Pass import terminal in Jefferson County, Texas and modification of the existing Golden Pass pipeline system. The project includes a total of eight miles of new 30- to 36-inch pipeline, four new compressor stations, as well as modifications to interconnections to allow bi-directional service in Texas and Louisiana. This project is ongoing.

**Work performed at previous firm.*



Toni Bou Lattouf, BBA, MBus

Education + Training

- Master of Business in Finance, University of Technology Sydney, Australia
- Bachelor of Business Administration – Finance, Universite Saint-Esprit de Kaslik, Lebanon

Select Project Awards

- Ras Al Khair Aluminium Smelter Project, ENR Global Best Projects Award of Merit, Bechtel, 2014
- Ras Al Khair Aluminium Smelter Project, Bechtel Project Management Excellence Award, Bechtel, 2012

Languages Spoken

- English
- French
- Arabic

Toni has a unique mix of corporate and international project experience, having worked in Australia, UK, USA, Canada, Bahrain, and Saudi Arabia. He has held multiple roles and responsibilities in iconic-multi-billion infrastructure programs. For the past 9 years, he has worked closely with senior management in different organizations to report the financial health of projects and performed detailed budget forecasts for inclusion in the operational plans.

Toni brings extensive experience in setting up, monitoring, and evaluating all aspects of project controls disciplines. For several years, he provided in-depth analysis of multiple mega projects financial progress, quarterly review of the forecast and tracking of GM/Revenue earnings. Toni has been involved in development programs and project management controls solutions in the PMO, construction, transport, and mining and metals industries. He has led and mentored teams to deploy best practices in project controls. Working on end-to-end management of each project he is proficient at maintaining the fluidity of each project lifecycle, liaising directly with internal and external stakeholders on goals, tools, strategy, and best practices.

Toni has delivered many Training courses to new employees to assure their full understanding of the project controls processes and provided feedback for improvements to the functional leads.

Project Experience

EXP Services Inc., Project Controls Manager, Toronto, ON

- Developing project planning, budgeting, change management, cost control, cost estimating, reporting, and forecasting for assigned projects.
- Monitor financial performance and create Earned Value.
- Work with Project Managers to ensure alignment of the projects forecast Estimate at Completion (EAC) both in terms of time and cost.
- Maintain and update the projects' work breakdown structure (WBS) and cost breakdown structure (CBS).
- Provide accurate internal weekly and monthly project reports and interface and present to management.
- Prepare and present project planning reports for project management and customer review.
- Prepare cost reviews and participate in project review audits and workshops.

Toni Bou Lattouf, BBA, MBus – Cont.

- Analyze, trend, and communicate progress information to project personnel through the use of dashboards, specifically utilizing Power BI.
- Identify and mitigate risks related to potential impacts on scope, cost, and schedule.
- Monitor project total expenditure including verifying and checking of invoices and claims from subconsultants.
- Evaluate project contracts and commercial terms to ensure that the project controls processes are aligned to address any specific project needs.
- Ensure the project is contract and corporate compliant. Maintain compliance with all applicable policies, procedures, and company standards.
- Coordinate interdisciplinary communications with design leads and project management team.
- Communicate proactively with the project team, stakeholders, and project leadership all issues and variances which may influence the project outcome.
- Participate in Project risk assessments.
- Provide project planning input into proposals and bids.

***Bechtel International Inc, National Project Management Organization (NPMO), Project Controls Manager – Entities Enablement, Riyadh, Saudi Arabia**

- Managed the effective execution of the Project Controls function for multiple projects as part of Saudi 2030 vision program.
- Sub-Bullet Managed the delivery of various Project Control programs varying from inception to at-completion, identify and analyze core requirements and key features of projects.
- Monitored and signed off Earned Revenue Determination Data, Proposal Financial Summaries, Project Financial Status Reports, and Charge for Project Working Capital calculations for assigned projects.
- Developed program scopes and objectives, involving all relevant stakeholders, ensuring resource availability and allocation.
- Supported the delivery of projects by assessing contract drafts to ensure all program deliverables meet set project controls requirements.
- Played a key role within client and stakeholder meetings; utilizing negotiation and influencing skills to gather client requirements and gain project/idea buy in from senior members of the team.
- Was accountable for the recruitment, training, and management of personnel, maximizing productivity through ongoing performance monitoring and review; conduct appraisals and regular 1-2-1s.
- Managed the insights of managers, directors, and stakeholders, helping to ensure all parties agreed with the current scope and roadmap of projects.
- Continuous liaison with GBU functional management to coordinate workload, staffing plans, processes, and procedures.

***Bechtel International Inc, National Project Management Organization (NPMO), Senior Project Controls Specialist – Entities Enablement, Riyadh, Saudi Arabia**

- Managed all Cost engineering aspects for multiple projects as part of Saudi 2030 vision program.
- Developed standards for cost and schedule control and monthly budget analysis activities.

**Work performed at previous firm.*

Toni Bou Lattouf, BBA, MBus – Cont.

- Reviewed and approved Earned Value data, updates to Estimate at Completion (EAC) and financial status report for management review approval.
- Supervised cost reporting practices for compliance with agreed standards for accuracy and consistency.
- Reviewed contract drafts to ensure they include adequate cost and scope definition and meet Project Controls requirements.
- Prepared, coordinated, and reported Project Controls presentations to Bechtel and senior management.
- Liaison with functional managers to review workload and staffing plans, work processes, and update procedures as needed.
- Led integration of project controls processes across the program by Training and lessons learned.
- Reviewed project work activities to ensure support of project milestones.
- Supervised the comparisons of scope, quantities, and cost data between the projects.
- Established KPIs and associated reporting structure.
- Routine identification of risks and contingency analysis.
- Deployed auditing program and continually achieved 100% planned audits of consultants, contractors, PMC's departments, and functions.

***Bechtel International Inc, Bechtel's Global Headquarters, Deputy Finance Manager, Reston, USA**

- Toni worked directly with the Senior Vice President and Managing Director of Infrastructure to plan, direct, and coordinate the day-to-day operations of the business line in a variety of areas, including: project operations, commercial management, market research, strategy development, bid preparation, business reviews, project delivery strategies, human resource management, budget management, performance management, risk management, and financial management.

***Bechtel International Inc, Bechtel's Headquarters, Finance Specialist, Reston, USA / London, United Kingdom**

- As part of Bechtel's CFO team, Toni was responsible for overseeing North America Infrastructure projects. Providing in-depth analysis projects financial progress, quarterly review of the forecast and tracking of GM/Revenue earnings against agreed operation planned. Also, assisted projects with cashflow, cost of working capital and staffing forecast. He was also responsible for compiling information regarding Bechtel project offices and personnel and researching general business information sources to prepare forecast information, to answer general business questions and to input forecast data.

***Bechtel International Inc, Waad Al Shamaal City Development, Project Controls Specialist, Turaif, Saudi Arabia**

- Toni was responsible for supporting all project controls related matters including but not limited to planning, cost, reporting, project summary dashboards, special studies, presentations and meetings with the client, weekly and monthly progress reports, critical items, KPIs, periodic risk and contingency analysis.

***Bechtel International Inc, Ras Al Khair Aluminium Smelter Project, Project Controls/ Claims Specialist, Ras Al Khair, Saudi Arabia**

- Toni was responsible for providing All project controls related matters including but not limited to planning, cost, reporting, project summary dashboards, presentations and meetings with the client and insurers. He was also responsible for providing Monthly Cost & Commitment report and only person responsible for monitoring and forecasting vendor rep services (\$50 million budget), including preparation of weekly and monthly vendor rep cost reports on the project.

**Work performed at previous firm.*



Valerie Parra brings over 1 year of experience in civil and roadway/highway design including roadway design, pedestrian and bicycle facilities, stormwater/drainage, signing and pavement markings, and civil land developments. Her areas of specialization include roadway signing and pavement markings, paving and grading plans, and drainage analysis. She has experience working on roadway projects for multiple Municipal and State agencies in Florida.

VALERIE PARRA

Expertise

Roadway/Highway Design
Land Development

Education

BS Civil Engineering
Florida International University, 2022

Affiliations + Memberships

American Society of Civil Engineers

Spanish, English

Relevant Experience

Sevilla Estates Phase 1 Drainage Improvements Project | Town of Miami Lakes | Project Engineer

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 169th Terrace to the North, NW 87th Court to the East, NW 168th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. The proposed drainage improvements will consist of exfiltration trench, manholes, catch basins, piping and roadway and swale restoration. (2022-On-going)

Sevilla Estates Phase 2 Drainage Improvements Project | Town of Miami Lakes | Project Engineer

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Sevilla Estates Phase 1 neighborhood area which is bounded by NW 89th Court to the West, NW 167th Street to the North, NW 87th Court to the East, NW 166th Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. (2022-On-going)

Genesis Oak Gardens Drainage Improvements Project | Town of Miami Lakes | Project Engineer

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Genesis Oak Gardens neighborhood area which is bounded by NW 91st Court to the West, NW 169th Street to the North, NW 89th Place to the East, NW 167th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. (2022-On-going)

Florinda Estates Drainage Improvements Project | Town of Miami Lakes | Project Engineer

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Florinda Estates neighborhood area which is bounded by NW 88th Place to the West, NW 140th Lane to the North, Palmetto Frontage Road to the East, NW 138th Street to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. (2022-On-going)

Royal Garden Estates Drainage Improvements Project | Town of Miami Lakes | Project Engineer

Provided design services to deliver construction plans to improve stormwater management and provide stormwater quality within the Royal Garden Estates neighborhood area which is bounded by NW 88th Place to the West, NW 164th Street to the North, NW 87th Court to the East, NW 162nd Terrace to the South. The professional services associated with this project includes design, permitting, bidding assistance, and limited construction phase services. (2022-On-going)

Amy Elmore, AICP

Education + Training

B.S., Information Technology Middle
Georgia State University

M.S., Digital Forensics
University of Central Florida

American Institute of Certified Planners

Public Speaking & Media Relations
Training

Public Involvement Training, FEMA

Toastmasters

Vice President of Communications,
American Planning Association of Florida

Member, American Planning Association of
Florida- Equity, Diversity, and Inclusion
Committee

Member, American Planning Association of
Florida- Editorial Committee

Mentor, American Planning Association of
Florida- Mentorship Program

LEAN Six Sigma Certification

Smartsheet Certification

Experience

- 50+ Safety/Educational Campaigns
- 100+ Public Outreach Campaigns
- 15+ presentations given for local, state, and national conferences on topics including equitable outreach, hybrid outreach, building relationships, negotiating through public discourse, social media, public engagement, & ADA compliance

Mrs. Elmore is a highly motivated planning professional with a commitment to personal and professional excellence. She excels in a challenging and fast-paced environment with a high level of detail, strong verbal communication skills, excellent analytical and planning skills, and the ability to manage multiple projects and tasks successfully to meet and exceed organizational goals. She brings more than 12 years' experience working with both the public and private sectors encompassing a myriad of disciplines in planning, communications, media relations, public involvement, and project management. Her background includes developing and managing equity-focused, innovative planning and communications strategies, as well as forming intergovernmental and community partnerships, public information/communication programs, safety planning, multimodal planning, community planning, change management, consensus building, interagency collaboration, community outreach, special event planning, high profile campaigns, and crisis management. She has managed many planning projects especially related to public engagement programs in compliance with Title VI and ADA regulations for local planning departments, regional agencies, regional non-profits, and local Metropolitan Planning Organizations and Planning Councils.

