

Request For Qualifications
TRAFFIC
ENGINEERING
SERVICES
RFQ# 23-003

Submitted by:







Request For Qualifications TRAFFIC ENGINEERING SERVICES RFQ # 23-003

March 29, 2023 City Clerk City of Key West 1300 White Street Key West, FL 33040

Re: Request for Qualifications for Traffic Engineering Services. RFQ #23-003

Dear Selection Committee Members:

Choice Engineering Consultants, Inc. (Choice) is pleased to submit this qualification package for the above referenced project to provide Traffic Engineering Services for the City of Key West. We look forward to providing these services to the City as described in the "Scope of Services" section of the referenced RFQ. We appreciate your consideration to review our qualifications and experience.

Choice is a State certified DBE and Small Business Firm. **Choice** is prequalified by the Florida Department of Transportation in Traffic Engineering Studies (6.1), Traffic Signal Timing (6.2), Intelligent Transportation System (6.3.1-6.3.4), as well as Minor Highway Design (3.1), Signing, Pavement Marking, & Channelization Design (7.1), Lighting Design (7.2), Signalization Design (7.3), Subarea/Corridor Planning (13.5), and Transportation Statistics (13.7). We are a full-service engineering consulting firm with staff specializing in transportation planning, engineering, analysis, TSM&O, and design of roadways. Our expertise is broad and has a strong foundation in transportation engineering. **Choice** staff has been providing transportation infrastructure services to public agencies in South Florida for over 30 years. Our office is located at 12855 SW 132nd Street, Suite 200, in Miami, Florida, 33186. For additional support of specialized services, we have teamed up with Metric Engineering and EXP.

Having served the City over the past 4 years with these very same services, we trust the information provided in this RFQ gives you an in-depth understanding of our technical and managerial experience and look forward to the opportunity to continue to assist the City to meet its goals. We have provided detailed information related to our staff quality, quantity, and availability. As you will see, we continue to offer the City a very high level of availability of our traffic/transportation/planning staff. The **Choice** Team has prepared this qualification statement based upon our experience and understanding of the major requirements and contract description issues. We have structured our team to meet and exceed each aspect of this project. The technical qualifications and experience of the staff selected match the requirements of this contract. We are committed to the highest standards of excellence and will continue to provide the services required, surpassing the levels of satisfaction already provided to (and expected by) the City.

We bring the local knowledge of traffic analysis within the City and awareness of the City's goals for its residents and visitors alike. We are aware of the issues to be faced in providing the services required by the proposed scope, and are ready, willing, and able to meet the challenge.

Sincerely,

Carlos Francis, P.E., PTOE, RSP1 President - Choice Engineering Consultants, Inc. <u>cfrancis@choiceeng.com</u> Cell: 786-556-3323



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Prime Submitting the RFQ

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Project Manager for this RFQ

Erik Echezabal, MSCE, PE, PTOE TSM&O Division Lead

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Persons with Authority to Make Representations for Choice Engineering Consultants

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RFQ # 23-003

	KEY STAFF	ENCE	BILITY	ICATION
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	CHOICE ENGINEERING CONSULTA	NTS,	INC	
	Erik Echezabal, PE, PTOE	13	75%	111
	Carlos Francis, PE, PTOE, RSP1	30	60%	
	Rafael S. Aguilar, PE	24	60%	
	Eugenio S. Lopez, PE	20	65%	
	Alexander Socarras, PE, PTOE	15	70%	1
	Mario B. Rojas IV, PE	8	60%	
	Alejandro Ortega, El	12	60%	- II -
	Jessica Garcia, El, RSP1, (PE Passed)	3	65%	
	Osvaldo Rodriguez, El	5	75%	11
	Henrique Fernandez, EI (PE Passed)	3	70%	11
	Elizabeth Correal, El	4	80%	1
	Carlos Dominguez, EI (PE Passed)	1	80%	
	Hillary Lopez	3	80%	
	Andy Rodriguez	1	80%	
	Elizabeth Gonzalez	1	80%	
	Ricardo Bohorques	1	80%	Ш
	Alexander Seoane	6	80%	
	Andv Gutierrez. El	2	80%	
	Yevgeny "Gene" Sherman, Fl	40	75%	
	Leonardo Francis CGC	37	75%	
	Olsen Deronvil	10	70%	П
	William S. Vazquez	2	80%	
	Israel Ortega	3	80%	
	Abel Sierra	6	80%	
	Justo Espinales	8	80%	
	George Nelson	2	80%	
	Sebastian Lonez	1	80%	
	Jose Salazar	1	80%	
	Mariam de Celis	1	80%	
-		1	80%	
	Kathy Francis	R	80%	
		5	80%	
	Ellvette Diaz	5	8070	
	Stofan Escanos DE DTOE	12	70%	
	Stelan Escanes, PE, PTOE	5	7070	п
	Eduardo Montoaquido	a	80%	
	Nicolas Vop	7	80%	11
		/	00%	11
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		17	000/	
	Jenniner Borges, PE, PTOE	14	90%	

COMPANY INFORMATION

Choice Engineering Consultants, Inc

Established in 2015, Choice Engineering Consultants, Inc. is a proud DBE, SBE company serving South Florida to further develop its transportation infrastructure. Choice Engineering is a Civil Engineering firm specializing in Roadway and Traffic Engineering. Our engineering team provides Signal Retiming, TSM&O support (AAM, ITS, ASCT, System Engineering), Design Solutions in Roadway Design, Traffic Engineering and Operations Studies, Traffic Safety Analysis, Traffic Operations Design (signing, pavement marking, and channelization, roadway lighting and signalization), ADA compliance support, and Planning (Subarea/Corridor Planning and Transportation Statistics). We provide minor to complex roadway design, maintenance of traffic design, traffic engineering studies, traffic micro-simulation, plan reviews and construction site reviews.

Since its inception, Choice has proudly served FDOT District Four and District Six in the production of roadway plans for Bridge Replacement Projects, RRR Projects, Minor Pushbutton Design Type Projects and in the Department's Districtwide Signal Retiming efforts. Choice currently supports one of District Four's signal retiming contracts and has been proudly selected again to serve as FDOT's Districtwide Signal Retiming Consultant for Miami-Dade and Monroe Counties. Choice has been successfully and proudly serving the City of Key West with traffic engineering services for the past four years.

Metric Engineering, Inc

Metric Engineering, Inc. was founded in 1976 on the principle of providing personalized consulting engineering services. Today, we are among the top consulting engineering firms specializing in civil and transportation projects. Metric specializes on the following services offered to clients: Construction Engineering & Inspection (CEI), EI, Intelligent Transportation Systems Construction Engineering & Inspection (ITS CEI), Transportation Systems

Management & Operations (TSM&O), Traffic Management Center Operations, Planning, Project Development & Environment (PD&E), Roadway Design, Environmental, and Emergency Management Services (EMS). Over the last four decades, Metric has successfully completed numerous large, complex transportation projects in the United States and abroad. Our multidisciplinary workforce and strategically located regional offices enable us to provide both maximized local responsiveness and a diversified technical base. Our clients include local, county, state, and foreign governments as well as private clients. Much of our success in growing and diversifying can be attributed to our efforts to understand clients' emerging needs, as well as the expanding capabilities of our professionals.

EXP

EXP is a full service architectural and engineering firm with nearly 4,000 professionals across North America, and offices throughout the US including offices in Coral Gables and eleven others in Florida. At EXP, we bring over 116 years of experience delivering planning, design, public information, and construction projects of all sizes. We have built a reputation for outstanding client service and have worked hard to create a culture that fuels creativity and an entrepreneurial spirit. We also understand the processes needed to successfully engage our communities, gain meaningful input, and facilitate collaboration and stakeholder consensus. At EXP, people make us who we are. Together, we leverage our differences, combine talents, and share ambitions with each other, our clients, and the communities we serve. With diverse perspectives, voices, and capabilities, we offer clients solutions to exceed expectations, and build a better, more sustainable world. We're an integrated, motivated team working together with all types of clients, on projects big and small - locally, regionally, nationally, globally. With local knowledge and registrations in strategic locations around the world, we've got it covered. Our approach concisely moves everything along, blending vision with delivery, and providing designed and deliberate outcomes that align with our clients' business goals.

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METHODOLOGY AND APPROACH

Summary of Expertise & Technical Competence

At **Choice** Engineering Consultants Inc. our goals and objectives revolve around creating sound processes and designs, as well as enhancing safety and operations for all modes of transportation and the walking public. **Choice** is dedicated to building success and is focused on innovation and purpose-built solutions that address all project needs. Our primary office is located in southern Miami-Dade County and will serve as the office from which the contract and all task work orders will be managed and executed for the City. Our team of professionals have extensive experience in all required work types, some over 35 years, which will ensure the successful completion of all assigned work through this contract.

Mr. Erik Echezabal, PE, PTOE will be the Consultant Project Manager (CPM) and point of contact for this contract. Mr. Echezabal will be supported by a large group of TSM&O/traffic engineers and specialists, as well as highly-qualified engineers (traffic, safety, planning) in all supporting roles. Erik is a proactive CPM and his experience serving as Consultant Deputy Project Manager (CDPM) for the previous City contract has served to highlight his coordination and active project management role. Mr. Echezabal has more than 13 years of experience including serving major roles in the following projects:

- Monroe County, Signal Timing Engineering Services
- City of Key West General Traffic Engineering Services
- City of Key West, Signal Timing Efforts (jointly w/Monroe County)
- FDOT District 6 TSM&O, Signal Retiming Consultant
- Keys COAST Connected Vehicles Design-Build Project
- Districtwide Traffic Ops / Plans Review & Ped/Bike Safety Consultant
- FDOT District 4-I95 at Hypoluxo Rd DDI, Signal Design

Mr. Carlos Francis, PE, PTOE will be the Consultant Deputy Project Manager (CDPM) assisting Erik on all efforts, as necessary. Mr. Francis has over 30 years of experience in traffic engineering, minor highway design and construction inspection. His technical expertise includes traffic engineering, operations and safety analysis, planning, modeling, traffic control systems, traffic modeling, traffic signal timing coordination / analysis / implementation, and minor design. He has supported the FDOT and other clients with presentations to City/County Officials and at community meetings to garner support for engineering projects. He has served as PM on numerous projects for clients such as FDOT, City of Key West, Monroe County, City of Miami Beach, City of South Miami, and Miami-Dade County. Some of these projects include:

- City of Key West General Traffic Engineering Services
- FDOT District 6, Districtwide Traffic Operations Safety Studies
- FDOT District 6, ADA District-wide Compliance Consultant
- FDOT District 6, Traffic Operations Signal Retiming Consultant
- FDOT District 6, ITS-General Engineering Consultant
- City of Miami Beach, Traffic Engineering Consultant
- City of South Miami, Traffic Engineering Consultant

We understand the role of the PM in this type of contract, and we assure the City's PM that all tasks will be handled in the most efficient way to guarantee the successful completion of this project. For this project we will:

- Assign the staff with a strong technical knowledge in the required disciplines.
- Adhere to the project schedule and budget.
- Establish and maintain the public and government agencies involved.
- Maintain the necessary level of coordination with City staff prior to submittals.

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- Perform constructability reviews of all alternatives.
- Evaluate the quality of all deliverables prior to all submittals.

Choice Engineering has partnered with Metric Engineering and EXP to further enhance our Team and to provide redundancy at all levels. We have structured our team to meet and exceed each aspect of this project. In assembling our team, we not only considered the special capabilities of each individual, but also the current and projected workload and availability of each team member. The technical qualifications and experience of the staff selected matches the requirements of this contract. We are committed to the highest standards of excellence and will provide the services required, surpassing the expectations of the City.

Scope of Services Proposed

The scope for this contract requires expertise in providing Traffic Engineering consulting services such as:

- 1. Traffic Studies
- 2. Traffic Signal System Design
- 3. Physical (Field) Timing of Traffic Signals
- 4. Traffic Signal Detection Systems
- 5. Roadway Capacity Calculations and Studies
- 6. Roadway Signage Warrants, Design/Siting
- 7. Traffic Counting
- 8. Florida DOT Green Book
- 9. Bicycle and Pedestrian Planning
- 10. Parking Studies
- 11. Wayfinding Sign Program

Our approach to every task begins by achieving a thorough understanding of our client's needs, which allows us to complete projects that meet our client's expectations. The **Choice Team** is keenly aware of the importance to properly collect, review, and process highway and traffic data in a timely manner at data is the cornerstone of all engineering endeavors. **Choice** has a seasoned staff of professionals well versed in the principles and procedures associated not only with the collection and processing of highway and traffic data but also with analysis of this data to come up with feasible recommendations that will improve the client's performance. This same staff is well versed in conducting these services in a work order mode. We also understand that much of this work will be time sensitive, in response to emergency or quick response requests. Given that we have inhouse data collection capabilities we will be able to meet the client's most critical schedule. The following is a brief discussion of the **Choice Team**'s expertise and technical competence for each of the identified work types.