Project Experience

FDOT District Six, NW 36th Street Multimodal Corridor Study, Miami-Dade County, FL – Senior Transportation Planner. SR 948/NW 36th Street is an east-west corridor in Miami-Dade County, Florida. From SR 826/Palmetto Expressway to I-195/SR 112/Julia Tuttle Causeway, SR 948 is 8.626 miles long and traverses the cities of Virginia Gardens, Miami Springs, Hialeah, and Miami. The goal of this scope of services is to document the range and complexity of professional transportation planning and traffic engineering services required for the development and evaluation of multimodal improvements that address existing and future mobility, operational, social, economic, and safety needs along SR 948/NW 36th Street. (2020-2022)

FDOT District Six, Freight Logistics and Passenger Operations Consultant, Miami-Dade, FL. – Senior Transportation Planner. This contract consists in providing professional technical personnel to perform services to support the Freight Logistics and Passenger Operations Unit (FLPO). The objective of this scope of services is to provide direction for the future of Miami-Dade County's truck parking transportation system and advance the implementation of new truck parking facilities to combat the shortage of 10,195 intrastate and 1,825 interstate truck parking spaces. This plan is intended to determine and develop a project bank of feasible parcels that could be developed as truck parking facilities, and proposes an implementation plan (including policies, supplemental actions, and technology advancements) to further the goal. (2019-2022)

***Downtown St. Petersburg Mobility Study (DTSP) – Communications and Outreach Program Manager.** The purpose of this study was to understand the context and vision for multimodal mobility in DTSP, conduct conceptual planning and evaluation of multimodal improvement options, and prioritize short- and long-term projects. The project required Elmore to coordinate meetings with FDOT, municipalities, and stakeholders; create and implement a Public Involvement Plan (PIP); Host more than 20 public workshops, develop high-profile campaigns, and review all final deliverables. (2020-2022)

Experience Cont.

- Mobility Studies
- Target Zero Plans/Campaigns
- Regional Transportation Studies
- Transit-Oriented Development Studies
- Geofencing Studies
- Summit Planning
- Rebranding & Website Design
- Dashboards/Performance Measures
- Zoning & Land Use Analyses
- Zoning & Land Use Amendments
- Site Reviews
- Comprehensive Plan Updates

Proficient Skills

- Community Planning & Placemaking
- Project Management
- Public Outreach
- Vision Zero
- Multimodal
- Technical & Blog Writing
- Stakeholder Relations
- Title VI & ADA Compliance
- Graphic/Web/Video Design
- Change Management
- Crisis Management
- Consensus Building
- Interagency Relations
- Media Relations
- High Profile Campaigns
- Social Media Management

Other Projects Include

- Safety Campaigns
- Gulf Coast Safe Streets Hybrid Summit
- Tampa Bay Resiliency Summit
- GIS Project Pipeline Dashboard
- ADA Compliance Plans
- Public Participation Plan (PPP)
- Public Involvement Plan (PIP)

***Target Zero, Safe Streets Action Plan – Communications and Outreach Program Manager.** For the Target Zero, Safe Streets Action Plan, Elmore worked with dozens of local partner agencies in a cohesive communications strategy, including a virtual summit, art contest, quizzes, videos, news releases, local media, blogs, newsletters, Email blasts, flyers, signage, and many community events. (2020-2022)

***SunRunner Rising Development Study – Communications and Outreach Program Manager.** The SunRunner Rising Development Study examined ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrians and bicyclists, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations. During the project, Elmore created social media campaigns, news releases, blogs, and hosted virtual public workshops. (2020-2022)

***“Slow Your Roll” Geofencing Speed Study – Communications and Outreach Program Manager.** This educational, outreach study uses targeted location-based Facebook and Instagram ads delivered to mobile devices of people traveling on or near a specific, high-crash corridor, in an effort to change longer-term travel behavior related to speed management. Elmore was responsible for creating the communications strategy, and assisting with graphics, news releases, websites, traditional media, and other organic engagement. (2022)

***Target Employment and Industrial Lands Study – Communications and Outreach Program Manager.** This study engages key stakeholders, as well as local, regional, and national agencies to create a holistic set of policies aimed at having a balance of living wage jobs, attainable housing, and good transportation options. Elmore coordinated meetings, planned community events, and created news releases, surveys, email blasts, websites, and social media content to help achieve this goal. (2022)

***Resilience and Energy Assessment of Communities and Housing (REACH) Summit – Communications and Outreach Program Manager.** Forward Pinellas, the Florida Housing Coalition, and the Urban Land Institute Tampa Bay partnered with the Tampa Bay Regional Planning Council to host the first Resilience and Energy Assessment of Communities and Housing (REACH) Summit. Elmore developed deliverables including graphics, news releases, and social media campaigns. (2022)

***Equity Action Plan – Communications and Outreach Program Manager.** Throughout the Equity Assessment and Action Plan, Elmore spearheaded the community outreach, hosted in person and hybrid events, and developed and implemented the Public Input Plan including social media campaigns, news releases, traditional media, newsletters, Email blasts, blogs, flyers, brochures, signage, presentations, videos, quizzes, and other outreach as needed. (2020-2022)

***SunCoast Transportation Planning Alliance (SCTPA) Rebranding and Website Design – Communications and Outreach Program Manager.** Elmore lead the rebranding and website design and development for the SCTPA, and directed the promotion of the brand through regional news releases, videos, and social media campaigns. (2021)

***Gateway Master Plan – Communications and Outreach Program Manager.** The Gateway Master Plan brought together many local agencies and governments to create an action-oriented redevelopment strategy that focuses on building partnerships to guide future development and multimodal connectivity, both regionally and throughout the district. Elmore created news releases, blogs, social media content, graphics, websites, and Email blasts as well as a performance measures dashboard. (2020-2022)

**experience prior to working with exp.*

Daniel Bearer**Education + Training**

B.S., Graphic Design, La Roche
College, Pittsburgh, PA, 1982

Communication Specialist/Graphic designer with over 37 years of experience in the design field accomplished in producing proposals, presentations, publications, and illustration work for various clients that include FDOT, SFRTA, Miami-Dade TPO, and the Broward MPO. Expertise includes creating effective communication materials, branding, marketing, promotions, and publications for leading transportation planning groups. Prior to joining EXP, his design work included broadcasting as Art Director for thirteen CBS and ABC affiliate television stations, created educational materials for the reading and math programs for Harcourt Publishing, work in various communication departments within Walt Disney World, and recently worked with District Six as a Graphic Designer in South Florida.

Project Experience

FDOT District Four, Preliminary Design for SR-5/US-1 from 59th St. to SR-850/Northlake Blvd., Palm Beach County, FL. Communication Specialist. The purpose of this contract is to conduct a Feasibility Study to ensure the recommendations from the US-1 Multimodal Corridor Study ("Corridor Study") conducted by the Palm Beach Transportation Planning Agency (PBTPA) are feasible within the existing right of way (R/W) and to record public outreach, any variations, permitting, utility coordination, tree impacts, and evaluation of existing infrastructure in line with PBTPA's objectives and vision. The "Corridor Study" was conducted to develop a comprehensive plan to upgrade the existing Palm Tran limited stop service to a corridor-based Bus Rapid Transit (BRT) service, the Palm Tran Express (PTX), with the goal of applying for Small Starts Funding or phasing improvements with local funding.

FDOT District Six, NW 36th Street Multimodal Corridor Study, Miami-Dade County, FL. Project Communication Specialist/Planner. SR 948/NW 36th Street is an east-west corridor in Miami-Dade County, Florida. From SR 826/Palmetto Expressway to I-195/SR 112/Julia Tuttle Causeway, SR 948 is 8.6 miles long and traverses the cities of Virginia Gardens, Miami Springs, Hialeah, and Miami. The goal of this scope of services is to document the range and complexity of professional transportation planning and traffic engineering services required for the development and evaluation of multimodal improvements that address existing and future mobility, operational, social, economic, and safety needs along SR 948/NW 36th Street.

Kendall Drive Rapid Transit; FDOT, Miami Dade, FL. Project Communication Specialist for the branding of the public outreach materials Designed PowerPoint presentations and communication materials for Public Workshops and newsletters in the development of the implementation of a Rapid Transit System for the corridor. Produced effective communications to build consensus for transportation improvements.

Daniel Bearer – *Cont.*

Central Broward East-West Transit PD&E Study, FDOT, Broward County, FL. Designed presentations, technical documents, and communication materials promoting transit alternatives for Central Broward County. Projects included the Draft Environmental Statement Conceptual Design Reports, Peer Workshop Presentations, and Project Information that help move the study forward to expand the current streetcar service in Downtown Fort Lauderdale.

FDOT District Six, PD&E Study on SR 94/Kendall Corridor in Miami-Dade County from SR 977 to US 1, FL; Community Outreach Senior Specialist for this PD&E study consisting of evaluating transit/roadway alternatives by analyzing the future demand for these transportation facilities and services. In 2002, the SR-94/Kendall Drive Corridor (Kendall Corridor) was identified as one of six Rapid Transit Corridors in the People's Transportation Plan (PTP). Miami-Dade TPO Governing Board directed that the Kendall Corridor be implemented in an expedited manner assuming full Bus Rapid Transit (BRT), Light Rail Transit (LRT), Heavy Rail Transit (HRT), or other appropriate premium transit modal technologies.

FDOT District Six, NW 125th Street from NW 6th Avenue to NE Miami Ct., City of North Miami Beach, Miami-Dade, FL. Community Outreach Senior Specialist for this safety scoping unit project to developed design plans. The project team prepared roadway tasks in order to prepare roadway, drainage, signing and pavement markings, plan sheets, and details. In addition, a public hearing was conducted to record the results and proposed recommendations.

FDOT District Six, SR 90/SW 8th Street/SW 7th Street Feasibility Study, Miami-Dade County, FL; Community Outreach Senior Specialist Project Manager responsible for this feasibility corridor analysis from SW 27th Avenue to Brickell Avenue/I-95 interchange. SR 90 is a major east-west corridor that provides access to important Miami neighborhoods. SR 90 is a vital corridor for the economy in the area by connecting western residential neighborhoods to the growing urban center of Brickell. Consisting of one-way pairs with SW 7th Street operating as SR 90 westbound and SW 8th Street operating as SR 90 eastbound, this study evaluated more than 30 signalized intersections and the I-95 existing configurations and a management plan for freight delivery within the study limits.

FDOT District Six, NE 203rd and NE 215th Street PD&E Alternatives Development and ETDM Screening Report, Miami-Dade County, FL; Community Outreach Senior Specialist Project Manager for this study to identify the most viable options to eliminate conflicts between the Florida East Coast (FEC) railway line and passenger vehicles traveling on NE 203rd Street and NE 215th Street. Grade separation options were identified to allow for enough tangential distance to store and assemble longer trains while transporting freight in and out of Miami-Dade County. The study formulated alternatives with different ramps configurations that included bridges and depressions over and under the FEC line.

FDOT District Six, Truck Parking and Park and Ride Feasibility Study, Miami-Dade County, FL; Community Outreach Senior Specialist for this project seeking to advance the development of the contiguous Truck Parking and Park and Ride Location Sites identified in an TPO study and other adjacent areas located near the 12th Street/Florida's Turnpike interchange. The study included a potential connection to proposed Turnpike Managed Lanes and to MDX 836. Concepts for ramps to connect directly to the Park and Ride and Truck Parking Facility were developed to Design Year.

FDOT District Six, US 1 between SW 152nd Street and I 95 Planning Project, Community Outreach Senior Specialist In 2016, the Florida Department of Transportation (FDOT) initiated a corridor study along SR 5/US 1/Dixie Highway from SR 922/SW 152 Street/Coral Reef Drive to I-95, in Miami-Dade County. Several months into the study, the southern study limit changed to SR 94/SW 88 Street/Kendall Drive to align with the Miami-Dade County Transportation Planning Organization's (TPO) ongoing Strategic Miami Area Rapid Transit Plan (SMART) efforts. The FDOT corridor study includes existing conditions analyses that identified recurring congestion locations and evaluated multimodal transportation improvement needs based on future travel demand. A number of ongoing assessments, including the Underline Study and the South Dade Transitway Study, have been conducted on the corridor with the aim to meet the needs of local neighborhoods, business centers, and transportation options. The US 1 Corridor Study aims to unify these efforts, taking into consideration prior recommendations and current conditions to present recommended improvements that address the needs of all users. As a final product, the study identifies conceptual improvements that address transportation needs along the SR 5/US 1 corridor.

Daniel Bearer – *Cont.*

Other Projects Include:

2011-2017 – Annual Report Designs Miami-Dade Transportation Planning Organization (TPO)

Provided panoramic photographs, infographics, and layout designs for the Miami-Dade TPO's Annual Reports showcasing their accomplishments of the planning strategies and studies for that year.

2015 – Miami-Dade Transportation Planning Organization (TPO), Palmetto Station Intermodal Terminal Feasibility Study

Designed the Final Report and Executive Summary Report providing a logo, layout, and graphics for feasibility study of the transportation facility.

2010-2015 – Central Broward East-West Transit PD&E Study

Designed presentations, technical documents, and communication materials promoting transit alternatives for Central Broward County. Projects included the Draft Environmental Statement Conceptual Design Reports, Peer Workshop Presentations, and Project Information that help move the study forward to expand the current streetcar service in Downtown Fort Lauderdale.

2014-2015 – New York Governor's Office of Storm Recovery, NY Rising Community Reconstruction Program

Created the proposal and provided various reports, illustrations, presentations, and the layout designs for the development of a disaster relief program. Praised for the "word art" illustrations created by taking local citizens responses and forming them into designs of local landmarks in the community.

- 2014 – SR 5/US-1/Quadriple Boulevard Roadway Improvements Project
 - For the Public Workshop provided the announcement flyer, fact sheet, presentation and other communication materials that explained in detail the roadway improvements for Downtown West Palm Beach. Praised by the client and City Commissioners on providing a fast turnaround showing the addition of bike lanes added to the roadway improvements.
- 2014 – Miami-Dade Transportation Planning Organization (TPO), Intermodal Terminal Feasibility Study for Downtown Miami
 - Designed the Final Report and Executive Summary Report by providing graphics and layout design on the feasibility study for an intermodal terminal facility in Downtown Miami.
- 2013-2015 – Miami-Dade Transportation Planning Organization (TPO), 2040 LRTP: Compliance with Federal and State Requirements Report
 - Designed the Final Report and Executive Summary Report by providing graphics and layout designs showcasing best practices of leading transportation planning agencies on long-range planning throughout the country.
 - 2012-2013 – Pedestrian Improvements at Railroad Crossing Report - Designed the Final Report and Executive Summary Report by providing graphics, charts, and layout design on railroad crossing improvements for safety and security throughout Miami-Dade County. Praised for providing an easy-to-read report with attractive charts.
 - 2013-2015 – Broward Metropolitan Planning Organization (MPO), Speak Up Broward, Public Engagement Campaign

The purpose of this campaign was to engage the public in a conversation about the future of Broward County's transportation system; gather feedback on how people feel about transportation today; what they would like it to be in the future; and which potential new revenues sources they prefer to use for funding any additional transportation improvements. Designed various presentations, reports, logos, coordinated several e-Townhalls on Beacon TV, and created communication materials promoting transit initiatives and funding options for the Broward MPO.

Daphne Spanos, PE**Education + Training**

- B.S. Civil Engineering, University of Miami, 2002
- B.S. Environmental Engineering, University of Miami, 2002

Professional Registrations

- Professional Engineer No. 67865 – FL, 2008

Professional Engineer and Planner with over 18 years of experience in transportation engineering, which includes managing Project Development and Environment (PD&E) Studies and public transportation studies for the Florida Department of Transportation (FDOT) as a consultant. Previous experience with FDOT District Four as PE Trainee, Seaport Administrator and Consultant Management Project Manager. Proficient with FDOT internal process and intergovernmental coordination with MPO's and local agencies.

Project Experience

FDOT District Six, NW 36th Street Multimodal Corridor Study, Miami-Dade County, FL. Project Manager. SR 948/NW 36th Street is an east-west corridor in Miami-Dade County, Florida. From SR 826/Palmetto Expressway to I-195/SR 112/Julia Tuttle Causeway, SR 948 is 8.626 miles long and traverses the cities of Virginia Gardens, Miami Springs, Hialeah, and Miami. This corridor serves the Miami International Airport (MIA), Florida East Coast Railroad's (FEC's) Hialeah Yard, and major recreational and community centers such as the Miami Springs Golf & Country Club, Casino Miami, Tropicana Flea Market, Miami Jackson Senior High School, and The Shops at Midtown Miami. The goal of this scope of services is to document the range and complexity of professional transportation planning and traffic engineering services required for the development and evaluation of multimodal improvements that address existing and future mobility, operational, social, economic, and safety needs along SR 948/NW 36th Street. **Dates: 2020 to 2022**

FDOT District Six, Districtwide PD&E Contract, Miami-Dade and Monroe Counties, FL; Deputy Project Manager. Provide support to the District Six PD&E office including in-house project management, ETDM screenings, public involvement, etc. One of the task work orders on this contract is the Snake Creek High Level Bridge Feasibility Study. Ms. Spanos is managing this study, which involves analyzing the feasibility of replacing the last bascule bridge in the Florida Keys with a high-level bridge. Assessing traffic, environmental, utilities, right of way, structures, and access management is part of this study. Ms. Spanos is also leading the public involvement effort with subconsultant, ISC, to gain community and agency input on various bridge options. **Dates: 2012 to 2017**

FDOT District Six, Freight Logistics and Passenger Operations Consultant, Miami-Dade, FL. Senior Engineer. This contract consists in providing professional technical personnel to perform services to support the Freight Logistics and Passenger Operations Unit (FLPO). Services shall include, but not be limited to multimodal plans and specifications reviews, technical reports/studies reviews, multimodal inspections and reports, project site visits, multimodal inventories, Project Development and Environment (PD&E) services, design services, and program administration assistance for Aviation, Intermodal, Seaport, Rail, and Freight projects in Miami-Dade and Monroe Counties. **Dates: 2019 to present**

FDOT District Six, Freight Implementation Master Plan, Miami Dade, FL. Task Manager/Senior Engineer. Produced an Implementation Master Plan to advance these planning level recommendations through respective project development processes. The Implementation Master Plan will prioritize potential efforts that can be added to the FDOT's Work Program and other state/federal sources (e.g. grants). **Dates: 2019 to 2022**

Daphne Spanos – Cont.

FDOT District Six, Modal Inspections Consultant Services Contract, Miami Dade, FL. Senior Engineer. This contract main purpose is to conduct modal inspection site visit on behalf of FDOT, to ensure that all projects with grants provided by FDOT follow the JPA/PTGA requirements. These reviews could include site evaluation to validate compliance with latest standards adopted by AASHTO, Roadway and Traffic Standards, Structure Plans Preparation Manual, FDOT Standard Specifications, FDOT current memoranda, FDOT Roadway Plans, Preparation Manual, FDOT Flexible & Rigid Pavement Design Manual, and FDOT Drainage Manual, among others. Under this scope of work, The Consultant will meet with FDOT as well as Aviation and Seaport officials to gain a clear understanding of the current grant conditions while validating project progress. Aviation and Seaport grant recipient projects can range from purchasing of new equipment, operational improvements or expenses, economic development projects, infrastructure or roadway reconstruction projects, or any project that would promote transportation for Airport and Seaports. As part of this contract we helped develop a procedure to conduct these reviews in a safe manner while dealing with the COVID-19 pandemic restrictions and safety measures. **Dates: 2020 to**

FDOT District Four, Preliminary Design for SR-5/US-1 from 59th St. to SR-850/Northlake Blvd.; Deputy Project Manager. The purpose of this contract is to conduct a Feasibility Study to ensure the recommendations from the US-1 Multimodal Corridor Study (“Corridor Study”) conducted by the Palm Beach Transportation Planning Agency (PBTPA) are feasible within the existing right of way (R/W) and to record public outreach, any variations, permitting, utility coordination, tree impacts, and evaluation of existing infrastructure in line with PBTPA’s objectives and vision. The “Corridor Study” was conducted to develop a comprehensive plan to upgrade the existing Palm Tran limited stop service to a corridor-based Bus Rapid Transit (BRT) service, the Palm Tran Express (PTX), with the goal of applying for Small Starts Funding or phasing improvements with local funding. The “Corridor Study’s” purpose was also to implement continuous multimodal facilities (Complete Streets) along SR-5/US-1 throughout a 42-mile stretch running north-south across 14 local municipalities in Palm Beach County, while prioritizing the need for connectivity when dealing with limited space within the R/W. This Feasibility Study is limited to SR-5/US-1 between 59th St. and Northlake Boulevard, a 3-mile stretch. Recommendations from this Feasibility Study will be used in the subsequent design phase. **Dates: 2019 to**

***FDOT District 6, Districtwide PD&E Contract, Miami-Dade and Monroe Counties, FL; Deputy Project Manager.** Provide support to the District 6 PD&E office including in-house project management, ETDM screenings, public involvement, etc. One of the task work orders on this contract is the Snake Creek High Level Bridge Feasibility Study. Ms. Spanos is managing this study, which involves analyzing the feasibility of replacing the last bascule bridge in the Florida Keys with a high-level bridge. Assessing traffic, environmental, utilities, right of way, structures, and access management is part of this study. Ms. Spanos is also leading the public involvement effort with subconsultant, ISC, to gain community and agency input on the various bridge options.

Dates: April 2017 to June 2018

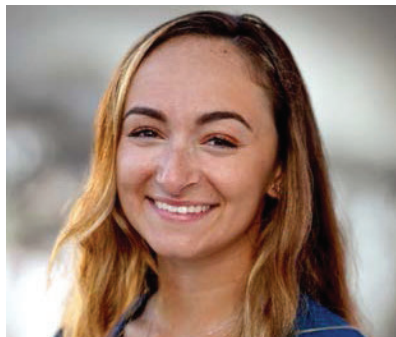
***FDOT District 6, Kendall Drive Rapid Transit PD&E Study, Miami-Dade County, FL, PD&E Team Support.** This PD&E study is ongoing, and the study team is analyzing various rapid transit alternatives along Kendall Drive between Krome Avenue and the Dadeland North Metrorail Station. Assisted in overall project management, PD&E report writing and compilation, project invoicing/accounting, coordination with subconsultants, and extensive public involvement activities on this 10.7-mile-long corridor.