1. Traffic Studies

The **Choice Team** has performed countless traffic studies for FDOT, County, and municipal clients. **Choice** professional staff includes 5 professional engineers, 3 of which also have PTOE certifications, and 2 engineers with RSP1 certification. Our support staff includes ten technicians, designers, and clerical staff accustomed to performing (and supporting) these kinds of studies. The common types of traffic studies performed are normally either for intersections or stretches of arterials. Studies associated with intersections can include Sight Distance Studies, Signal Warrant Studies, Qualitative Assessments, Traffic Calming Studies, etc. Whereas studies associated with arterials are more likely to be Speed Studies, Signal Retiming Studies, Pedestrian or Bicycle Pathway Studies, etc. The **Choice Team** has performed these studies and understands the basic steps required to successfully complete a traffic study. These steps consist of the following:

- a. Clearly identify the request/complaint
- b. Collect necessary existing data (could include traffic, crash, and geometric)
- c. Assess operations (normally via field reviews)
- d. Perform operational analysis (as needed)
- e. Perform engineering analysis (review data, observations, & analysis to identify deficiency/causes)
- f. Develop improvement recommendations (text based or conceptual drawings)
- g. Identify impacts and benefits (costs, utility, R/W and crash/delay reductions)
- h. Formalize findings and recommendation in a report format

Considering the extensive experience of both **Choice** and its subconsultants Metric & EXP, the team has successfully performed well over 500 traffic studies for numerous public sector agency clients.

2. Traffic Signal System Design

Choice has developed signal plans for several intersections related to both RRR projects and pushbutton type projects. During the development of signalization plans, it is critical to not only have the hardware expertise to properly design for the necessary operation, but it is necessary to understand the existing limitations in the field to properly locate the signal infrastructure, for both vehicular and pedestrian users, given limited R/W and existing utilities. Some of our most recent efforts include the preparation of signalization plans for the intersections of:

- Flagler Ave Ped Improvements (Key West Push Button-added ped signal heads & Accessible Ped Signal (APS) detection, vehicle detection, ramp reconstruction)
- SR 5/N. Roosevelt Blvd from Eisenhower Dr to S. Roosevelt Blvd (RRR)
- SR 860/Miami Gardens Dr from W. of NW 27 Ave to W. of NW 2 Ave (RRR)
- SR 994/Quail Roost Dr from W. of Krome Ave to E. of SW 137 Ave (RRR)
- Keys Coast D-B Design/US-1 from Key West to Monroe/Miami-Dade County line (Roadside Units, CCTV cameras & full vehicular detection, Transit Signal Priority)
- SR 9A/I-95 interchange at Hypoluxo Rd (Reconstruction DDI Conversion)
- SR 817/NW 27 Ave from N. of NW 135 St to Burlington St (Safety Improvements)
- City of Key West Retrofit Signalization Improvements (ranging from UPS, APS, Service Disconnects, Cabinet Mod's)
- SR 5/Overseas Hwy at Palm Ave/First St (flashing yellow right turn arrow & ped improvements)
- SR 5/Overseas Hwy west of Kennedy Dr HAWK (conversion to full ped signal)
- SR 5/Overseas Hwy at MacDonald Ave (new controller, UPS, foundation, etc.)
- SR 5/Overseas Hwy at College Rd (new 5-section signal head & controller mod's)
- SR 5/Overseas Hwy at vars. location (Adv. Microwave Detection retrofit at Key Deer Blvd, Bessie Dr, & Atlantic Blvd)
- SR 5/Overseas Hwy at Sadowski Cswy (Leading Ped Interval implementation)
- SR 5/S. Dixie Hwy from SW 27 Ave to I-95 (RRR)
- SR 826/Palmetto Expwy at SR 823/Red Rd (Reconstruction)

3. Physical (Field) Timing of Traffic Signals

Choice is the current Signal Retiming Consultant for FDOT, and we have been successfully serving in this capacity for the last 8 years. **Choice** is tasked with performing signal retiming of all the signalized intersections on State Roads over a 3-year period. By this summer, **Choice** will have successfully retimed over 1300 signalized intersections within Miami-Dade and Monroe Counties, twice. These efforts defined here are based on field reviews. Our current scope consists of the following:

- <u>Data Gathering / Coordination Maintaining Agency Staff.</u> We have coordinated with the Area Engineer(s) to identify operational deficiencies along the coordinated sections, and we have collected all the latest signal timing plans, KITS MOE reports, lane configuration, turn bay lengths, signal spacing, loop count data to be provided by the Maintaining Agency, and RITIS data for each corridor.
- <u>Review Timing Plans and Prepare Coordinated Section Timing Diagrams:</u> We have reviewed and evaluated the timing plans collected. This data, along with geometric data such as lane configurations, signal spacing, and turn bay lengths of each corridor, was used to prepare individual coordinated section timing diagrams per corridor, showing information such as green time allocation, distance between signals, TOD plans, offsets, etc.
- <u>Field Reviews:</u> the field review task was performed mainly based on actual extended field visits during AM Peak, Midday Peak, PM Peak, and on occasion, Weekend Peak. The field reviews included Travel Time Runs (minimum 6 runs per direction) for each time period to assess the corridor progression and readily apparent bottleneck locations. Individual intersections were observed for operations during each time period including notable queue build up and interaction with adjacent intersections/driveways/openings.
- <u>Recommendations for Improvements:</u> From the results of the previous tasks recommendations for signal timing adjustments were identified. These adjustments may include some of the following:
 - o Adjustments to signal offsets and splits.
 - Adjustments to timing parameters (extension, min green, recall modes, etc.)
 - o Development of timing plans to account for peak shoulder periods.
 - Adjustment to TOD schedule.
 - "Double cycling" some intersections.
 - Appropriate change/clearance interval (FDOT Traffic Engineering Manual)
 - o Serving a movement twice during the same cycle.
 - Skipping a movement during a plan.
 - o Modifying the "flashing" operations times for intersections.

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- <u>Coordinate Implementation</u>: Choice coordinated the recommendations with the maintaining agency for implementation and fine-tuning as needed.
- <u>Fine Tuning of Recommendations:</u> Choice reviewed field operations after implementation of all changes to make any necessary minor adjustments to maximize effects of the recommendations. This effort included travel time runs for the "after" condition.
- <u>Before & After (RITIS based) Evaluation:</u> Choice performed a before and after evaluation to compare the before and after travel times and speed along the section. This evaluation was based on available data from Ritis.org and the travel time data collected before and after the fine-tuning implementation.
- <u>Documentation</u>: The products of previous tasks within this study were documented collectively in a formal report.

In addition, the **Choice Team** has extensive experience with traditional retiming efforts. The benefit of traditional/full retiming is that traffic models (e.g., Synchro) aid to perform operational and coordination analysis. We do not simply use the "optimize" feature to determine the optimized cycle length, splits, and offsets. We understand the limitations of Synchro, and we use our field knowledge (e.g., left-turn spillbacks, saturated and underutilized green, queues, weaving, driver behavior, etc.) to drive our timing decisions. The proposed signal timing will consist of cycle lengths, splits, offsets, and relevant signal controller parameters (e.g., force-off type, etc.). On the other hand, partial retiming (current cost effective, field-based approach) is based on an iterative observation-and-adjustment based approach by fine tuning the splits and offsets. We are currently completing a traditional retiming effort along SR 90/SW 8 St from SW 147 Ave to SW 67 Ave.

Moreover, we have in-depth knowledge of the existing signal system within the City of Key West (e.g., NEMA TS1 and Caltrans cabinets). The **Choice** staff has an adept understanding of the various types of signal controllers and software, including NEMA TS1 (e.g., Transyt 1880EL, TCT, etc.) and TS2 controllers (e.g., Peek 3000, Peek 3000E, etc.), McCain 170E, McCain 2070E, and McCain ATC controllers (2070LX and NEMA). Our staff has successfully implemented and coordinated corridors with various types of controllers. We have assisted with the standardization of signal equipment by converting to primarily McCain 2070LX or NEMA ATC controllers, and we have access to Transparity IMS to maintain McCain controller databases. Moreover, we have been in the forefront of addressing citizen complaints and troubleshooting for City of Key West and FDOT. We have an excellent working relationship with McCain and regularly coordinate with their staff for hardware integration. Some of **Choice's** recent retiming efforts (full/partial) include:

- Flagler Avenue Retiming at White Street and First St/Bertha St (City of Key West issued task- Choice retimed Weekday and weekend AM/MD/PM/PM-Off peak, perform controller 1:1 database conversion, support Keys Energy with controller replacements, and field fine tuning)
- White Street Retiming from United Street to Virginia St (City of Key West issued task- Choice retimed Weekday and weekend AM/MD/PM/PM-Off peak, converting from Free to Coordinated operations to coordinate with Truman Avenue, perform controller 1:1 database conversion, support Keys Energy with controller replacements, and field fine tuning)
- Bertha St Reconstruction MOT Timing Support (City of Key West issued task Choice supported with controller timing modification during MOT)
- Kennedy Dr at Poinciana Crosswalk (City of Key West issued task Choice supported with controller conversion and upgrades, and evaluation of pedestrian and vehicular clearances)
- FY 18 FDOT Signal Retiming of US-1 from Key West to Key Largo (Choice retimed all traffic signals along US-1 and SR A1A during the Weekday AM, MD, PM, and PM-Off peak)
- FDOT TSMCA Opt-out Choice supported FDOT D6 with performing the controller 1:1 database conversions and field integrations of new controllers, CPUs, cabinet alarms, and cellular communications for all traffic signals along US-1 within State Highway System.
- Stock Island Retiming (joint effort by City of Key West and Monroe County): Choice retimed 5 signalized intersections during the AM, MD, and PM peak periods to mitigate 2017 "snowbird" seasonal congestion.
- SR 5/Overseas Highway at Atlantic Blvd (Key Largo) and Ocean Blvd (Tavernier): Developed and programmed seasonal plans into McCain 2070E controllers.
- SR 5/Overseas Highway at Emerald Dr (Big Coppitt Key), Jo-Jean Way (Tavernier Key), East Dr (Key Largo), and CR 905 (Key Largo): Coordinated with local fire dept. to optimize preemption operations, programmed new preemption sequence into McCain 2070E controllers, updated vehicular clearances, and field integrated.
- SR 5/Overseas Highway at Key Deer Blvd (Big Pine Key): Evaluated opportunities to optimize the signal operating
 plan, and field implemented the new sequence, which included modification of the signal cabinet assembly. Moreover,
 Choice is supporting Monroe County with replacement of the existing McCain 2070E controller (installed as part of

Hurricane emergency replacement) with a McCain 2070LX controller (i.e., ATC) to reimplement dynamic max operations.

- Stock Island Retiming (FDOT D6): Choice was tasked to retime 5 signalized intersections during the AM, MD, & PM peaks as part of the FDOT retiming program. Choice also introduced a Season Timing Plan schedule to operate lower cycle lengths during the summer.
- SR 5/Overseas Hwy at N Roosevelt Blvd/S Roosevelt Blvd (i.e., Triangle): Choice was tasked to evaluate the feasibility of implementing flashing red arrow operations for the exclusive right-turns and supported the contractor with implementation. This effort also included the support to program the signal sequence and coordination timings, bench test, and field integration.

4. Traffic Signal Detection Systems

The Choice Team has comprehensive experience with traffic signal detection systems, from hands-on experience to the development of signalization plans, special details, and technical special provisions. Traffic signal detection systems include both pedestrian and vehicular modes. Pedestrian detection systems consist of standard pushbutton installations and passive detection, such as thermal technology. Vehicle detection systems include Inductive Loops, Video Vehicle Detection System (VVDS), and Microwave Vehicle Detection Systems (MVDS) to name a few. Generally, the most commonly deployed vehicle detection systems in the City of Key West are inductive loops and VVDS. Although not traditional, wireless (e.g., GPS, radio, etc.) and interconnected (e.g., pushbutton) are forms of vehicle detection to initiate preemption operations at signalized intersection. **Choice** engineers have participated with the deployment, programming, troubleshooting of the various VVDS equipment (e.g., FLIR/Traficon, and Iteris) and MVDS (e.g., Wavetronix) that is deployed throughout the City at multiple intersections. Our in-depth knowledge of currently deployed cabinet installations (e.g., NEMA TS1 and Caltrans 332 and 336, etc.) allows our team to properly select feasible and deployable equipment. Notable efforts related to traffic signal detection systems include:

- City of Key West Flagler Ave Pedestrian Improvements Project As part of post design services, Choice supported the City of Key West with inspections and proper installation of type F induction loops and Polara APS.
- SR 7/SW 8 Av at SW 6 Av: Erik Echezabal was EOR that designed the retrofit to upgrade APS with capability to support smart phone interaction for visually impaired. As part of post design, Erik supported the Contractor with programming and integrating the Polara iNS system and PedApp phone application.
- SR 90/SW 8 St at Brickell Av Scramble Phase: Erik Echezabal was EOR that designed the retrofit to upgrade APS and signalization to operate a scramble phase (diagonal crosswalks).
- SR 5/Overseas Hwy at Burton Dr: Oversaw and directed the signalization contractor with proper configuration of the Smartmicro MVDS system that included stop bar, exit count, and advance detection zones. We closely worked with the vendor to introduce additional detection zones to mitigate occlusion and auxiliary road operations and supported FDOT with verification of proper functionality.
- FDOT D6 Keys COAST: As part of the responsibilities, Choice is supporting with initial integrations of the connected vehicle detection devices (i.e., Roadside units). As part of the design responsibilities (e.g., Prime EOR), 360-degree VVDS was designed to provide a cost-effective solution for an intersection that operates in flash majority of the day.
- SR 5/Overseas Hwy and College Rd: Oversaw and directed the signalization contractor to reconfigure loop connections for the College Rd approach, specifically, to separate the right-turn and left-turn lane detection inputs. This allowed our engineers to program a delay and mitigate false-calls from vehicles performing right-turns, which consequently caused the traffic signal to cycle for a movement without vehicles.
- SR 5/Overseas Hwy at Key Deer Blvd (Big Pine Key) and Atlantic Blvd (Key Largo): Performed troubleshooting of nonfunctional detection and assisted the contractor with installation of video detector processors, reprogramming, and reconfiguration of detector hook-ups.
- SR 5/Overseas Hwy at Ocean Blvd: Performed inspection of the signal controller assembly, consisting of fully actuated operation by inductive loops, including stop-bar and advance loops (type A). The main objective was to ensure proper labeling, termination, and isolator configuration for operable volume density operations.
- SR 5/Overseas Hwy at Emerald Dr (Big Coppitt Key), Jo-Jean Way (Tavernier Key), East Dr (Key Largo), and CR 905 (Key Largo): Performed troubleshooting and diagnosis of non-operable preemption operations. Coordinated and assisted with the replacement of damaged radio antennas, fire station pushbuttons, and communication devices.
- Conducted numerous feasibility studies to deploy ADA complaint audible pedestrian signals (APS) throughout Miami-Dade County.
- Assisted the FDOT D6, the District Traffic Design Engineer in the development and updates of the video detection systems details, including a technical special provision for controller assembly modify.

5. Roadway Capacity Calculations and Studies

The **Choice Team** has successfully conducted roadway capacity analysis at numerous locations (intersection and corridor level). In fact, the majority of our traffic studies performed not only included operational analysis for Level of Service (LOS), but also considered capacity deficiencies and improvement needs. We are proficient with various traffic engineering software for evaluation of both LOS and capacity needs. Whether it is CORSIM, HCS, or Synchro, we have successfully completed numerous analysis efforts to evaluate the need for capacity improvements, such as additional travel lanes, additional turn lanes, expanded intersections, extension of turn lanes, etc. We understand the limitations of traffic engineering software such as Synchro, and we use our field knowledge (e.g., left-turn spillbacks, saturated green, underutilized greens, early release, pedestrian phase controller corrections, start-up, queues, weaving, lane utilization, driver behavior, etc) to ensure an accurate model depiction of the existing conditions and proper analysis and reporting of benefits related to proposed capacity improvements.

6. Roadway Signage – Warrants, Design/Siting

Virtually all roadway projects require the use of traffic signs as part of the general improvements. The intent of roadway signage is to present information to its users, vehicular and pedestrian alike. The **Choice Team** has successfully been involved in the planning, study, design, review and construction phases of multiple projects involving the use of traffic signs on major and local roads. Our staff has served as Engineer of Record as well as Professional Traffic Operations Engineers in the design and analysis of over one-hundred projects in Monroe and Miami-Dade Counties. The **Choice Team** is intimately familiar with the MUTCD as well as FDOT's standards and its governing criteria, including the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, commonly known as the "Florida Greenbook." Some of our staff have been involved in the review and acceptance of final signage configurations during the construction phase for FDOT Traffic Operations Office and is currently involved in the review of FDOT projects currently in the design phase. As part of our review process, we evaluate the operational effectiveness, placement, conflicts, and possible clustering of all signage prior to and after installation in the field. While this review is primarily done during the design process, it also plays an important role in the post construction process in analyzing the public's reaction to new signage patterns.

Warrants for signage can include regulatory signage such as speed limit, reduced speed, stop and yield conditions and sometimes ahead warning signage. As a Traffic Engineering and Highway Design firm, **Choice** currently provides FDOT and private clients alike, services that include traffic studies, sign warrants and the design of such any recommendation(s) resulting from such studies.

7. Traffic Counting

The **Choice Team** can and has successfully conducted traffic counting efforts such as volume counts, classification counts, turning movement counts, pedestrian/bicycle counts, traffic time & delay collection, and origin-destination counts, as required. We are well known for providing high quality and accurate data collection services. We will field monitor each counter for a minimum of thirty minutes to ensure that it is accurately recording data by comparing it to manual counts. Our team will also field check equipment regularly to detect any problems or potential failure. Processing the traffic data includes identifying large variations that occur from day-to-day as well as annual variations (>10%) that are outside normal trends. Counts are scheduled based on the needs and operating conditions at the count site (Tuesday-Thursday, non-holiday weeks or peak season, when schools in sessions, etc). Placement of traffic count equipment involves a review of surrounding conditions such as construction zones, new developments, or special events that could impact the data results. Results will be compared to historical data when available for further QC. Outputs will undergo an extensive QA/QC process before the final report is presented to the Client. Some recent efforts include:

- 7-day ATRs for the Flagler Ave and White St retiming
- 2-hr TMCs at N Roosevelt Blvd and Kennedy Dr-Sigsbee Rd
- 2-hr TMC's at N Roosevelt Blvd and Palm Ave
- 72-hr ATR and 4-hr TMCs at S Roosevelt Blvd and Flagler Ave
- 72-hr ATR and 4-hr TMCs at S Roosevelt Blvd and Seaside Dr
- Spot Speed Study along Truman Ave between Windsor Ln and Simonton St

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- 72-hr ATR, 4-hr Ped Grp Size/Ct/Gap: S Roosevelt Blvd at Duck Ave/Douglas Cir
- 72-hr ATR, 6-hr Ped Grp Size/Cts/Gap/Spot Spd: S Roosevelt Blvd at Smather's Bch •
- Spot Speed Study along Whitehead Street between Truman Ave and Fleming St •
- 72-hr ATR at Caroline St and Elizabeth St
- 8-hr TMCs at Whitehead St and Caroline St & Whitehead St and Front St
- 7-day ATR, 12-hr Ped Grp Size/Cts at Bertha St and Atlantic Blvd

8. Florida DOT "Green Book"

The Manual of Uniform Minimum Standards for Design, Construction and Maintenance (Florida Greenbook) is used as the primary design for local public streets, roads, highways, bridges, sidewalks, curbs and curb ramps, crosswalks, bicycle facilities, underpasses, and overpasses used by the public for vehicular and pedestrian travel. We understand that the city uses this manual as a basis for design and recommendations on local roads under the City's jurisdiction. Choice is currently working on three off-State system road projects that use this manual as the basis for design. Our Team staff is intimately familiar with this manual through their wealth of project experience with local municipalities and agencies, designing over twenty (20) corridors using the Florida Greenbook as the basis for design.

9. Bicycle and Pedestrian Planning

The **Choice Team** has qualified personnel with experience to conduct pedestrian and bicycle planning studies. There are several essential components to be considered for these types of studies, some of these include goals and objectives (e.g., community needs assessment), bicycle/pedestrian network plan, design guidelines, maintenance policies and procedures, project costs and timing implementation, support programs (e.g., safety education and law enforcement), on-going monitoring of facility, and ensuring the integration of the Four E's (Education, Encouragement, Enforcement, and Evaluation). Bicycling and walking are increasingly recognized as a viable means of transportation. Walking and cycling improvements are critical for creating more livable communities, such as in the City of Key West. Some of these principles were applied by our firm for the SR A1A/Collins Avenue, Haulover Park, Feasibility Study for sidewalk and bicycle lane improvements. The study evaluated existing pedestrian/bicyclist operations and the feasibility of providing sidewalks and bicycle lanes along both sides of SR A1A throughout the limits of Haulover Park. A challenge of this study was to incorporate the pedestrian/bicyclist improvements while maintaining the integrity of the Haulover Park. We are aware that one of the objectives of the City's Bicycle and Pedestrian Master Plan is to reduce injuries and fatalities for pedestrians/bicyclists. We have reviewed hundreds of fatal crash reports and produced disposition reports to identify safety issues and provide feasible improvements. In addition, we have performed numerous Road Safety Audits in Miami-Dade and Monroe Counties for pedestrian/bicyclist safety. This has giving us a deep understanding of the pedestrian/bicyclist behavior that leads to conflicts with vehicular traffic, such as crossing at undesignated midblock locations, alcohol intoxication, not crossing during the "walk" signal indication, and not yielding the right-of-way to traffic. The incorporation of the applicable principles for the characteristics of the area for a pedestrian and bicycle planning study, and the awareness of the factors contributing and jeopardizing their safety when dealing with studies on a regular basis are essential with identifying their needs of today to better understand and plan for their needs for tomorrow through a planning study. Choice is currently working with the City to identify priority locations to deploy pedestrian signalization.

10. Parking Studies

We have the qualified personnel with experience to conduct parking studies including curb parking and off-street parking in lots and garages within a study area. Typically, the need for parking studies originates when merchants or residents complain that parking demand exceeds the parking supply. A comprehensive study requires a team of field observers to periodically (usually every 15 minutes) circulate around the study area and record data on the vehicles parked in each space. The Choice Team has successfully used the license plate survey method which we find is the most accurate and efficient way to keep records of the parked vehicles, especially in larger parking lots. Ultimately, parking demand is determined by calculating the parking accumulation, occupancy, duration, and turnover rate. If it is determined that demand exceeds the existing parking supply, additional parking spaces may be recommended if right-of-way is available. If right-of-way is not easily attainable, a possible solution to increase vehicle turnover is to implement a time restraint for parking. Our firm recently

completed a parking inventory in Mallory Square and its immediate area, in Key West, Florida. The intent of this effort was to analyze the parking locations qualitatively and quantitatively at and outside of Mallory Square to understand the feasibility of reducing parking capacity at the square.

11. Wayfinding Sign Program

A comprehensive wayfinding signage program is vital to a tourist-oriented community, assisting visitors to navigate and orient themselves, to take advantage of what the City of Key West has to offer. A wayfinding program can route travelers to points of interest and link neighborhoods to one another, it can address pedestrian needs and provide information to drivers. The key in the design phase is stakeholder input from community groups, steering committees, regulatory agencies, design/historic review board, as well as the Chamber of commerce. Based on the data gathered, a design concept is developed, fine-tuned, and the preferred design is presented to the governing body for approval. It is crucial to identify the funding and develop a detailed scope of the project so that development of the construction plans for the Wayfinding signage program can be seamless. Of course, funding must include the cost for long turn maintenance. The construction phase should be headed by a key person that will follow the project from beginning to end. The maintenance phase has to include funding along with a detailed operations plan that addresses all aspects of maintenance, from annual cleaning and inspections to replacement procedures. The **Choice Team** has successfully managed the engineering, construction, and maintenance of a Wayfinding Signage Program in an island setting such as Key West.