Dates: June 2016 to June 2018

***FDOT District 4, SR 7 Extension PD&E Study, Palm Beach County, FL; Assistant Project Manager.** This complex study was an Environmental Assessment with a Finding of No Significant Impact, and responsibilities included coordination with FDOT and a multi-disciplinary team. Assisted in managing this highly controversial PD&E study, coordinating public involvement activities, including preparing for the project’s Public Hearing (over 700 persons attended). Aided in writing, compiling, and reviewing (QA/QC) the PD&E reports for submission to FDOT and FHWA. The study received LDCA and is in the Design phase. **Dates:** April 2011 to June 2018

***FDOT District 4, Districtwide PD&E Contract, Broward, Palm Beach, St. Lucie, Martin, and Indian River Counties, FL; Project Manager.** Managed districtwide PD&E contract including providing in-house PD&E Support to FDOT. Activities performed on this contract included: seagrass surveys, in-house PD&E project management, in-house Environmental support to the Planning and Environmental Management Office, support on transit analysis along 17th Street in Fort Lauderdale, support on Oakland Park Boulevard Alternatives Analysis Study, etc. All tasks were completed on schedule and within budget using the 13 subconsultants involved. **Dates:** April 2012-2015

**experience prior to working with EXP.*



Alyssa Goldberg

Education + Training

BS, Urban and Regional Planning,
Florida Atlantic University, 2017

MS, Sustainable Transportation,
University of Washington, 2022

Affiliations

- Member, American Planning Association of Florida- Equity, Diversity, and Inclusion Committee

Transportation Planner with over 5 years of experience in multimodal and resiliency planning, as well as work order and grant management. Previous experience as the Lead Pedestrian-Bicycle Coordinator for the Palm Beach Transportation Planning Agency (TPA). Proficient in sustainable transportation planning, including corridor studies, transit, Complete Streets feasibility studies and program technical assistance review (ERCs, Section 5310, and PBC Pathways Program). Well-versed in both municipal and MPO policies and processes with a plethora of experience in collaboration with stakeholders, partner agencies, and the public.

Project Experience

FDOT District Six, NW 36th Street Multimodal Corridor Study, Miami-Dade County, FL – Transportation Planner. SR 948/NW 36th Street is an east-west corridor in Miami-Dade County, Florida. From SR 826/Palmetto Expressway to I-195/SR 112/Julia Tuttle Causeway, SR 948 is 8.626 miles long and traverses the cities of Virginia Gardens, Miami Springs, Hialeah, and Miami. The goal of this scope of services is to document the range and complexity of professional transportation planning and traffic engineering services required for the development and evaluation of multimodal improvements that address existing and future mobility, operational, social, economic, and safety needs along SR 948/NW 36th Street. **Dates: 2020 to 2022**

FDOT District Six, Freight Logistics and Passenger Operations Consultant, Miami-Dade, FL. – Transportation Planner. This contract consists in providing professional technical personnel to perform services to support the Freight Logistics and Passenger Operations Unit (FLPO). Services shall include, but not be limited to multimodal plans and specifications reviews, technical reports/studies reviews, multimodal inspections and reports, project site visits, multimodal inventories, Project Development and Environmental (PD&E) services, design services, and program administration assistance for Aviation, Intermodal, Seaport, Rail, and Freight projects in Miami-Dade and Monroe Counties. As part of this task, a Truck Parking Study was performed for Miami-Dade County. The objective of this scope of services is to provide direction for the future of Miami-Dade County's truck parking transportation system and advance the implementation of new truck parking facilities to combat the shortage of 10,195 intrastate and 1,825 interstate truck parking spaces. This plan is intended to determine and develop a project bank of feasible parcels that could be developed as truck parking facilities, and proposes an implementation plan (including policies, supplemental actions, and technology advancements) to further the goal. **Dates: 2019 to 2022**

FDOT District Six, Freight Implementation Master Plan, Miami Dade, FL – Transportation Planner. Produced an Implementation Master Plan to advance these planning level recommendations through respective project development processes. The Implementation Master Plan will prioritize potential efforts that can be added to the FDOT's Work Program and other state/federal sources (e.g. grants). **Dates: 2019 to 2022**

***SUN Trail Improvement Plan – Project Manager.** The goal of this study was to identify the inconsistencies between FDOT's Shared Use Nonmotorized (SUN) Trail network as identified on their interactive map, compare it to existing conditions in Palm Beach County, and then coordinate updates to the map with Central Office and associated municipalities. The project required Ms. Frank to coordinate meetings with FDOT and municipalities, deliverables, such as field photos as justifications, and final deliverable maps. (2021)

Alyssa Goldberg – Cont.

***Transit Access Plans – Project Manager.** This project evaluated pedestrian and bicycle safety, connectivity, and ADA accessibility at six high ridership Palm Tran locations. As project manager, Ms. Goldberg was responsible for directing, reviewing, and approving all deliverables in the project, including a thorough analysis of the 6 sites, conceptual site plans, and cost estimates. (2018)

***Complete Streets Design Guidelines 2.0 (2022) – Project Manager.** The objective of this project was to update the agency's existing Complete Streets Design Guidelines (2016) to be current, while also including prescriptions for roadway design based on FDOT's context classification, available right of way, and target speed, as identified in the FDM, as well as design criteria included in the FL Green Book for county roads. Ms. Goldberg identified the need to bring the document up to date and developed the criteria to be included. As project manager, she was responsible for the development, review, edits, and final approval of this project. (2022)

***Pedestrian and Bicycle County Program - Program Manager.** As project manager for the TPA's Pedestrian and Bicycle Count program, Alyssa was responsible for accessing, reviewing, and utilizing the counts collected, as well as identifying and developing deployment plans for new counts. She has worked with various count technology, such as Eco-Counter and Iteris Vantage Life, as well as FDOT's Non-Motorized Traffic Monitoring Program (NMTMP) to identify locations for short-term, long-term, and continuous counters in Palm Beach County. Through her coordination efforts, FDOT's first visual counter is being installed at the El Rio trail/Boca Raton Tri-Rail Station in late 2022. (2017-2022)

***Walk Bike Safety Audit – Program Manager.** This program was developed and implemented by Ms. Goldberg to identify pedestrian and bicycle issues by being on the ground and experiencing the built environment firsthand. This program takes a holistic approach, in that it requires collaboration between all stakeholders and community partners, as well as residents and law enforcement. As program manager, she was responsible for the complete development of the data collection application for field utilization, story maps to depict findings, as well as summary reports. After audit completion, summary reports were created and provided to stakeholders, along with next steps for implementation. (2021-2022)

***Transportation Alternatives Program (TAP) Grant – Program Manager.** The purpose of the annual TAP grant imbursement program is to help fund connected infrastructure for non-motorized users. As program manager, Alyssa was responsible for the development of the program overview and objective scoring, as well as coordination with FDOT for meetings, feasibility evaluations, and bringing the submitted applications to the BTPAC for review, reranking and ultimately, approval before going to the Board. Through this experience, she gained great familiarity with FDOT's GAP system. (2020-2022)

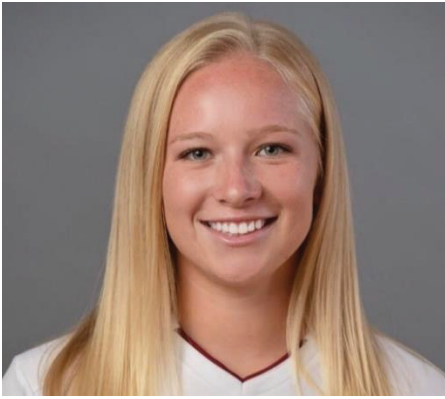
***Transit Shelter Design Guidelines – Project Manager and Lead.** Intended as a resource for Palm Tran and its municipalities, Alyssa developed this document to present an inventory of existing conditions at transit stops in Palm Beach County, while providing national best practices to reference for future placement and design of transit shelters. The goal of this initiative was to ensure that future transit stops provide easy access, comfort, and safety to all system users. (2019)

***Lake Worth Road Multimodal Corridor Improvement Study and Graphics – Senior Transportation Planner.** This complex study was to identify safety improvements to be added to the scope of an existing RRR project (FM# 441632-1). The resulting project scope included 7' separated bicycle facilities, a new mid-block crossing, ADA and drainage improvements, however, did not address a big concern: how to access the bus through a separated bicycle lane. As the senior transportation planner on the team, Alyssa proposed bicycle ramps that raised the crossing area through the bicycle lane to be flush with the sidewalk (ADA compliant). This recommendation was included in the updated scope. In addition, she was the project manager for the graphics associated with this project, including the flyover video. This included concept development, review, edits, and final approval. (2019)

***TPA State Road Modification (SRM) Project Candidate Identification (2020) – Senior Transportation Planner.** The SRM funding program was formalized to allocate a portion of D4's District Dedicated Revenue (DDR) funds for the enhancement of state roadways in Palm Beach County. Prior to the formalization of the application process in 2021, Ms. Goldberg was responsible for evaluating state roadways to identify complete streets and other safety opportunities that could be added to upcoming RRR projects and funded through SRM. (2020)

**experience prior to working with exp.*





Nicole Barnett, ENV SP, LEED® Green Associate™

Experience

- Total – 4
- EXP – 1

Professional Registrations

- LEED® Green Associate™, 2022
- Envision Sustainability Professional (#46027), 2021
- APTI SI-422 Air Pollution Control, 2018

Education + Training

- B.S., Sustainability Studies, Florida Institute of Technology, Melbourne, FL – 2021

Affiliations + Memberships

- United States Green Building Council (USGBC) Carolinas
- Institute for Sustainable Infrastructure
- Women in Sustainability Network (WISN)
- Sustainability Professionals
- National Spanish Honor Society, 2017

Languages

- English – High-Level: Speaking, Reading and Writing
- Spanish – Mid-Level: Speaking, Reading and Writing

Ms. Barnett is a certified Envision Sustainability Professional and an accredited LEED® Green Associate™. Ms. Barnett can provide recommendations of responsible green building practices for sites towards their desired level of performance in sustainable infrastructure. The above accreditations have been critical in conducting quality control and quality assurance throughout EXP’s projects pursuing Envision, LEED and other environmentally driven certifications. Ms. Barnett carries a great attention to detail in her work and ensures compliance with all organizations, codes and regulations as needed in projects. With a heavy academic background in Sustainability, Ms. Barnett has worked with various organizations across every discipline in assessing existing conditions of communities and structures and developing environmental reports addressing their impacts from climate change. A significant portion of her academic career included research for the Coastal Climate Adaptation Library. These reports have provided the necessary experience for structural emergency preparation, analysis of property, and potential innovations for future operations.

Previously working with the largest municipality in Brevard County, the City of Palm Bay, FL; Ms. Barnett became familiar with city processes and developed the necessary skills coordinating with public works. She has strong public outreach and communication skills which have successfully accommodated the needs of diverse members of the community; through leading official board meetings, workshops and discussions of important agenda items while relaying their voices in her work. Producing the City’s first Sustainability Action Plan in 2021, Ms. Barnett created a master plan detailing the Natural Environment, Built Environment, Transportation & Mobility, Innovative Waste Management, and Public Engagement conditions of the city and proposed action items to achieve set goals for the community’s future. Ms. Barnett and her team triumphantly acquired City Council Approval for the Plan and subsequently began implementation of priority action items.

Project Experience

Miami International Airport, Solar Feasibility Study – Terminal Wide Re-roofing and Lighting System Upgrades, Miami, FL

This project involved review and evaluation of locating a solar photovoltaic system on the roof of the Miami International Airport Terminal Complex. This project considered a complete system installation including solar panel array locations, space for support equipment, and recommended types of solar panels best suited for installation. ROM calculations of electrical power generation, electrical configurations to the roof, electrical rooms for DC to AC inverter panel locations and connections to the building electrical system were also evaluated. This project also included a phasing plan to implement the PV installation, maintenance considerations and costs, value analysis, and stakeholder considerations.

Nicole Barnett, ENV SP, LEED® Green Associate™ - Cont.

Port of Miami Fumigation and Cold Storage Facility, Miami, FL 2022

Conducted a gap analysis for the site. Analyzed as a warehouse under LEED v4.1 during the predesign phase to identify current and future opportunities towards achieving credits for a LEED Gold certification. The gap analysis is also serving a purpose to provide recommendations and consultation to the stakeholders involved to have early intervention of efficient and resilient strategies to be implemented as needed.

Naples Beach Club Gap Analysis, 2022

The Naples Beach Club site was analyzed to identify areas of improvement for future certification. A strong focus on Location & Transportation and Sustainable Sites credit categories. Utilized mapping programs and FEMA Data to identify flood zones, access to quality transit and proximity to diverse needs within the community, as well as other location specific data to achieve as many credits as possible that were in relation to state, federal and local codes.

777 Industrial Rd., 2022

Utilized various mapping and GIS programs to complete the LEED credit: LTc4 – Surrounding Density and Diverse Uses; and document supporting evidence to later be uploaded for the site pursuing certification under LEED v4 Core and Shell.

SBW Sorrento Mesa South, 2022

This project is pursuing LEED certification. Using the v4 and v4.1 reference guides, identified the credits' necessary variables and calculated each credits' ability to achieve points and later certification. The specific credits calculated are: LTc3 – High Priority Site, LTc5 – Access to Quality Transit, LTc6 – Bicycle Facilities, LTc7 – Reduced Parking Footprint, SSc2 – Site Development, Protect or Restore Habitat.

Innovation Park Building A/Master Site, 2021-2022

This project is pursuing LEED certification. Using the v4 and v4.1 reference guides, identified the credits' necessary variables and calculated each credits' ability to achieve points and later certification. Performed investigation on the site's ability to achieve points for the following credits: LTc6 – Bicycle Facilities, LTc8 – Green Vehicles and SSc5 – Heat Island Reduction. Created an entryway systems site map to enhance indoor air quality (IAQ) strategies. Additionally, suggested alternatives for the project's plans and credit options pursued in order to fulfill requirements and earn more points. Also performed the final QA/QC of all of the attempted credits before submitting the Master Site in LEED Online. Checked each credit in terms of completeness, correctness, and possible alternatives for higher certification.

Glendale 303 Park/Master Site, 2021-2022

Expanding knowledge of the LEED reference guide from projects pursuing Core and Shell to the Glendale Park Master Site pursuing LEED v4 BD+C: Warehouses. Documented for Buildings A and D, conducted an analysis of LTc4 – Surrounding Density and Diverse Uses, SSc6 – Light Pollution Reduction, SSc5 – Heat Island Reduction, SSc4 – Rainwater Management and WEp1 – Outdoor Water Use Reduction. Involved in producing the low impact development infiltration narrative of the site with use of drywells and stormwater retention basins.

Virgin Trains Aventura Station, 2021

This project is pursuing LEED certification. Using the v4 and v4.1 reference guides, completed and uploaded the LTc8 – Green Vehicles LEED documentation for review, identified and uploaded meter plans for prerequisites WEp3 – Building-Level Water Metering and EA p3 – Building-Level Energy Metering. Calculated the SSc5 – Heat Island Reduction credit under specified parameters for materials regarding site elements such as the roofs, sidewalks and shading structures.

Upshot Master Site, 2021

Conducted research and calculations in pursuit of LEED certification for the Upshot Master site. The project pursued certification under LEED v4 BD+C: Core and Shell, however, substituted certain credits to v4.1 based on optimal performance. Specific tasks included the Project Information forms, the assessments of LTc2 – Sensitive Land Protection, LTc4 – Surrounding Density and Diverse uses, SSc3 – Open Space and SSc5 – Heat Island Reduction; the creation of the No Smoking Signage Plan for the entire site as well as the Pedestrian Friendly Overall

**Work performed at previous firm.*

Nicole Barnett, ENV SP, LEED® Green Associate™ - Cont.

Landscape Plan, and lastly, the development of EXP's contractor handouts for the client to reference and maintain a high-level understanding of the path to achieve their desired certification.

501 NE Ave, 2021

Utilized the Florida Green Building Coalition's (FGBC): Florida Green High-Rise Residential Building Standard Reference Guide to determine the site's ability to achieve the FGBC High Rise Certification. Focused primarily on the Site credits: S1.01 – Selecting an Appropriate Site, S1.04 – High Density, S1.07 – Access to Basic Services (Connectivity) and S1.08 – Access to Public Transportation.

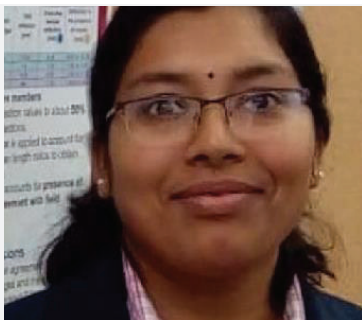
***Northrup Grumman Engineering & Science Student Design Showcase, 2020-2021**

Sustainability Intern for the City of Palm Bay, FL: Developed the Sustainability Action Plan in coordination with the Palm Bay Sustainability Advisory Board. This master plan emphasizes the three capital assets of environmental, social and economic aspects. Researching the existing municipal operations, we provided suggestions to alternatives to five different areas of concern within the city: Natural Environment (Land & Water Systems), Built Environment (Energy & Buildings), Transportation & Mobility, Innovative Waste Management, and Education & Public Engagement. This project was subject to City Council approval and subsequently implementation overtime.

***Brevard Sustainability Working Group (BSWG) Strategic Plan, 2020-2021**

Strategic Plan Committee Member: also served as the Florida Tech Student Representative for the group. As the BSWG Student Intern, her role in this committee was to compile sustainability resources adaptable to all boards within Brevard County and create a high-level informational reference packet to educate existing and future board members, as well as provide solutions to common problems within the City Sustainability Advisory Boards.

**Work performed at previous firm.*



Ishwarya Srikanth, Ph.D., F.E.

Professional Registrations

- Engineer in Training: FL (Pursuing)
- Passed FE Exam

Education + Training

- Ph.D., Transportation and Environmental Engineering (Transportation Structures), Florida Atlantic University
- Masters in Structural Engineering, College of Engineering Guindy, Anna University Chennai
- Masters in Civil Engineering, Ecole Centrale de Nantes, Nantes, France

Affiliations + Memberships

- Affiliate Member of American Society of Civil Engineers
- Affiliate Member of Structural Engineering Institute
- Reviewer of Practice Periodical in Structural Design and Construction, ASCE
- Reviewer of Journal of Performance of Constructed Facilities, ASCE
- Reviewer of Journal of Infrastructure Systems, ASCE
- Reviewer of Transportation Research Board, Bridges and Structures, AKT40 Standing Committee on Structures Maintenance

Dr. Srikanth has 4+ years of Engineering and Research experience in the area of transportation structures including finite element analysis and load rating of timber trestle railroad bridges, development of non-contact deflection monitoring system for bridges, and development of deterioration models for bridge management using statistical and machine learning techniques. Her research works lead to 10+ publications in reputed journals and conferences.

Project Experience

Structural Engineer, EXP, October 2021 – Present

Responsible for structural design of buildings, highway, railway and mass-transit projects under the direct supervision of senior structural engineers. Project types include new structures, inspection and evaluation of existing structures, and rehabilitation of existing structures.

Graduate Research Assistant, Florida Atlantic University May 2017 – Aug. 2021* Supervisor: Dr. M. Arockiasamy, P.E., P.Eng, F.ASCE

Development of Non-contact Deflection Monitoring System for Timber Railroad Bridges (TRB- funded)

- Demonstrated the feasibility of using camera as a bridge deflection measurement sensor.
- Performed field tests on Timber trestle railroad bridges using deflectometers, cameras and Lidar laser scanner under moving train loads.
- Performed Finite Element Analysis using SAP2000 and CSI Bridge, and calculated load rating of primary load-carrying structural members with reference to AREMA Specifications.
- Validated the non-contact deflection measurement technique through field bridge deflection measurements.

Development of Deterioration Models for Remaining Service Life Prediction of Bridges and Offshore Structures.

- Analyzed National Bridge Inventory (NBI) data and developed mathematical models for remaining service life prediction of Concrete and Timber bridges using various techniques including Multivariate Regression Analysis, Survival Analysis, Artificial Neural Network, Stochastic Markov-chain Model, Stochastic time-dependent Reliability Analysis. Tools used: R, MATLAB, Python, MS Excel
- Developed a novel framework for remaining service life prediction of offshore jacket-type platform in case of scarcity of inspection records

Ishwarya Srikanth, Ph.D., F.E. – Cont.

Select Project Awards

- Florida Structural Engineers Association Education Award, 2019
- Presidential Award, Florida Atlantic University, 2017-2019

Languages Spoken

- English

by using a combination of numerical techniques and machine learning.

Property Damage Evaluation

- Conducted field observations. Assisted in evaluation of property damage due to construction vehicular loads. Assisted in preparation of technical report to resolve a dispute.

Structural Engineering Intern at National Institute of Ocean Technology, India, May 2016 – April 2017*

Analysis and Design of Offshore Wind turbine Substructure

- Developed a Simplified Design Procedure of Monopile Foundation for Offshore Wind Turbine in Gujarat, India as per API RP 2A and NORSOK Standards.

Structural Engineering Intern at TechnipFMC Chennai, India, June 2015 – July 2015*

- Analysis and Design of Offshore Oil & Gas Platform for the Danish North Sea Region based on API RP 2A and NORSOK guidelines using SACS software. Delivered technical report.

Civil Engineering Intern at Wigwam Ingénierie, Nantes, France, April 2014 – July 2014*

- Learnt about Lean Six Sigma principles, Open service innovation, Project management.
- Assisted in urban planning and development through collaborative workshops with the stakeholders.

*Work performed at previous firm.



Tung T. Lam

Education + Training

- Associate Degree Pipeline Design Technology, Houston Community College, Houston, Texas

Senior Drafter, Field Piping Design II (Shell refinery), Create 3D model, Field sketch ISO, Field walkdown P&ID, Section and Details drawing, complete piping package new construction, plant, and meter station AS-BUILT, know to run 3D CADWORX, LFM 5.2 3D scan, PDMS, Auto GIS, PODS data, Auto CAD, As-built, and Mark-up Alignment Sheet (Pipeline). Mechanical Drafter, Construction Inspector and Testing.