Responsiveness, Location, and Availability of Project Manager & Staff

Choice Engineering Consultants, Inc. has its principal office located within southern Miami-Dade County at the following address: 12855 SW 132nd Street, Suite 200, Miami, FL. 33186

This is the office location from which the work is to be performed for the City. Professionals from each of our divisions carry varied and extensive experience, some over 35 years, which will ensure the successful completion of all assigned work through this contract. Currently our staff includes 27 full-time and 6 part-time employees of which 6 are Florida Professional Engineers (PE's), 3 are Professional Traffic Operations Engineers (PTOE's), 2 are RSP1 certified, 8 are Engineer in Training (EI's), 3 are designers, 9 are engineering technicians, and we have two office administrators.

Given that we have been supporting the City for the last 4 years, it is understood that in many cases there will be a time constraint on City staff due to the nature and scale of the work. The Choice Team has all the necessary local staff for the specializations required under this RFQ, which affords us the ability to quickly respond to requests for services. Given our extensive experience with work order driven term contracts, including this same contract, we understand the need to respond quickly to the City's requests and develop a budget and schedule quickly. These will be provided to the City PM immediately after being given the assignment. Choice is committed to providing the City with a level of responsiveness support that will far exceed the City's expectations. In order to reach this high level, Choice has established a methodology and approach which consists of obtaining a sound understanding of the scope of work, getting well acquainted with existing conditions and criteria to be used, developing a quality product and maintaining close communication with the City's PM. We understand that under this contract, we may be part of a pool of Consultants for which work can be assigned by way of Task Work Orders and the types of projects can vary depending on the expertise that is required by each of the assignments. Our first step is always to conference with the City staff in order to clearly develop a scope of services to address the City's need(s) and provide the necessary analysis, documentation to produce a work product which will lead to a timely and successful project. Overall, our project management approach consists of six main areas of focus, all of which are critical to maintaining a high level of responsiveness, while keeping quality maximized. They are as follows:

<u>Project Work Plan:</u> We develop a Project Work Plan (PWP) before any work commences. It provides a full description of the scope of services, and unique issues such as permit requirements, list of deliverables, schedule, budget, and lines of communication. It also identifies the staff that will perform the analysis or design

and quality control functions for the project staff. The PWP will list these commitments and will be distributed to all staff at the kick-off meeting.

Kick-off Meeting: Once NTP is obtained, a kick-off meeting is held with key project staff, including the City PM (if desired). The agenda items will include the key project issues as well as review and acceptance of the PWP. Tasks and task managers will be identified.

Coordination Meetings: Erik and Carlos will conduct regular coordination meetings (depending on the length of the schedule, these may be weekly or biweekly) with the task managers. During these meetings, work progress will be discussed and any issues that need to be resolved will be addressed. Furthermore, it is Erik's responsibility to coordinate with the appropriate task managers regarding their work efforts. Erik will keep the City PM informed of all key project issues and any other issues to the extent desired. Other coordination that will be performed as part of our services will consist of ensuring that all stakeholders are kept aware of the project, including its schedule.

Control of Project Schedule: The project schedule is an integral part of the Project Work Plan. We will prepare a project schedule showing the major project milestones, allowance for quality control reviews, and City review periods. Upon NTP, our PM will submit a full detailed schedule including all project activities for City approval. He will meet with the City PM to ensure that all parties are in agreement with the schedule and the relationships between project tasks. On a regular basis, Erik will update the project schedule with input from the task managers and submit it to the City PM. The project progress and completion dates will be monitored against the baseline master schedule. He will monitor the progress of the work effort and review scope changes that could affect production.

Control of Project Budget: To further monitor and control costs, Erik will utilize the earned value method to compare project expenditure to progress on a real time basis to ensure compliance with task budgets. Task managers will evaluate the progress of their task(s) weekly and designate the progress as a percentage of the task's budgeted value, resulting in an 'earned value' for this task. The earned value of each task will then be compared to the actual cost expended on that task to accurately determine the relationship between the level of effort expended to achieve the progress and the status of work product. This comparison allows our team to adjust resources and task approach to ensure that project costs are held in check. This effort allows us to accommodate minor changes in our scope without the need for supplemental agreements.

Innovation: Another aspect of staying responsive to the client is to constantly strive to utilize innovation to save the client time and money. At Choice we pride ourselves in staying abreast of ever changing technology and innovating every aspect of our business. We have full GIS capabilities with an extensive library of information that can be used to streamline data collection efforts. Over the last few years, both smart phones and tablets have become prevalent in our society, and they also have numerous uses in our industry. We regularly use iPhones or iPads to take georeferenced photographs. They are useful in complicated intersections and/or segments making it easy to identify the location where photographs were taken. The photographs can be quickly emailed to the office for immediate use. There are applications already available on the market for the collection of Turning Movement Counts. This is very useful for guick access to data collected in the field via email/internet. They can be used for spot counts to immediately verify a specific condition. All our field vehicles are equipped with dash cams which record field conditions while driving through study sites and can also be used for spot counts. These are just some examples of how we use our innovation to save the client time and money.

Availability of Project Team

The availability of the key Choice staff is shown on the organizational chart. As can be seen, the depth and availability of the entire team is significant and sufficient to handle the workload needed for the City. Several projects are being finalized which will further increase our availability by the time this agreement gets executed. In addition, the presence of our subconsultants, Metric and EXP, gives our team additional redundancy to handle multiple concurrent tasks as needed while still meeting compressed schedules.

Internal Peer Review Procedures

Quality Assurance Process

Choice follows a complete Quality Management System (QMS) which provides the tools and culture to ensure quality is a day-to-day activity in the office. There are two kinds of quality activities. The first is Quality Control (QC) which occurs daily by those working on the assigned tasks. Before they finish their work, they review their product and ensure it's ready for the next person to use in the workflow. Prior to advancing internal work products, a peer review is performed by staff of the same category (i.e., a technician reviewing technician's work or an engineer reviewing engineer's work), not involved in the development of that work product. This ensures that the review is performed with the understanding of the context of the work. This process continues until the work product has been brought to a draft stage. The draft product is then reviewed by an independent engineer. At this point, the second kind of quality activity, Quality Assurance (QA), can begin. QA is the step-by-step documentation effort of the QC that occurred during the development of the work product prior to releasing it to the client. This is a "failsafe" effort which ensures that extensive and appropriate QC was performed. In order for QA to be effective, there has to be accountability and an established process with custom checklist (depending on the work product) that ensures the appropriate level of QC has occurred and all comments have been addressed. A number of objectives will be involved in our QA program. Our process is built to make sure three things are accomplished:

- Meet Criteria/Regulations: Use of experts to ensure appropriate engineering or proper documentation of variations
- Accurate Recommendations: Use of professionals with broad experience for reviews
- Impacts Identified: Use different disciplines to review and properly identify impacts
- Appropriate Costs: Ensure cost estimates accurately reflect of work required
- Ensure Quality: Use qualified staff (engineers, designers, technicians, etc.) not involved in the project for peer review

All these efforts are performed under an extensive documentation process which ensures all submittals have gone through the QC/QA process prior to leaving the office. The QA/QC review process will be managed by Rafael S. Aguilar, P.E., a principal in the firm who will be supported by Leonardo Francis, CGC.

www.ChoiceEng.com

PERSONNEL

Professional Qualifications, Certifications, and Capacity of Staff

As mentioned before, **Choice** is a full-service engineering consulting firm located within Miami-Dade County. We have attached our professional licenses/certifications from both Miami-Dade County and the State of Florida at the end of this section. **Choice** is a State certified Disadvantaged Business Enterprise (DBE) and Small Business (SB) Firm. We are currently prequalified by the Florida Department of Transportation in Traffic Engineering Studies (6.1), Traffic Signal Timing (6.2), Intelligent Transportation System (6.3.1-6.3.4), as well as Minor Highway Design (3.1), Signing, Pavement Marking, & Channelization Design (7.1), Lighting Design (7.2), Signalization Design (7.3), Subarea/Corridor Planning (13.5), and Transportation Statistics (13.7). Our expertise is broad and has a strong foundation in transportation engineering. **Choice** staff has been providing transportation infrastructure services to public agencies in South Florida for over 35 years. For additional support of specialized services, we have teamed up with Metric Engineering and EXP.

Table 1, below, offers a brief description of the experience gained by the **Choice Team** staff on similar openended, public sector continuing services contracts.

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Carlos Francis. PE_ PTOE. RSP1 Deputy Project Manager 30 BSCE V <td>Erik Echezabal, PE, PTOE</td> <td>Project Manager</td> <td>13</td> <td>Ш</td> <td>MSCE</td> <td>1</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td>\checkmark</td> <td>✓</td>	Erik Echezabal, PE, PTOE	Project Manager	13	Ш	MSCE	1	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		\checkmark	✓
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Mario B. Roias IV. PE Roadway Engineer 8 MSCE V <td>Alexander Socarras, PE, PTOE</td> <td>Traffic Engineer</td> <td>15</td> <td></td> <td>BSCE</td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>~</td> <td>~</td> <td>✓</td> <td>\checkmark</td> <td></td>	Alexander Socarras, PE, PTOE	Traffic Engineer	15		BSCE			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	~	~	✓	\checkmark	
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Sergio Rios Traffic Analyst 5 II BSCE ✓ <t< td=""><td>Stefan Escanes, PE, PTOE</td><td>Traffic Engineer</td><td>12</td><td></td><td>BSCE</td><td>1</td><td></td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>~</td><td></td><td>1</td><td></td><td>✓</td><td>~</td><td>✓</td><td>~</td><td>✓</td><td>~</td><td>~</td><td></td></t<>	Stefan Escanes, PE, PTOE	Traffic Engineer	12		BSCE	1		1	1	1	1	1	1	~		1		✓	~	✓	~	✓	~	~	
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Jennifer Borges, PE, PTOE Traffic Engineer 14 MSCE	EXP																								
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Table 1 – Choice Team Experience

Project Manager Experience

To serve the City in the most efficient manner, we have designated a single point of contact to maintain communication with the City and provide the necessary services as needed; however, a Deputy Project Manager is identified to assist and ensure the team properly addresses the City's needs in an expeditious manner.

Erik Echezabal, MSCE, PE, PTOE

Erik will be the Consultant Project Manager (CPM) and point of contact. His BSCE and MSCE from Florida International University are in Civil Engineering with emphasis in Transportation Engineering. He has over 13 years of transportation engineering experience including Resurfacing, Restoration and Rehabilitation (3R) safety reviews, traffic operations analysis, safety analysis, signal warrant studies, qualitative assessments, traffic impact studies, pedestrian mid-block evaluations and traffic signal plans development. Erik gained arterial management experience through his work on various active arterial and work zone management projects for the Florida Department of Transportation (FDOT). He supported design projects with conceptual design, development of signal operating plans and Traffic Control Plans (TCP) refinements. Erik has hands-on experience with intersection and corridor level signal timing optimization, development of signal coordination plans, and special events timing. He has programmed 2070 signal controllers, 170 signal controllers (operating with 233 intersection software, including BiTran and MC1 firmware) and NEMA signal controllers. He is knowledgeable in McCain QuicLoad laptop software used to manage City traffic signals and has experience in traffic engineering software applications, including CORSIM, SYNCHRO and SimTraffic. Erik has served as engineer of record (EOR) for multiple projects within the City of Key West, including FDOT and City of Key West Projects. Some contracts in which Erik has served as PM or had major roles include:

- City of Key West General Traffic Engineering Services (planning, traffic studies, data collection, design, signal retiming, and traffic signal maintenance)
- Monroe County, Signal Timing Engineering Services
- FDOT District 6 TSM&O, Signal Retiming Consultant
- Keys COAST Connected Vehicles Design-Build Project
- Districtwide Traffic Ops / Plans Review & Ped/Bike Safety Consultant
- FDOT District 4-I95 at Hypoluxo Rd DDI, Signal Design
- FDOT District 6 SR 25 Okeechobee Rd Smart Workzone Support Contract

Carlos Francis, PE, PTOE, RSP1

Carlos will serve as Consultant Deputy Project Manager (CDPM) and brings more than 30 years of experience ranging from traffic engineering and minor design to construction inspection. His first 10 years of experience were acquired at FDOT District 6 as a PE Trainee, Traffic Operations Engineer, and ultimately as the District Safety Engineer. The subsequent 15+ years have been the private sector as a consultant. He is experienced in project management, technical analysis, peer reviews, report preparation, plans preparation, and technical writing. His technical expertise includes traffic engineering, operations and safety analysis, planning, modeling, traffic control systems, traffic modeling, traffic signal timing coordination/analysis/implementation, and minor design. He has participated in presentations to City/County Officials and community meetings to garner support for engineering projects. Carlos has served as PM on numerous projects for clients such as FDOT, Monroe County, City of Miami Beach, City of South Miami, and Miami-Dade County. Some of these projects include:

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- FDOT District 6, Districtwide Traffic Operations Safety Studies
- FDOT District 6, Districtwide Public Transportation Consultant
- FDOT District 6, ADA Districtwide Compliance Consultant
- FDOT District 6, Signal Retiming Consultant
- FDOT District 6, Kendall Drive RRR Project
- FDOT District 6, ITS-General Engineering Consultant
- Monroe County, Signal Timing Engineering Services
- City of Key West, Signal Timing Efforts (jointly w/Monroe County)
- City of Miami Beach, Traffic Engineering Consultant
- City of South Miami, Traffic Engineering Consultant

Key Staff Bio

Rafael S. Aguilar, PE

Rafael is an FIU graduate and brings with him over 24 years of experience in Highway & Infrastructure Design. His career has been focused on roadway design, traffic control, signing and pavement markings, lighting, and signalization design. Throughout his career, Rafael has served as technical advisor, ADA specialist, senior roadway engineer and as PM for numerous roadway projects and districtwide push-button contracts. As PM, Rafael has managed contracts for several types of projects, including ADA, minor and major reconstruction projects, RRR, POP, ROP and Safety Improvement Only. Rafael served as the interim ADA Coordinator for the FDOT District 6 and currently serves as the District's ADA Consultant. He was key in District 6 ADA transition Plan during the inventory and implementation phase of "ADA Only" projects. Currently, Rafael serves as the company's Highway Engineering Lead and ensures the timely delivery of context driven quality projects.

Eugenio S. Lopez, PE

Eugenio has 20 years of experience in the field of transportation engineering with the last 8 years as a licensed engineer. His experience includes the development and preparation of safety and operations studies for arterials, freeways, and composite roadway networks for FDOT District 6, District 4, and MDX. Specific studies included road safety audits, feasibility, traffic impact, speed, before/after, travel time/delay, left-turn warrant, qualitative assessments, fatal disposition reports, and signal retiming studies. He has been involved in the process and development of planning studies, and the preparation and execution of project presentations and public outreach. He is proficient in HCS, SYNCHRO, and CORSIM.

Alexander Socarras, PE, PTOE

Alexander has over 14 years of experience in the field of transportation engineering. He began his career in traffic and transportation engineering in 2007. Alexander has successfully completed numerous traffic operations/safety projects for the FDOT Districts 4 & 6 including 3 Interchange Operational Analysis Reports and 1 Interchange Justification Report for District 4 and a District-wide Traffic Operations Safety contract for District 6. He is proficient using the Highway Capacity Software (HCS), Synchro, and Corsim simulation software's used to perform traffic analyses. He is familiar with the methodologies of the latest Highway Capacity Manual, the Manual on Uniform Traffic Control Devices (MUTCD), the Traffic Engineering Manual (TEM), the Manual on Uniform Traffic Studies (MUTS), and the Project Traffic Forecasting Handbook. Alexander has worked for 6 months alongside FDOT District 6 staff as an in-house consultant in the traffic operations unit.

Mario B. Rojas, MSCE, MBA, PE

Mario is an F.I.U. graduate with a Bachelor of Science degree in Civil Engineering. He brings with him over 8 years of experience in Highway & Infrastructure Design. His career has been focused on roadway design, traffic control, signing and pavement markings, lighting, and signalization design. Throughout his career, Mario has served as technical advisor, senior roadway engineer, and PM for numerous roadway projects and districtwide push-button contracts. As PM, Mario has managed contracts for several types of projects, including ADA, minor and major reconstruction projects, RRR, POP, ROP and Safety Improvement Only. Mario currently serves as a Lead Designer and Production Manager with the roadway and traffic group. Mario is proficient in CADD software, including 3D corridor modeling. Mario has been the Engineer of Record and Lead Designer for FDOT, MDX, and various municipalities.

Alejandro Ortega, MSCE, El

Alejandro has a BSCE and MSCE in Civil Engineering from Florida International University (FIU) with emphasis in Transportation Engineering. He has 12 years of experience in the field of transportation engineering, he has been involved in the preparation of traffic safety and impact studies, and projects for the FDOT Traffic Operation Office, including the review and update of roadway inventory. His experience includes the development and preparation of safety and operations studies for arterials, freeways, and composite roadway networks for FDOT District 6. Specific studies included traffic impact, speed, before/after travel time/delay, traffic warrant analysis, qualitative assessments, and fatal disposition reports. He has also been involved in FDOT rail crossing tasks that included updating and maintaining the Railroad/Highway Crossing Inventory Database and related sources,

including documents and tools used by FDOT's Central Office, Federal Highway Administration, Federal Railroad Administration, local governments, and other railroad companies. He also has been involved in the preparation and execution of project presentations and public outreach. He has experience in HCS, SYNCHRO, CORSIM, and ARCGIS.

Leonardo Francis, CGC

Leo is an F.I.U. graduate with degrees in Construction Management and Architectural Technology. He brings with him over 35 years of experience in Municipal Civil Engineering & Infrastructure Plans Production, Design, and Construction for the City of Miami Beach Public Works Dept. He led the transition of the Public Works Department's Civil Engineering Plans Production from paper to CADD. Developed and implemented the Department's CADD standards, trained staff in the use of, and managed the department's CADD system. He was responsible for plans production along with QA/QC of all construction drawing for the department's infrastructure projects. As a Special Projects Coordinator, he implemented the City's Infrastructure Management System (CityWorks), including its integration with the City's Geographic information system and coordinated the CityWorks training efforts for the entire Public Works Operations staff. Additionally, he managed the replacement, construction and expanded the citywide Transit Bus Stop Shelters, the installation of the Transit Bus Stop benches and bicycle parking stations. Supervised inspection activities in the construction and retrofitting of intersection improvements for ADA compliance. Managed the installation of the city's uniquely branded Citywide Wayfinding Signage System which included both vehicular and pedestrian signage. He enhanced the city record drawing filing and management systems, including advancing guality control of the as-built documents as they are migrated into the geographic information systems. The last 2 years his focus has been in Signal Retiming Studies, Traffic Impact Studies, Traffic Operations Plans and Roadway Safety Audits.

Stefan Escanes, PE, PTOE

Stefan currently serves as Project Manager and South Florida Traffic Division Manager. His traffic engineering expertise spans from transportation planning to signalization design and smart work zone systems implementation. His management experience includes management of multiple concurrent work orders and data intensive large-scale projects through the various TSM&O, traffic operations, signalization, transportation planning, and PD&E Study contracts. Additional experience includes traffic analyses for Traffic Operations and PD&E Studies using the latest traffic simulation software including Vissim, Aimsun, Synchro, Sidra, Corsim and more. His 14 years of experience includes Active Arterial Management (AAM) and signal retiming and implementation in Florida. He has also worked on adaptive and Transit Signal Priority (TSP) projects, knowing when to apply these operational technologies for maximum agency benefit. Stefan is one of the main transportation engineers at Metric who performs in-depth traffic modeling and simulation services, including for roundabouts statewide.

Jennifer Borges, MS, PE, PTOE

Jennifer PE, PTOE, MS began her career in roadway design, providing a strong foundation for her current role as a traffic engineer. Ms. Borges has nine years of experience working for the District Six Traffic Operations Office. From 2013-2016, Ms. Borges worked as a traffic analyst for the Department, serving as a project manager and overseeing consultant contracts and addressing citizen requests. Then as a consultant from 2016-2022, Ms. Borges provided in-house consultant services to the Traffic Operations Office continuing to address citizen requests, reviewing permits, reviewing safety studies, coordinating push-button projects from study recommendations to design to construction, and assisting the Pedestrian and Bicyclist Specialist. Throughout her time at FDOT, Ms. Borges addressed over 425 constituent requests, managed all Traffic Operations' push-button projects from 2016-2022, and has prepared, presented, and received approved funding for over 25 projects to be added to FDOT's Work Program. Currently, Ms. Borges serves as the Traffic Operations Manager at EXP working to prepare scope of services and contract proposals and submittals. Ms. Borges is experienced and proficient using and applying the principles within the Highway Capacity Manual, the Manual on Uniform Traffic Control Devices (MUTCD), the Traffic Engineering Manual (TEM), the Manual on Uniform Traffic Studies (MUTS), and more.

Erik Echezabal, MSCE, PE, PTOE has over 13 years of transportation engineering experience, including signalization and ITS design, all phases of TSM&O initiatives (Planning, Design, Integration, Operations, and Maintenance), minor roadway design, maintenance of traffic, signing and pavement marking, signal retiming, signal inspection, signal controller bench testing and troubleshooting, and traffic operations / safety analysis. Erik gained significant and important signalization/ITS experience through his work on various TSM&O retiming contracts, RRR, RO, and reconstruction projects. Erik has retimed over 600 traffic signals in Miami-Dade and Monroe Counties and has hands-on experience with intersection and corridor level optimization. He has programmed 2070 (E and LX) signal controllers, 170 signal controllers (including Miami-Dade County's controller), and NEMA signal controllers (TS1, TS2, and ATC). He is knowledgeable with KITS ATMS, McCain QuicLoad and Transparity IMS laptop software(s). He is certified IMSA Traffic Signal Senior Field Tech Level III and Traffic Signal Inspector for Advance Technologies, Advanced MOT, and Wavetronix Microwave certification.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS 🖊 JULY 2016 TO PRESENT

Keys COAST Design-Build Connected Vehicles Project (FDOT D6) Monroe County: 07/2021-Present

EOR responsible for signalization and ITS improvements along SR 5/US-1/Overseas Highway from Key West to Key Largo (approximately 104 miles) at 59 project sites (traffic signals, weigh-in-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/ loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions. This project also includes implementation of ATSPM and Connected Vehicle Central Software at the SunGuide TMC and integration of Onboard Units (OBU) for 250 vehicles.

TSM&O Master Plan (FDOT D6) Districtwide: 02/2020-Present

Serving as a TSM&O Engineer to provide support with the development of the TSM&O Master Plan. Erik is currently assisting with the Data Collection and Goal Setting task which addresses two of the nine defined tasks for the TSM&O Master Plan scope of services. Erik is facilitating the development of the comprehensive TSM&O GIS map by gathering data associated with ITS devices, communication infrastructure, mapping of TSM&O operations of all agencies with District 6, and assessment of data sources for performance measurement. In addition, he is also supporting with development of Goals, Objectives, and Measures (GOMs) by summarizing relevant information from various TSM&O FDOT documents and aiding with the update of the District 6 TSM&O Action Plan of PLEMO responsibilities.

Districtwide Traffic Signal System Retiming (FDOT D4) Districtwide: 10/2019-Present

Serving as a TSM&O Engineer to provide support with the development of the initial phase of the new District 4 signal retiming prioritization program which will be a data driven process, repeatable, and sustainable for selecting corridors for planned retiming efforts. Erik is currently supporting the development of the prioritization methodology for the signal retiming prioritization process and supporting prioritization tools. The retiming prioritization program targets all eight signal maintaining agencies within District 4, and the current task involves establishing the initial prioritization matrix framework, data gathering and collection, agency data identification, and preliminary priority matrix development.

SR 94 Kendall Dr / RRR From SW 132 Ave to SW 122 Ave (FDOT D6)

Miami-Dade: 01/2018-Present

EOR responsible for analysis and design for implementation of signalization improvements to this segment of Kendall Dr, which included 4 signalized intersections. Project improvements included design of hybrid loop-video detection/VVDS system with existing Econolite 2070LX signal controller and Centracs ASCT system and upgrading pedestrian signal features. This project required significant coordination with the maintaining agency due to limitations with existing signal equipment.