Project Experience

Mapping Designer III, Various Clients, Various Locations

- Organize and edit Alignment Sheets
- Create master files for alignment sheet
- Create typical drawing
- Create and Edit Plat
- Edit Permit Drawing

Wood / Sweeny C5+, Gray Oak Facilities and Pipeline, Houston, Texas

- Create and edit 3D model and details
- Edit P&ID match up with 3D model
- Design in 3D model by use CADWORX
- Created master files for Piping plan drawing
- Generate ISO drawing for piping model
- Piping As-built
- Field sketch ISO
- Field walkdown P&ID
- Organize and edit Alignment sheets
- Created master files for alignment sheet\

Senior Drafter (Contractor KMI), Various Clients, Various Locations

- Create completed package for new construction
- Created 3D model, section and details drawings
- Pick up redline & update REV. As-builts
- Created 2D and 3D models
- Research and reconstruct pipeline segment
- Pump station for reroute pipeline
- As-built package for piping, electrical, and structure
- Edit GIS pipeline system



Angelica Corredor, Associate AIA

With a multidisciplinary background experience in the A/E industry developing out-of-the-box and practical design solutions, and efficient architectural drawings for effective communication of ideas. She has experience in construction documentation and modeling using Auto Desk Revit, research and interpretation of applicable codes and she has worked modeling and coordinating MEP and design clash detection.

Education + Training

- Master of Architecture, Academy of Arts University
- B. S. Business Administration, University of Central Florida

Affiliations + Memberships

- AIA

Project Experience

Miami-Dade County Animal Services Homestead Community Spay/Neuter Clinic, Homestead, Florida

Construction documents for the new modular clinic for the homestead community Spay/neuter clinic of Miami-Dade County animal Services. The updated design will be situated in the same location and provide a 24'w x 60'l (roughly 1440 Square feet) multi-wide office trailer to operate as a Miami-Dade community spay/neuter clinic. The trailer is equipped to have Three to five (3-5) occupants per day and house fifty (50) pets per day for clinical offerings. The design also provides accessible access to the office with a shade cover.

Avis Car Rental, Panama City and Wesley Chapel, Florida

Construction documents for the two new one-story AVIS car rental buildings. Panama The buildings include an office, a single bathroom, storage closet, and utility closet. A Covered roof portion will be connected to the conditioned spaces and 35 parking spaces. The building is wood-frame construction with Pre-engineered wood roof trusses.

POM MSC Terminal Design Review, Miami, Florida

Port Miami's Program Management services for the iconic \$414 million cruise terminal and 2,400 car garage structure including owner's representation, contract administration, project, and construction management services. Part of the Team that provided QA/QC to advise Port Miami throughout the various stages of the project and its interface with multiple stakeholders

Cortland Magnolia Park Multi-family

Participated in the construction documentation, modeling using Auto Desk Revit, and research and interpretation of applicable codes for the multifamily project located in Hillsborough County consisting of 319 Units, with in five (5) residential building types. Two of which include integrated amenities.

Educational Facility

Developed of pre-design and building program documents, design development, and preparation of construction documents for 110,000 SQ FT educational facility. She formulated an innovative and practical design solution resulting in a mixed free-flow approach to design characterized by micro-habitats developed around the spatial and social needs of a single student. A complete set of architectural drawings, conceptual diagrams, renderings, and construction documents to effectively communicate the design ideas were prepared and presented.



Elizabeth Alcantara, Assoc. AIA, LEED Green Associate

Professional Registrations

- AIA Member - 40732165
- LEED Green Associate, Miami, Florida, United States, 2020
- LEED AP ND, Miami, Florida, United States, Anticipated Date – October 2022

Education + Training

- BS in Architecture, Roger Williams University, Bristol, Rhode Island
- Construction Management Minor, Roger Williams University, Bristol, Rhode Island
- Art and Architectural History Core Concentration, Roger Williams University, Bristol, Rhode Island

Professional in the A/E industry with a strong affinity for building capabilities by thorough workflow and state-of-the-art practice. Ms. Alcantara's multidisciplinary experience ranges from small scale residential and commercial spaces to major complex projects dedicated to human development. Ms. Alcantara is deeply familiarized with green building, LEED certification processes, and urban planning. Ms. Alcantara is an avid graphic designer with the ability to create visually appealing, innovative designs and brand-related materials. Her education and background in construction management makes her acquainted with project management tasks, including scheduling and estimating, team building, and QA/QC procedures. Additionally, Ms. Alcantara has expanded her horizons into business development by helping undertake multiple RFQ/RFPs, both internally and with partner firms, for emerging contracts in Florida and the Northeast.

Project Experience

Park Avenue at Boulder Creek Masterplan, Houston, Texas

Developed conceptual masterplan layout for gated community. Masterplan layout consisted of seven (7) 4-story buildings, 400+ parking spaces, circulation, clubhouse, fitness center, green spaces (including dog parks), and landscaping. Responsibilities also included code review, utility coordination, survey studies, and coordination with stormwater experts.

AVIS Car Rental, Wesley Chapel, Florida

Worked as Lead Architect's right-hand and head of 3D design modeling for new commercial development. Responsibilities also included coordinating disciplines (MEP + Structures) for construction documentation.

AVIS Car Rental, Panama City, Florida

Worked as Lead Architect's right-hand and assisted with 3D design modeling for new commercial development. Responsibilities also included coordinating disciplines (MEP + Structures) for construction documentation.

Miami-Dade County Animal Services Homestead Community Clinic, Homestead, Florida

Responsibilities also included coordinating disciplines (MEP + Structures) for construction documentation.

Stern McCafferty, Boston, MA

Head of 3D design modeling for multimillion-dollar private residences. Responsibilities also included overseeing construction documents and client design consultations.

LGP Arch + Atelier, Santo Domingo, Dominican Republic


Worked overseas assisting Lead Architect in all phases of the design, consultation, and construction documentation process for low-income housing residence complexes.



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 8/21/2023 the Louisiana Professional Engineering and Land Surveying Board (LPELS) has the following information on file:

Mr. Jose Luis Santiago
9936 Northwest 29 Terrace
Doral, Florida 33172

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Jose Luis Santiago		
License/Certificate Type - Number	Expiration Date	
PE.0047773	09/30/2023	
Status: Active		
<p>Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).</p> <p>LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.</p>		

Fold Here

Cut Here

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Disclaimer


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LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

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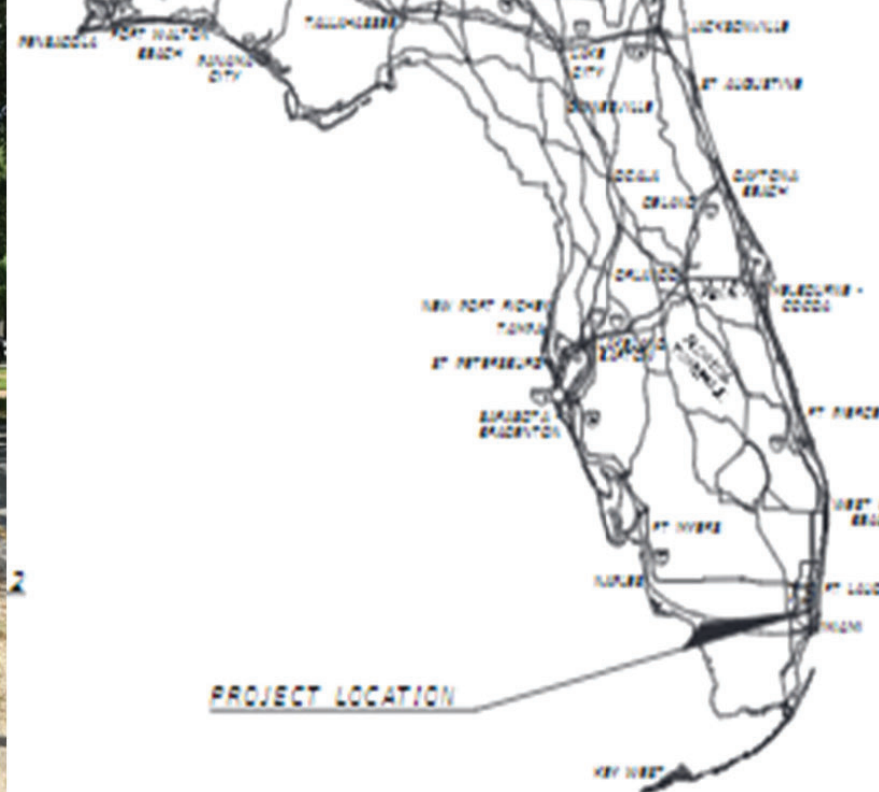
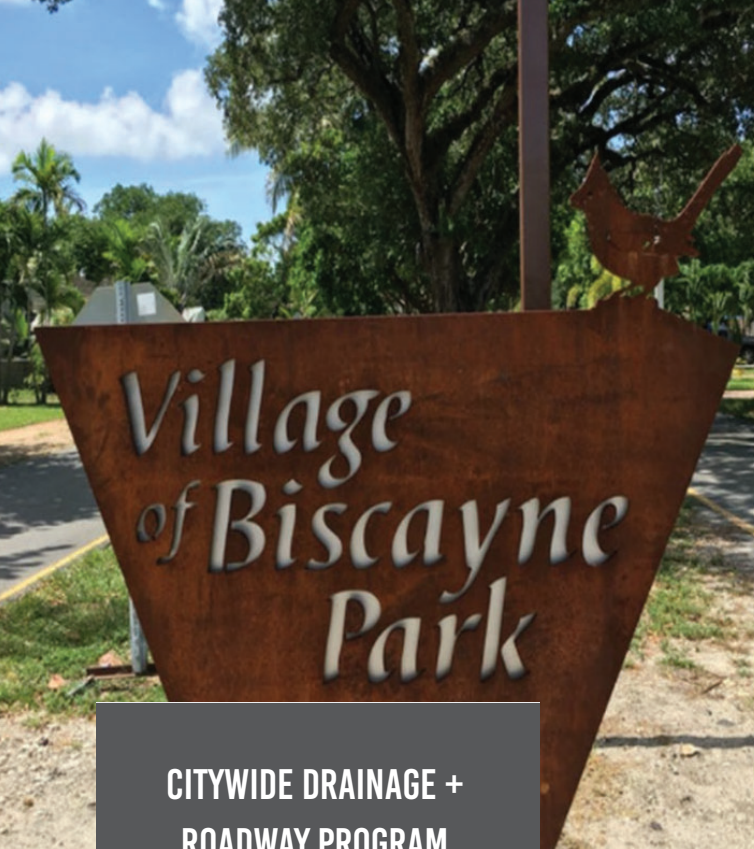
Mr. Nicholas Sinclair Karpathy
201 Alhambra Circle, Suite 800
Coral Gables, Florida 33134

	LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LPELS)	
	9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com	
Mr. Nicholas Sinclair Karpathy		
License/Certificate Type - Number	Expiration Date	
PE.0047788	09/30/2025	
Status: Active		
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CITYWIDE DRAINAGE + ROADWAY PROGRAM

Client

Village of Biscayne Bay
Albert Dominguez, PE
t: +1.305.893.4346

Timeline

Ongoing

Value

\$1M (Construction Cost)

Services

- Stormwater Design
- Flood Mitigation
- Roadway Improvement
- Project Sequencing Optimization
- MOT
- Environmental permitting
- Bidding assistance
- Construction Management
- Drainage
- Community engagement

CITYWIDE STORMWATER + ROADWAY IMPROVEMENTS

Village of Biscayne Park, FL USA

As part of the citywide drainage program outlined in the 2016 Stormwater Master Plan, EXP was hired to design and construct a new and functional stormwater collection system and improve roadways at five (5) different locations within the Village of Biscayne Park to improve drainage and minimize flooding in low lying areas in the Village.