FM No.: 435755-1-12-01

FM No.: 444920-1-52-01

Client PM: Bruce Bovd (561) 743-9737

Client PM: Kenneth Jeffries (305) 470-5445

FM No.: 230017-9-32-01

FM No.: 433264-2-32-01

Client PM: Ivette Funtanellas. PE (305) 470-5270

Client PM: Daniel Smith (954) 847-2633

Erik Echezabal, PE, PTOE

Signal Retiming Services Consultant (FDOT D6) Districtwide: 08/2018-Present

Serving as the Deputy Project Manager supporting with the overall management and performance of signal retiming services for over 1300 signalized intersection on the State Highway System utilizing multiple subconsultants. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using Synchro, field fine tuning, and performing before & after analysis using RITIS data and documentation. Supported with the transfer of operations and maintenance (O&M) responsibility of Traffic Signals in Monroe County (MM 4.4 to MM 104.6); integration of cellular communication, controller CPU upgrade (1-E to 1-C) with database conversion and testing, miscellaneous troubleshooting, cabinet assembly retrofits to establish alarms and provide improved accessibility to the police panel, and on-going operational support. Supported with TSM&O initiatives such as the development of the D6 Arterial Management Plan, Arterial Performance Reporting, on-going Automated Traffic Signal Performance Metrics (ATSPMs) implementation plan, and transition of City of Key West Traffic Signals O&M to the District. Erik is currently supporting the TSM&O unit with expanding the NW 119 Street ASCT pilot project limits to NW 125 Street by developing the signalization/ASCT plans for pushbutton construction, and eTraffic contribution.

General Traffic Engineering Services (City of Key West)

Citvwide: 05/2018-Present

EOR responsible for analysis and design for implementation of signalization improvements along Flagler Ave at Bertha St/First St and Kennedy Blvd, and Kennedy Dr Mid-block signalized crossing. Project improvements include upgrading to full actuation and addition pedestrian signalization at Bertha St/First St and redesign of the eastbound left turn lane and addition of pedestrian signalization at the intersection of Kennedy Blvd. As part of post design, Erik assisted with addressing technical controller and cabinet requests by the Contractor and performing walkthrough inspections. Erik was also EOR for two signal retiming efforts along Flagler Ave and White St corridors. In addition, he supported with controller database 1:1 conversions and troubleshooting support with the signal maintaining contractor, technical advisory support, and MOT signal timing support to City engineering staff.

SR 826/Palmetto Expressway from E of NW 67 Ave to E of NW 57 Ave (FDOT D6)

Miami-Dade: 07/2017-Present

EOR responsible for developing the signalization plans for the full reconstruction of the SR 826/Palmetto Expressway interchange (tight diamond) at SR 823/NW 57 Avenue/Red Road. The scope of work includes new extended capacity cabinet assemblies, video detection, UPS, full actuation, new mast arms, and pedestrian signalization. Erik was responsible for the analyzing of evaluating a single controller operation and coordinating with the signal maintaining agency regarding the feasibility by providing the high level schematic of detector input utilization, switch pack/load switch assignment, and database programming. He also analyzed capacity restrictions of the MD 660X cabinet and determined SDLC interface is required with the proposed 2070LX ATC signal controller.

SR 5 US-1 / RRR & Safety (FDOT D6) Miami-Dade: 05/2017-08/2020

Engineer of Record responsible for the production of Signalization Plans to this segment of US-1, in Miami-Dade County. This project includes four (4) signalized intersections all which are to be upgraded to video detection. This project required major coordination with the maintaining agency due to the implementation of video detection/VVDS on existing Econolite 2070LX traffic signal controllers and MD 552 Caltrans cabinets, and retrofit to the existing ASCT system.

Districtwide Traffic Operations Pushbutton Design (FDOT D6)

Miami-Dade: 05/2017-Present

EOR responsible for the development of ITS plans for the integration of wireless communication to advance flashers at Overseas Highway/SR 5/US-1 at Snake Creek Drawbridge. The project required integrating advance bridge control flashing beacon assemblies with the bridge tenders house. Erik analyzed the existing wireless radio communication system and interaction with the mechanical signal control relays. The design plans included solar ITS beacon assemblies, supplementary traffic control warning signs, wireless radio communication for master and remote stations, and preemption operational sequence and provisions for the flashing beacons.

Signal Retiming Services Consultant (FDOT D6) Districtwide: 07/2016-Present

Responsible for supporting performance of signal retiming services for the State Highway System. Efforts include data collection efforts, coordination with multiple maintaining agencies, development of traffic models using SYNCHRO, field fine tuning, and performing before and after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, various TSM&O/ITS studies, and plans development. In addition, Erik served as EOR for various signalization pushbutton projects in Monroe County, which included signalization upgrades at College Road, MacDonald Avenue, Tarpon Basin Drive, and all traffic signals within the City of Key West. Erik mitigated the issue of inaccessible police access panels for elevated traffic cabinet assemblies by developing a rear door retrofit solution, where the standard rear door of a 332 cabinet was replaced with a retrofit door that relocated the manual police pushbutton. He performed the feasibility study to implement the first flashing red arrow operations in the District and was responsible for programing the signal controller and field integration at the signalized intersection of SR 5/Overseas Hwy at N Roosevelt Boulevard.

- 2 of 2

FM No.: 435201-4-32-01 Client PM: Yamilet Diaz, PE (305) 470-5757

Client PM: Kellv Crowe, PE (305) 809-3967

FM No.: 435760-3-52-01 Client PM: Raul Quintela, PE (305) 470-5271

FM No.: 250629-5-32-01

FM No.: 433455-4-52-01

Client PM: Ivette Funtanellas. PE (305) 470-5270

Client PM: Jacques Defrant. PE (305) 470-5335

Client PM: Adriana Manzanares (Retired)

FM No.: 435201-2-32-01

Carlos Francis, PE, PTOE, RSP1 Project Manager

YEARS OF EXP: Over 30

CERTIFICATION:

Prof. Registration: PE No. 51364, 1997 Prof. Traffic Operations Engineer, 2003

EDUCATION: BS in Civil Engineering, UF 1991

FM No.: 421054-1-12-01

SUMMARY

Carlos Francis, PE, PTOE, RSP1 has more than 30 years of professional experience; his first 10 years were with FDOT, where he completed the Department's PE Program and developed to become the District Safety Engineer. He is a founding Principal of Choice Engineering Consultants, Inc., where he has successfully led the Traffic Group on various districtwide contracts and multiple projects for FDOT D4, D6, Miami-Dade County, Monroe County, and the City of Key West. Carlos' career has been focused on traffic operations, safety, TSM&O, signal retiming, planning and traffic forecasting. Through his career, Carlos has served as technical advisor, senior traffic engineer, and as project manager for numerous traffic safety studies and districtwide contracts. As project manager, Carlos has managed contracts for a wide variety of projects, including RRR, intersection analyses, review of LAP projects, TSM&O initiatives, traffic impact studies, ASCT corridor design, pedestrian and bicycle studies, safety reviews, and signal timing development & implementation.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / APRIL 2015 TO PRESENT

General Planning Consultant (FDOT D6)

Districtwide: 08/2020-Present

Subconsultant responsible for providing engineering and planning services to support the District Six Planning and Environmental Management Office (Department). As a part of this contract, we've performed an initial lighting justification report on SR 5/US 1/ Overseas Highway between MM 100 (and MM 104, in Key Largo, Monroe County, Florida. The purpose of this study was to assess the study segment to determine if lighting warrants were met and evaluate the need for supplemental lighting (or other safety enhancements) to mitigate crash patterns along the study limits.

Signal Retiming Services Consultant (FDOT D6)

FM No.: 435201-2-32-01 & 435201-4-32-01 Client PM: Jacques Defrant, PE & Yamilet Diaz, PE (305) 640-7333

Client PM: Kenneth Jeffries (305) 470-5445

Districtwide: 06/2017-Present Project Manager responsible for supporting the overall performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System utilizing multiple subconsultants. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using SYNCHRO, field fine tuning, performing before & after analysis using RITIS data, documentation of improvements. Additional efforts included performing Active Arterial Management Studies, various TSM&O/ITS studies & plans development, and Strategic Intermodal Systems (SIS) Support studies to improve traffic operations along the district's intermodal connectors and promote seamless change between multiple modes of transportation.

Congested Corridor Master Plan (FDOT D6) Districtwide: 11/2019-Present

Subconsultant responsible for providing support to Congested Corridor Master Plan which includes efforts such as developing goals, objectives, and measures for the plan, data collection & analysis, research on automated, connected, electric & shared vehicle technologies, developing the TSM&O strategy matrix, performing a needs assessment for the district, and developing an implementation plan considering the funding availability and the work program.

ADA Compliance Consultant (FDOT D6) Districtwide: 01/2016-Present

Serving as a traffic engineer providing planning and traffic engineering services to produce planning level studies, plans review, pedestrian safety studies, and traffic engineering studies to support the Intermodal Systems Development Office. This project includes the implementation/review of all ADA improvements performed by the District, ADA Plans Review, preparation of construction plans for ADA only improvements to be constructed through the Work Program and assisting the Department in the preparation of documents required for the settlement of ADA related lawsuits against the Department. In addition, we've completed a study to evaluate the feasibility of providing sidewalks and bicycle lanes along both sides of SR A1A/Collins Avenue near Haulover Park in North Miami Beach.

FM No.: 435755-1-12-01 Client PM: Kenneth Jeffries (305) 470-5445

FM No.: 418064-1-32-03

Client PM: Tiffany Gehrke (305) 470-5308

Carlos Francis, PE, PTOE, RSP1

General Traffic Engineering Services Citv of Kev West: 05/2018-Present

Serving as the Project Manager to provide general traffic engineer services to the City. Providing signal retiming services along with additional traffic engineering professional services such as preparing traffic operations studies to address request by the community related to signal warrants, all-way stop warrants, pedestrian safety concerns, parking zones, bicycle lanes, etc. Additional services include transportation design for roadway improvements.

SR 94 Kendall Dr – RRR Miami-Dade: 12/2017-Present

FM No.: 433264-2-32-01 Client PM: Ivette Funtanellas, PE (305) 470-5270

Serving as the Project Manager responsible for implementing scoped improvements to this 0.75 mile urban segment of SR 94 in Miami-Dade County including milling and resurfacing, signing and pavement markings, ADA compliance (reconstruct substandard ramps, remove obstructions from sidewalk, and provide missing ramps), lighting, and signal improvements. Roadway design was completed within budget and Department schedule. Project Letting was December 2019.

Traffic OPS Studies (FDOT D6) Districtwide: 11/2017-Present

Serving as the Project Manager responsible for the overall management and performance of traffic engineering services to produce operational studies and other traffic engineering studies (including traffic data collection) to support the Traffic Operations Office and address citizen complaints. Such efforts include preparing traffic operations studies to address request by the community related to signal warrants, left turn phase warrants, pedestrian safety concerns, bicycle lanes, qualitative assessments, arterial analysis, etc. This contract also includes efforts to support the FDOT with the maintenance and operational takeover of the traffic signals in Monroe County.

I-195 Corridor Planning Study (FDOT D6) Districtwide: 08/2017-Present

Serving as subconsultant responsible for performing the corridor wide safety analysis as part of the Interstate 195 Corridor Planning Study from Interstate 95/ NW 12 Avenue to Alton Road (approximately 5 miles), using the latest five years of crash data. The analysis consisted of GIS based crash clustering to identify concentration of crashes along the mainline and ramps.

SR 826 Express Lanes PD&E, US 1 to NW 36 St Miami-Dade: 09/2016-Present

Serving as subconsultant responsible for the assessment and coordination of different conceptual alternatives (including No-Build) for operational improvements, safety analysis of existing and future roadway conditions, and traffic data development review. In addition, due to the historic nature of SR 986 (Sunset Dr), an arterial safety study is being performed to justify any geometric changes to this roadway within the study limits. Synchro and SimTraffic have been used to evaluate and improve the arterial operations due to future traffic under the different analysis years and Express Lanes concepts.

CH PEREZ & ASSOCIATES

Miami-Dade County Expressway Authority– General Engineering Consultant

MDC: 06/2006 - 04/2015

Sub-consultant responsible for coordination of traffic data collection such as TMC's, ATR hose counts, vehicular travel time & delay, and intersection delay studies. Provided Traffic Safety and Operations Reviews (including high crash lists, fatal crash reviews, proactive safety reviews, sign reviews, and speed assessment); transportation planning and traffic engineering services such as signal warrant studies, SYNCHRO analysis, VISSIM simulation, intersection analysis, traffic forecasting, concept reports, review of MLOU's, IMR's, PD&E studies, & DRI's. Specific tasks: traffic analysis for SR 874/Killian Pkwy interchange (VISSIM analysis), SR 874 W. Ramp to SW 136 Street (trip generation/assignment and traffic forecasting), and transportation planning assessment for the SR 836 interchange at NW 87th Avenue considering the SR 836/SR 826 interchange reconstruction.

Metropolitan Planning Org. Support (FDOT D6) Districtwide: 11/2013 - 4/2015

Client PM: Curlene Thomas (305) 470-5408 Served as the Project Manager responsible for the performance of diverse planning, administrative, document reviews, technical reviews, and other tasks. These efforts included assisting the Miami-Dade MPO meet all federal requirements to secure and maintain funding for the implementation of their Unified Planning Work Program (UPWP) as well as the five-year Transportation Improvement Program (TIP) for the metropolitan planning area. Additional efforts included, preparing 5-year work program photo book, reviewing various planning documents, LAP projects, and scopes of services, and developing concept plans for pedestrian improvements along SR 5.

Client PM: Kelly Crowe (305) 809-3967

FM No.: 409521-6-32-01 Client PM: Julio Polo (305) 470-5335

FM No.: 440228-1-22-01 Client PM: Kenneth Jeffries (305) 470-5445

Client PM: Raul Quintela, PE (305) 470-5271

Client PM: Juan Carlos Villalba (305) 222-1217

FM No.: 432639-1-32-01

FM No.: 252094-1-12-08

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Rafael S. Aguilar, PE is a founding Principal, Lead Highway Engineer and Senior Project Manager for Choice Engineering and has 24 years of transportation design and project management experience. He has focused on highway design and ADA compliance for the past 20 years and has been involved in major and minor roadway projects throughout Florida, ranging from new construction, reconstruction, RRR, Pavement Only, Ride Only, Safety Only, ADA Only and Lighting Retrofit projects. Mr. Aguilar has assisted municipalities and state agencies with the implementation of their ADA Transition Plan. He recently worked with the Florida Department of Transportation District 6 and Central Office to develop and present the District ADA Coordinator Process Handbook and the ADA Quick Guide, currently being used by FDOT construction and maintenance personnel, as well as county and municipality representatives. He has successfully led the Roadway Group on various districtwide contracts and multiple projects for FDOT D4, D6, Miami-Dade County and the City of Key West. Mr. Aguilar is Senior Project Manager and Senior Roadway Design Engineer responsible for the design and production of transportation engineering projects for the Florida Department of Transportation, Miami-Dade County, and other municipalities throughout South Florida. Mr. Aguilar has specialized expertise in horizontal and vertical roadway geometry; traffic signing and pavement marking; signalization, lighting and is well versed in FDOT design, specifications, and construction procedures. He holds a current Advanced MOT certification.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / APRIL 2015 TO PRESENT

SR 994/Quail Roost Dr (FDOT D6) Miami-Dade County 05/2021-Present

Project No.: 443907-1-52-01 Client PM: Raul Quintela (305) 470-5271

Deputy Project Manager for this RRR Project responsible for implementing all scoped improvements to this 4-mile rural segment of SR 994/Quail Roost Drive, in Miami-Dade County. The project improvements include milling and resurfacing, minor widening, inclusion of 5-ft shoulders, retention swales to account for the additional impervious areas, traffic safety and operational improvements, Intersection Control Evaluation for the inclusion of a roundabout, signing and pavement markings, lighting and signalization improvements.

Keys COAST Design-Build Connected Vehicles Project (FDOT D6) Monroe County: 07/2021-Present

Senior Engineer responsible for supporting EOR with quality control management and specifications development for signalization and ITS improvements along SR 5/ US-1/Overseas Highway from Key West to Key Largo (approximately 104 miles) at 59 project sites (traffic signals, weigh-in-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions. This project also includes implementation of ATSPM and Connected Vehicle Central Software at the SunGuide TMS and integration of Onboard Units (OBU) for 250 vehicles.

Plans Review (Miami-Dade County TED) In-House Consultant 11/2020-Present

Responsible for the review of plans associated to permit applications to Miami-Dade County Public Works, in particular the Traffic Engineering Division. Reviews include major reconstruction projects, minor roadway improvements, signing and pavement markings and signalization improvements.

General Planning Consulting (FDOT D6) Districtwide: 08/2020-Present

Engineering of Record for the development of lighting justification report, preliminary corridor lighting calculation, design and construction cost estimates for traffic engineering studies in Monroe County. Responsibilities include coordination with utility agency and Department staff, sign and seal of final deliverables, and attending of the D6 Scoping Committee Meeting to present study findings.

FM No.: 444920-1-52-01 Client PM: Bruce Boyd (561) 743-9737

Project No.: EDP-PSA-2024 Client PM: Miguel Caldera (305) 470-5270 de County Public Works, in particular the Traf

Rafael S. Aguilar, PE

Traffic Operations Plans Review (FDOT D6)

Districtwide: 09/2019-Present

Serving as the senior reviewer supporting with the overall performance of plans review services to the Department's Traffic Operations Office. Performed detailed plans review of all District plans to ensure appropriate traffic operations measure and features meeting the Department standards and Traffic Operations standard operating procedures. Plan sets reviewed include, roadway, signing & pavement markings, signalization, lighting, ITS, landscape, TTCP, etc. All comments and marked up plans are documented through the Department's ERC system. Additional services included the performance of final inspections representing the Traffic Operations Office to ensure operational and safety elements are properly constructed as per plans and field conditions.

Misc. PE Design / Lighting Improvements (FDOT D6) Districtwide: 01/2019-Present

Project Manager and EOR for this project to improve lighting levels at signalized intersections for pedestrian safety. This project is in response to changes in the lighting standards implemented in 2016 due to high pedestrian fatalities at inadequately lit intersections. Eleven task work orders along multiple state corridors in Miami-Dade County were assigned through this contract addressing lighting deficiencies associated to pedestrian crossings. This project has a fast-paced schedule and design required extensive field work, coordination with maintaining agency.

SR 94 Kendall Dr / RRR From SW 132 Ave to SW 122 Ave (FDOT D6)

Miami-Dade: 01/2018-Present Client PM: Ivette Funtanellas, PE (305) 470-5270 Engineer of Record responsible for implementing all scoped improvements to this 1-mile urban segment of Kendall Drive, in Miami-Dade County. The project improvements include milling and resurfacing, minor widening, signing and pavement marking, ADA compliance, minor lighting improvements and pedestrian signal improvements. This project required significant maintenance of traffic coordination with adjacent projects, to the west and the HEFT Interchange Improvements.

SR 94 Kendall Dr / RRR (FDOT D6)

Districtwide: Miami-Dade: 02/2016- 10/2019

Lead Senior Project Engineer responsible for implementing all scoped improvements to this 2.25-mile urban segment of Kendall Drive, in Miami-Dade County including milling and resurfacing, minor widening, minor drainage improvements, bridge pier protection, signing and pavement markings, ADA compliance, minor lighting improvements and pedestrian signal improvements. This project required significant maintenance of traffic coordination with adjacent projects, MDX, CSX, Baptist Hospital and Dadeland Mall.

NE 23 Ave / Bridge Replacement (FDOT D4) Districtwide: 9/2018-Present

Responsible for the roadway and lighting components for this bridge replacement project in the City of Lighthouse Point. This project includes the reconstruction of the roadway to bridge approaches, raising the roadway profile to meet current vertical clearance criteria and major road closures for MOT. This project also includes multiple pavement designs, and design variations following the Florida Greenbook criteria.

Signal Retiming Services Consultant (FDOT D6) Districtwide: 9/2018-Present

Project Engineer supporting the performance of signal retiming services for Miami-Dade and Monroe Counties. Supported the Traffic Engineering group in miscellaneous Maintenance of Traffic support services including, providing real-time traffic monitoring and traffic data collection within active work zones, implementing smart technologies and concepts within work zones, providing signal timing support within work zones, reviewing Maintenance of Traffic Plans and determining the need for detailed analysis of Maintenance of Traffic Impacts, coordinating with traffic signal maintaining agencies, FDOT offices, and other public agencies.

General Traffic Engineering Services City of Key West: 05/2018-Present

Serving as the Project Manager to provide general traffic engineer services to the City. Providing signal retiming services along with additional traffic engineering professional services such as preparing traffic operations studies to address request by the community related to signal warrants, all-way stop warrants, pedestrian safety concerns, parking zones, bicycle lanes, etc. Additional services include transportation design for roadway improvements.

FM No.: 415239-4-32-01 Client PM: Jacques Defrant, PE (305) 470-5335

FM No.: 439712-1-32-03 Client PM: Patrick Marchant, PE (305) 470-5214

FM No.: 431170-1-52-01 / 431170-2-32-01 Client PM: Ivette Funtanellas, PE (305) 470-5270

FM No.: 434359-1-32-01

FM No.: 435201-4-32-01

FM No.: 433264-2-32-01

Client PM: Donovan Pessoa, PE (954) 777-4442

Client PM: Yamilet Diaz, PE (305) 470-5335

Client PM: Kelly Crowe (305) 809-3967

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Eugenio S. Lopez, MSCE, PE

Project Manager

YEARS OF EXP: Over 20

CERTIFICATION: Prof. Registration: PE No. 68213, 2008

EDUCATION:

BS in Civil Engineering, FIU, 2002 MS in Transportation Eng, FIU, 2004

SUMMARY

Eugenio S. Lopez, PE professional experience has focused on traffic safety, operations, and planning. Eugenio has performed every technical task associated with producing an engineering study from beginning to end. He has been a task manager, a deputy project manager, and now a project manager. He has been involved and has produced safety and operational studies, safety reviews, pedestrian and bicycle studies, planning studies, traffic impact studies, traffic forecasting, signal warrant studies, road safety audits, office and field based crash dispositions, project presentations, public involvement, project pursuits, addressing safety concerns from citizens, traffic signal optimization and implementation, and technical memorandums for different engineering objectives. Eugenio has also performed signal retiming efforts for the State Highway System and Strategic Intermodal System. For the last 3 years he has been intimately involved in signal retiming efforts throughout Miami-Dade & Monroe. Experienced with Synchro, HCS, CORSIM, and VISSIM analyses.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS 🖊 JANUARY 2016 TO PRESENT

Traffic Engineering and Planning Studies Miami-Dade: 09/2019-Present

Project Manager for performing a traffic study to measure the operational benefits or impact of opening the NW 154 Street bridge over I-75. Study area is bounded by SR 860/Miami Gardens Drive/NW 186 Street to the north, NW 138 Street and I-75/SR 924 to the south, SR 826/Palmetto Expressway and NW 77 Avenue to the east, and the Florida's Turnpike to the west. Scope of work includes: collection of 72-hr vehicle counts to determine peak hour of analyses (29 locations); 4-hr Turning Movement Counts (18 locations), traffic percent growth evaluation, origin-destination data using Streetlight, safety & operational field review assessments, existing and future operational analyses, planning level roadway segment analysis, future (year 2045) roadway link traffic volume development using SERPM, future year turning movement volume development, and mitigation strategies.

Pedestrian and Bicycle Safety

Statewide: 10/2020-Present

Client PM: John "Jack" Freeman (407) 540-0555

Client PM: Yamilet Senespleda (305) 375-2746

Project Engineer for performing traffic engineering services to produce pedestrian and bicycle safety studies. This task work order includes existing conditions, traffic data collection, field reviews, speed data collection, pedestrian counts, crash analysis operational analysis to determine practical and cost-effective engineering solutions that are feasible and constructible.

Traffic Ops Studies (FDOT D6) Districtwide: 09/2019-Present

FM No.: 409521-6-32-01 Client PM: Isis Sotolongo (305) 470-5187

Project Engineer responsible for performing pedestrian midblock crossing evaluations, exclusive pedestrian signal phasing evaluation, bicyclist safety assessment, and data collection [72-hr machine counts for vehicle volume and speed, Turning Movement Counts (vehicles, trucks, ped & bike), and ped/bicycle counts]. Also, the development of improvement sketches for FDOT Maintenance Office and coordinating with the City of Miami Beach for study developments.

Traffic Ops Studies (FDOT D6)

Districtwide: 11/2017-Present

Project Engineer responsible for performing the corridor wide safety analysis as part of the Interstate 195 Corridor Planning Study from Interstate 95/ NW 12 Avenue to Alton Road (approximately 5 miles), using the latest five years of crash data. The analysis consisted of GIS based crash clustering to identify concentration of crashes along the mainline and ramps.