SCOPE + FEATURES

The scope of work included investigation of existing conditions, design and permitting, and construction of all improvements associated with the new stormwater management system and roadway improvements. The five locations included in this project were the following;

- NE 111th Street from NE 10th Avenue to NE 11th Place
- NE 113th Street from NE 9th Court to NE 10th Avenue
- NE 115th Street from NE 6th Avenue to NE 7th Avenue
- NE 11th Avenue from NE 119th Street to NE 121st Street
- NE 121st Street from NE 11th Avenue to NE 11th Court

PROJECT CHALLENGES + SOLUTIONS

The projects were sequenced carefully to minimize traffic and community disruptions. Jose, Roxana, and Miguel worked together to provide design, construction, and permitting support. Jose is serving as the project manager overseeing the design, managing the subconsultants, and coordinating with contractor and the Village during the design and construction process of this Design Build Project.



STORMWATER + ROADWAY IMPROVEMENTS PROGRAM

Client

Town of Miami Lakes
Omar Santos Baez
t: +1.305.364.6100 x 1182
e: santoso@miamilakes-fl.gov

Timeline

Apr 2022 – Ongoing

Value

\$8M (Construction Cost)

Services

- Stormwater Design
- Flood Mitigation
- Roadway Improvement
- Grant Management
- Bond Management
- Program Management
- Multi-agency coordination and permitting
- Bidding assistance
- Services of stormwater improvements
- Community engagement

STORMWATER + ROADWAY NEIGHBORHOOD IMPROVEMENTS PROGRAM

Miami Lakes, FL USA

The Town of Miami Lakes is performing drainage improvements in the Genesis Oak Gardens, Sevilla Estates, Florinda Estates and Royal Garden Estates neighborhoods. These improvements are designed to improve the level of service of the roadways in the neighborhoods in addition to providing relief from flooding. These projects are part of the ongoing drainage improvement program co-managed by EXP and the Town and are fully funded under the Stormwater Utility System Revenue Bond Series 2021 and the America Rescue Plan. Below is a representative description of the services EXP performed in this program.

SCOPE + FEATURES

Genesis Oak Gardens Drainage Improvements Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Genesis Oaks neighborhood. The project is bounded by NW 91st Court (West), NW 169th Street (North), NW 89th Place (East), and NW 167th Street (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,800 LF of drainage improvements, including HDPE pipes and exfiltration trench.

Sevilla Estates Phase 1 Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 169th.

STORMWATER + ROADWAY NEIGHBORHOOD IMPROVEMENTS PROGRAM – *continued*

Miami Lakes, FL USA

Sevilla Estates Phase 1 Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 169th Terrace (North), NW 87th Court (East), and NW 168th Street (South). The project includes approximately 5,000 LF of roadway milling and resurfacing, and approximately 3,750 LF of drainage improvements, including HDPE pipes, exfiltration trench and an outfall structure.

Sevilla Estates Phase 2 Scope consisted of providing professional engineering services for the design, permitting, bidding assistance, and limited construction services of stormwater improvements within the Sevilla Estates neighborhood. The project is bounded by NW 89th Court (West), NW 167th Street (North), NW 87th Court (East), and NW 166th Terrace (South). The project includes approximately 3,500 LF of roadway milling and resurfacing, and approximately 2,600 LF of drainage improvements, including HDPE pipes and exfiltration trench. Project Challenges and Solutions.

Solar Panels
(Self-Powering)
Branded Shelter
Design
Off-Board Ticketing
(Smartphone
Integration)

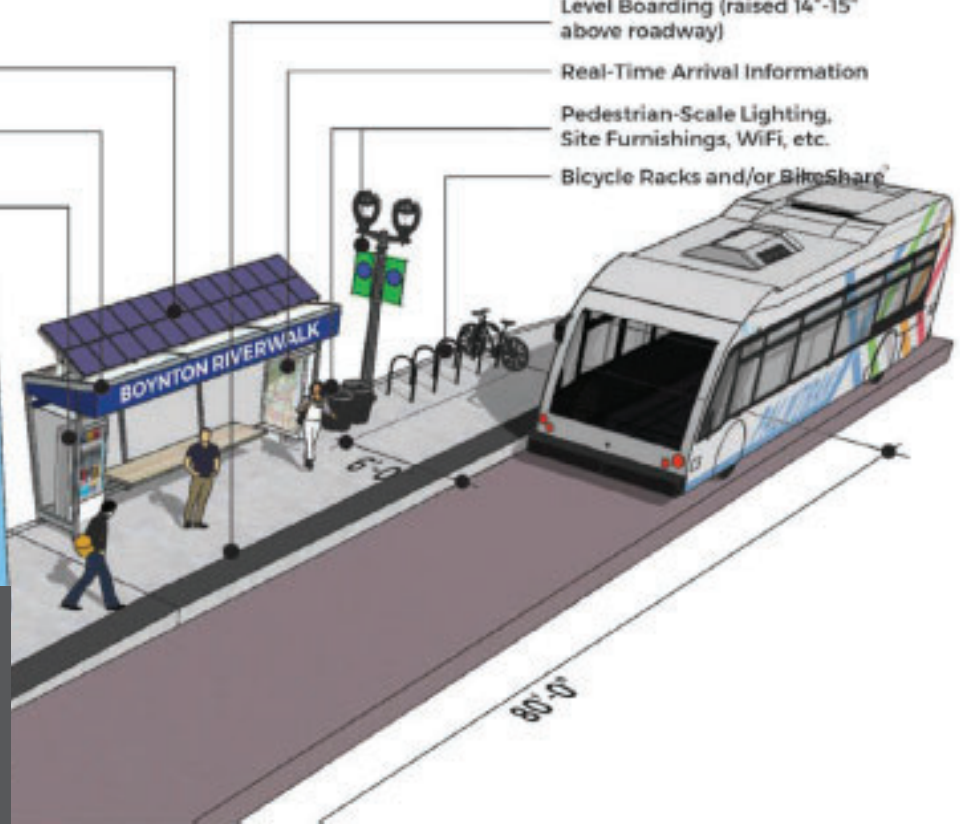
Branded
Wayfinding
Signage

Level Boarding (raised 14"-15"
above roadway)

Real-Time Arrival Information

Pedestrian-Scale Lighting,
Site Furnishings, WiFi, etc.

Bicycle Racks and/or BikeShare



3

miles

Preliminary Design for SR-5/US-1 from 59th St. to SR-850/North Lake Blvd

FDOT District Four

Palm Beach County, FL

Experience Level

EXP as Prime

Timeline

2020 - 2021

Services

- Preliminary Study
- Transportation Planning
- Facilities Planning
- Transit Intermodal Facilities
- Public Participation
- Visualization + Graphics
- Urban Design
- Transit Oriented Development

Agency/Client Contact

Damaris Williams

954-777-4679

damaris.williams@dot.state.fl.us

EXP conducted a feasibility study to ensure the recommendations for this segment of SR-5/US-1 from the US-1 Multimodal Corridor Study conducted by the Palm Beach TPA were feasible within the existing right of way, which was conducted to develop a comprehensive plan to upgrade the existing PalmTran limited stop service to a corridor-based Bus Rapid Transit (BRT) service, the Palm Tran Express (PTX), with the goal of applying for Small Starts Funding or implementing improvements with local funding.

The feasibility study also aimed to record public outreach, any variations, permitting, utility coordination, tree impacts, as well as any evaluation of existing infrastructure in line with Palm Beach TPA's objectives and vision, which ultimately aimed to implement continuous multimodal facilities (Complete Streets) along SR-5/ US-1 throughout a 42-mile stretch running north-south across 14 local municipalities in Palm Beach County, while prioritizing the need for connectivity when dealing with limited space within the right of way.

This feasibility study was limited to SR-5/US-1 between 59th St. and Northlake Boulevard, a 3-mile stretch. Recommendations from this feasibility study will be used in the subsequent design phase.



8.63
miles

Experience Level

EXP as Prime

Timeline

2020 - 2023

Services

- Transportation Planning
- Transit Operations Planning
- Facilities Planning
- Public Participation
- Environmental + Sustainability
- Visualization + Graphics

Agency/Client Contact

Daniel Lameck
(305) 470-5238
Daniel.Lameck@dot.state.fl.us

NW-NE 36th Street Multimodal Corridor Study

FDOT District Six

Miami-Dade County, FL

SR-948/NW-NE 36th Street is an east-west corridor in Miami-Dade County that goes from SR-826/Palmetto Expressway to I-195/SR-112/Julia Tuttle Causeway for about 8.626 miles and traverses the Village of Virginia Gardens as well as the Cities of Miami Springs, Hialeah, and Miami.

This corridor serves the Miami International Airport (MIA) and the Florida East Coast Railroad (FEC)'s Hialeah Yard; as well as major recreational and community centers such as the Miami Springs Golf and Country Club, Casino Miami, Tropicana Flea Market, Miami Jackson Senior High School, and The Shops at Midtown Miami.

EXP is currently documenting existing conditions required for the development and evaluation of multimodal improvements to address existing and future mobility, operational, social, economic, and safety needs along the corridor.





INTERSECTION SAFETY

Experience Level

EXP as Prime

Timeline

4/2022 - 9/2022

Services

- Traffic Engineering

Agency/Client Contact

Carlos Acosta, PE
(305) 364-6100
acostac@miamilakes-fl.gov

NW 154th Street and Miami Lakeway North Intersection Safety Study

Town of Miami Lakes

Miami Dade, FL

EXP was retained by the Town of Miami Lakes to conduct an intersection safety study at the high-profile location of NW 154th Street (Miami Lakes Drive) & Miami Lakeway North. The study's purpose was to reduce crashes, most importantly fatalities and serious injuries, by evaluating the intersection and providing recommendations for improvement.

The T-intersection lands on a sharp horizontal curve, creating concern about the overall safety of the intersection. The intersection was experiencing roadside-departure crashes in a residential neighborhood, generating apprehension for community safety, particularly in regard to the pedestrians and cyclists within the area. Repeat crashes had identified the intersection of increasing concern for the Town. The site was reviewed for a number safety considerations with respect to crash history trend review, the MUTCD, Florida Greenbook, and the Florida Access Management Guidebook.

EXP's study included day and night-time site visits to assess visibility, signage and striping, and driver behavior. Our team visited the field to conduct a spot-speed analysis to address speeding concerns identified by the residents. The analysis included assessing speeds for over 400 vehicles. Our team also conducted an operational analysis to review any kind of turn lane constraints, spillback into the thru lanes, turn lane warrant analyses, and deficiencies in signal timing. Our assessment also included a crash history analysis to review trends and driver behavior patterns. The team compiled all the data reviewed and provided the town a signed and sealed engineering report recommending both short- and long-term improvements for the Town to incorporate. Improvement recommendations included enhanced striping and signage, median adjustments, bollards for pedestrian safety, and signal timing adjustments.



20
year plan

Experience Level

EXP as Prime

Timeline

2022 - 2023

Services

- Master Planning
- Project Management
- Public Involvement
- Transportation Planning
- Transit Operations Planning
- Facilities Planning
- Financial Planning + Analysis
- Environmental + Sustainability
- Transit Intermodal Facilities
- Transit Oriented Development
- Urban Design

Agency/Client Contact

Lisa Colmenares, AICP
(786) 469-5394

MariaElisa.Colmenares@ miamidade.gov

Miami-Dade Transportation Master Plan (In-House Support)

*Miami-Dade Department of Transportation and Public Works
Miami Dade, FL*

The Miami-Dade County Department of Transportation and Public Works (DTPW) is developing the first ever Countywide Transportation Master Plan. This Transportation Master Plan will establish a clear vision and prioritization of projects for all transportation modes and networks within Miami-Dade County in the next 20 years, while improving collaboration with internal County, municipal, and agency plans to cohesively program improvements for the transportation system.

To enhance the planning process, EXP is assisting DTPW with In-House project management and public involvement support, acting as the liaison between DTPW and the Master Planning consultant team.

To expedite the plan development process, the EXP team is also assisting DTPW's consultant team with leading the development of the future framework, modal plans, project prioritization/needs planning, and overall plan implementation.



MIXED-USE

zone for pedestrians +
bicyclists

EXPERIENCE LEVEL

Firm Experience

YEAR(S) + TERM OF ENGAGEMENT

2018 - 2021 (On-going)

SERVICES

- Civil
- Transportation
- Landscape Architecture
- Electrical

AGENCY CONTACT

City of Montréal
Ms. Anjali Mishra, Urb. Dev.
+1.514.872.3449
anjali.mishra@ville.montreal.qc.ca

Peel Street Geometric Redevelopment

City of Montreal

Montreal, Quebec, Canada

Services in civil engineering, electricity, landscaping, urban planning, transportation, traffic maintenance and traffic lighting as part of the project regarding the geometric redevelopment, the improvement of public space and the integration of cycling facilities on Peel Street, from Smith Street to René-Lévesque Boulevard in Montréal.

The project aims to redevelop the street and enhance public space in order to promote active and public transportation as well as to showcase the importance of Peel Street as the main institutional and commercial hub downtown. It also aims to integrate innovative cycling facilities along Peel Street in order to establish future standards for the City of Montréal regarding the implementation of the “Réseau Express Vélo” (REV Biking Network).

This multidisciplinary project includes the addition of street furniture, conservation and enhancement of existing trees, planting of new trees in continuous trenches, rehabilitation of the street lighting system, reconstruction and upgrading of traffic lights, reconstruction of a sewer line, rehabilitation of a water pipe, reconstruction and construction of access wells and beds for the CSEM and Bell Canada, major gas works for Énergir (reconstruction of two gas pipes, CL-400 and CL-1000, and of an underground vault), and waterproofing works on a pedestrian tunnel for the STM.

The project is separated into two packages, namely Package A, from Smith to Notre-Dame Streets and Package B, from Notre-Dame Street to René-Lévesque Boulevard.

Peel Street Geometric Redevelopment - CONTINUED

City of Montreal

Montreal, Quebec, Canada

Scope + Features

- Widening of sidewalks and installation of a one-way bicycle path on each side, lowering the profile of the planned roadway by approximately 200 mm.
- Vibration control during work above the MTQ's Tunnel A-720 and for works near Windsor Station.
- Bicycle path made with pale raised concrete.
- Measures implemented to minimize frictions between cyclists and pedestrians at bus landings.
- Maintenance of traffic in a very busy, quickly-growing environment (Griffintown), and near access ramps to the A-720.
- Integration of lights for cyclists + Synchronization of traffic lights for cyclists.
- Creation of two-stage turn queue boxes for cyclists.
- Presence of several existing and proposed garden beds under the sidewalk, in conflict with the planned landscaping (low height available for construction of tree pits above the group of trees).
- Integration of major reconstruction works on gas pipes and an underground vault for Énergir.
- Temporary installations in front of buildings under construction during development works on Peel Street.

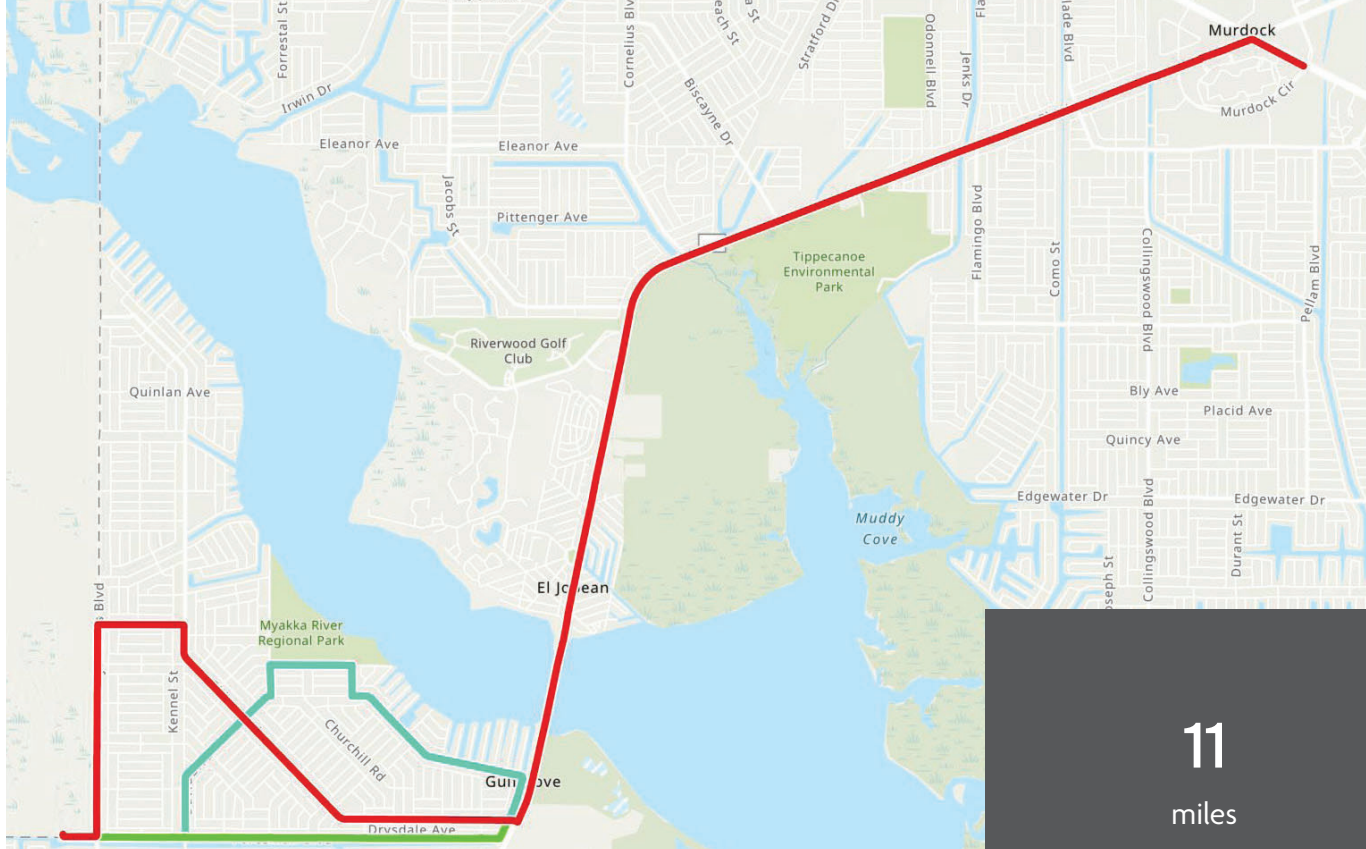
Specialty Services

- Study – Geometric redevelopment of Peel Street by incorporating wider sidewalks, an elevated bicycle path (2.5 m wide) in both directions, tree trenches, bus landings, street lighting and traffic lights.
- Plans and specifications –
 - Preparation of several designs for bus landings (mixed-use zone for pedestrians and cyclists)
 - Creation of a perspective drawing and colour drawings to be presented to elected officials and citizens during information sessions
 - Coordination with the services of the City of Montréal
 - Plans and specifications (70%, 90%, 98% and 100%)
 - Coordination and integration of plans and specifications from the CSEM, Bell Canada, Énergir, STM and FNX-INNOV (ITS and telecommunications)
 - Preparation of the schedule and specifications
 - Preparation of the work cost estimate
 - Preparation of a technical evaluation document for the MTQ
 - Coordination with all the disciplines involved in the project as well as with experts from the CSEM, Bell Canada, Énergir, Hydro-Québec, STM, and FNX-INNOV.

PROJECT RELEVANCE:

- Urban Redevelopment + Streetscape
- Bicycle Facility Development
- Pedestrian Walkways
- Multi-modal Considerations - Bus Landings
- Sidewalk Widening
- Stakeholder Coordination
- Street Furniture
- Street Lighting Rehabilitation
- Traffic Light Reconstruction + Upgrade
- Enhancement of Existing Tree Canopy
- Utility Coordination
- Garden Beds





11
miles

SUN Trail Extensions Feasibility Study

Charlotte County Metropolitan Planning Organization
Charlotte County, FL

Charlotte County received a SUN Trail grant to conduct a feasibility study along the SR 776 corridor to link into Sarasota County. The feasibility study was conducted for the extension of a Shared-Use Nonmotorized (SUN) Trail between Myakka River Forest in Gulf Cove along SR/776/S. McCall Rd to the intersection of US 41/Tamiami Trail.

The study included recommendations for gaining stakeholders engagement for future planning and implementation, while evaluating existing conditions for potential segmentation and economic impact analysis; as 35% of the length is located within residential land use and the rest (along SR 776/S McCall Rd.) fall within commercial and business districts.

This path aims to boost the local economy in Charlotte County by attracting more nonmotorized consumers, tourists, and visitors and promote multimodal opportunities.

Experience Level

EXP as Subconsultant

Timeline

2020 - 2021

Services

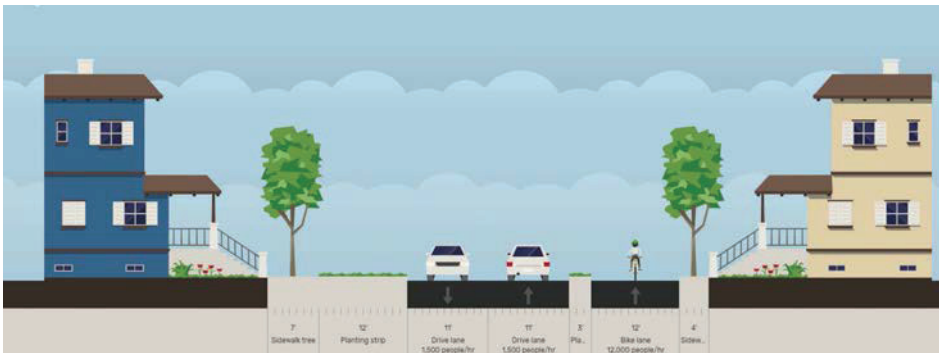
- Transportation Planning
- Public Involvement
- Visualization + Graphics
- Urban Design
- Transit Oriented Development

Agency/Client Contact

Lakshmi N. Gurram

941-883-3535

gurram@ccmpo.com





exp.



EXP

3650 Poydras St, Suite 1400
New Orleans, LA 70130

exp • com