General Traffic Engineering Services City of Key West: 05/2018-Present

Client PM: Kelly Crowe (305) 809-3967 Engineer providing general traffic engineering services to produce traffic studies, traffic signal system design, physical (field) timing of traffic signals, traffic signal detection systems, roadway capacity calculations and studies, roadway signage/warrants, design/siting, traffic counting, bicycle and pedestrian planning, parking studies, etc. To support the City, we have performed traffic signal retiming services to improve mobility, safety, and operations along Flagler Ave throughout the day. Additionally, we are evaluating the existing safety and operations at three intersections within the City to determine if a multi-way stop control is warranted based on the guidelines presented in the Manual on Uniform Traffic Control Devices (MUTCD), 2009

FEID: F930964447

EDP-PSA-2017 R

FM No.: 409521-6-32-01

Client PM: Julio Polo (305) 470-5335

Alexander Socarras, PE, PTOE Transportation Engineer

YEARS OF EXP: 15

CERTIFICATIONS:

Prof. Registration: PE No. 80510, 2015 Prof. Traffic Operations Engineer, 2017 IMSA Traffic Signal Technician, Level I Intermediate MOT

EDUCATION: BS in Civil Engineering, FIU 2011

SUMMARY

Alexander Socarras, PE, PTOE, successfully completed numerous traffic operations/safety and planning studies for the FDOT Districts 4 & 6 including 3 Interchange Operational Analysis Reports and 1 Interchange Justification Report. He is actively working on a Districtwide Traffic Operations and Safety contract for District 6 in which he completed over 100 safety and operations studies spanning from a simple Tech Memo to a more comprehensive Qualitative Assessment to evaluate the existing traffic conditions at a specific location or corridor. Since 2017, Alexander is actively supporting the FDOT Traffic Operations and TSM&O/ITS groups to improve the overall performance of nearly 1300 traffic signal on the State Highway System utilizing field data and HERE data from RITIS to develop and interpret performance metrics dashboards that quantify improvements and generate arterial performance reports. He is proficient using the Highway Capacity Software (HCS), SYNCHRO, and CORSIM simulation software's used to perform traffic analyses. He is proficient with the methodologies of the latest Highway Capacity Manual, the Manual on Uniform Traffic Control Devices (MUTCD), the Traffic Engineering Manual (TEM), the Manual on Uniform Traffic Studies (MUTS), the Project Traffic Forecasting Handbook, and the Highway Safety Manual (HSM), Alexander has worked for 6 months alongside FDOT District 6 staff as an in-house consultant in the traffic operations unit.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS 🖊 JUNE 2017 TO PRESENT

SR 5/US 1 Long Key Bridge (FDOT D6) Miami-Dade: 02/2021-Present

Transportation Engineer responsible for performing preliminary engineering analyses including existing traffic data collection and historical crash review the Highway Safety Manual (HSM) procedures as part of the SR 5/US-1 Long Key Bridge over Long Key Channel Bridge Project Development and Environment (PD&E) Study. Furthermore, a safety analysis was performed to identify and evaluate project safety needs associated with the future No-Build and Build Alternative(s) using the Highway Safety Manual (HSM) procedures to estimate the safety performance functions for each of the project alternatives. The project limits extend along SR 5/US 1/Overseas Highway from MP 3.104 (south of N. Conch Avenue) to MP 6.251 (Mile Marker 66), within the Florida Keys in unincorporated Monroe County.

Plans Review Consultant and Support Services - Ped/Bike (FDOT D6) Districtwide: 06/2018-Present

Provided professional engineering services to evaluate future traffic impacts to traffic operations resulting from proposed construction of a Regions Bank branch on the northeast corner of SR 5/S Dixie Highway and SW 124 Street/Chapman Field Drive within the Village of Pinecrest. Tasks included performing site visit to review existing roadway conditions, review of existing traffic volumes, traffic signal phasing and timing, and existing capacity analysis performed at various intersections surrounding the project site. Future conditions analysis was reviewed including trip generation and distribution, proposed site plan for proper access and circulation, parking, and future capacity analysis performed using SYNCHRO software.

General Traffic Engineering Services City of Key West: 05/2018-Present

Responsible for providing general traffic engineering services to produce traffic studies, traffic signal system design, physical (field) timing of traffic signals, traffic signal detection systems, roadway capacity calculations and studies, roadway signage/warrants, design/ siting, traffic counting, bicycle and pedestrian planning, parking studies, etc. To support the City, we have performed traffic signal retiming services to improve mobility, safety, and operations along Flagler Ave throughout the day. Additionally, we are evaluating the existing safety and operations at three intersections within the City to determine if a multi-way stop control is warranted based on the guidelines presented in the Manual on Uniform Traffic Control Devices (MUTCD), 2009

Signal Retiming Services Consultants (FDOT D6)

Districtwide: 06/2017-Present

FM No.: 435201-2-32-01 & 43201-4-32-01 Client PM: Jacques Defrant, PE & Yamilet Diaz, PE (305) 470-5757

Responsible for supporting overall performance of signal retiming services for nearly 1300 signalized intersection on the State Highway System utilizing multiple subconsultants. Efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using SYNCHRO, field fine tuning, and performing before & after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, various TSM&O/ITS studies, & plans development.

FM No.: 448206-1-22-01 Client PM: Bao Ying Wang (305) 470-5211

FM No.: 415239-4-32-01

Client PM: Kelly Crowe (305) 809-3967

Client PM: Isis Sotolongo (305) 470-5187

Mario B. Rojas IV, MSCE, MBA, PE Project Manager

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YEARS OF EXP: 8 CERTIFICATION: Prof. Registration: No. 89097, 2020

EDUCATION:

MA in Business Administration, UF 2020 MS in Civil Engineering, FIU 2016 BS in Civil Engineering, FIU 2015 BS in Business Administration, Newberry College 2013

SUMMARY

Mario Rojas has over 8 years of experience in major civil engineering projects as a Project Manager, Project Engineer, Roadway Designer, Pavement Design Engineer, and Utility Coordinator. Mario

worked on conventional and design-build projects for several clients including FDOT D4, FDOT D6, MDX, Miami-Dade County, City of Miami, and City of Doral. His roadway design experience includes milling/resurfacing, widening, full reconstruction, and site development. Additionally, Mario has experience with vertical construction. Mario earned a BS in Business Administration (2013), BS in Civil Engineering (2015), MS in Civil Engineering (2016), and MBA (2020). His education, combined with practical experience, willingness to learn, innate leadership skills, and integrity, makes Mario an invaluable asset to a company.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / AUGUST 2021 TO PRESENT

RRR / SR 860/Miami Gardens Dr from NW 27th Ave to NW 2nd Ave (FDOT 6) Miami-Dade County 07/2022 - Present Clien

Project Manager and EOR responsible for implementing all scoped improvements along SR 860/ Miami Gardens Drive / NW 183rd Street from West of NW 27th Avenue (MP 2.828) to West of NW 2nd Avenue (MP 5.505). This Resurfacing, Restoration, and Rehabilitation (RRR) Project sought to preserve and extend the service life of SR 860. The scope included (1) Milling and resurfacing of the existing pavement, (2) Reconstructing pavement failure around utilities, (3) Replacing inductive loops at three Traffic Monitoring Sites impacted by the milling, (4) Addressing minor ponding issues through drainage improvements, (5) Upgrading deficient pedestrian curb ramps and related components such as detectable warning surfaces, pavement markings, pedestrian crossing signs and plaques, (6) Upgrading substandard post-mounted signs and replacement of pavement markings, (7) Providing new countdown pedestrian signals and/or install ADA-compliant pedestrian pushbuttons and detector signs at all signalized intersections, (8) Adding Flexible Retroreflective Backplates on all approaches, (9) Landscaping improvements related to safety, and (10) Implementing RRR Safety Recommendations.

ADA Districtwide Consultant (FDOT D6) Districtwide 08/2021 - Present

Project Engineer responsible for the review of construction plans as it relates to ADA. This task work order driven contract includes various services such as ADA Plan Reviews, preparation of construction plans for ADA only improvements to be constructed through the Work Program, technical memos addressing citizen and municipality complaints and requests such as APS requests and accessibility reviews. Under this contract, Mario was the lead engineer for multiple pilot project design tasks with accelerated schedules and restrictive construction budgets.

SR 994/Quail Roost Dr (FDOT D6) Miami-Dade County 08/2021 - Present

Lead Project Engineer responsible for implementing all scoped improvements along SR 994 / Quail Roost Drive / SW 200 Street from East of SR 997/Krome Ave/SW 177 Ave (MP 0.098) to West of SW 137 Ave (MP 4.035). This Resurfacing, Restoration, and Rehabilitation (RRR) Project sought to preserve and extend the service life of SR 994. The scope included (1) Milling and resurfacing of the existing pavement (2) Widening of the existing travel lanes where less than 12' (3) Construction of 10' shoulders (5' paved/5' unpaved) where feasible (4) Construction of paved turnouts at side streets (5) Reconstruction of turnouts in poor condition (6) Upgrade guardrails and guardrail end treatments to current standards (7) Drainage improvements due to roadway and shoulder widening (8) Upgrade substandard post-mounted signs and replacement of pavement markings (9) Landscaping improvements related to safety (10) Implementation of RRR Safety Recommendations.

OT 6) Project No.: 447800-1-52-01 Client PM: Andres Castineiras (305) 640-7524

Project No.: 418064-1-32-04 Client PM: Tiffany Gehrke (305) 470-5308

Project No.: 443907-1-52-01 Client PM: Raul Quintela (305) 470-5271

Alejandro Ortega, MSCE, El Transportation Engineer

YEARS OF EXP: 12

CERTIFICATIONS:

Prof. Registration: E.I. No. 1100018209, 2014 IMSA Traffic Signal Field Technician, Level II IMSA Traffic Signal Inspector for Advanced Technologies Intermediate MOT

EDUCATION: BS in Civil Engineering, FIU 2008 MS in Civil Engineering, FIU 2011

FM No.: 444920-1-52-01

SUMMARY

Alejandro has been involved in the preparation of traffic safety studies, traffic impact studies, maintenance of traffic support, signal retiming, signal controller bench testing and configuration, and the review/update of roadway characteristics inventory for the FDOT Traffic Operation Office. His experience includes the development and preparation of safety and operations studies for arterials, freeways, and composite roadway networks for FDOT District 6. Specific studies included signal retiming, traffic impact, speed, before/after travel time/ delay, signal warrant analysis, qualitative assessments, and fatal disposition reports. He also has been involved in the preparation and execution of project presentations and public outreach. He has experience in HCS, SYNCHRO, CORSIM, and ARCGIS, Intermediate Temporary Traffic Control (No. 36784), Wavetronix Certificate, IMSA Traffic Signal Technician Level II, (No. BE_123528), Traffic Signal Inspector (No. SI 123528), IMSA Traffic Signal Inspector for Advanced Technologies, and FDOT Systems Engineering 100 CBT.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS 🖊 JANUARY 2017 TO PRESENT

Keys COAST Design-Build Connected Vehicles Project (FDOT D6)

Monroe County: 07/2021 - Present

Systems Engineer supporting with site investigations and inventory for signalization and ITS improvements along SR 5/US-1/Overseas Highway from Key West to Key Largo (approximately 104 miles) at 59 project sites (traffic signals, weigh-in-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions.

TSM&O Master Plan (FDOT D6)

Districtwide: 02/2020 - Present

TSM&O Engineer with Data Collection and related tasks for TSM&O Master Plan scope of services. Provides support for the development of the comprehensive TSM&O GIS map by gathering data associated with ITS devices, communication infrastructure, mapping of TSM&O operations of all agencies with D6, and assessment of data sources for performance measurement. In addition, Alejandro provides assistance with development of Goals, Objectives, and Measures (GOMs) by summarizing relevant information from various TSM&O FDOT documents and aiding with the update of the D6 TSM&O Action Plan of PLEMO responsibilities.

Signal Retiming Services Consultant (FDOT D6)

Districtwide: 08/2018 - Present

Engineer supporting the performance of signal retiming services for nearly 1300 signalized intersection on the State Highway System. Alejandro assisted the Transfer of City of Key West Traffic Signals O&M by supporting the team that performed the 2070E signal controller CPU upgrade (1-E to 1-C) database conversions and bench testing of signalized intersections. Performed in-field implementation/integration along with miscellaneous troubleshooting and support with cabinet assembly retrofits to establish alarms (cabinet door open, cabinet flash, UPS on and low battery) and integration of cellular communication for remote monitoring of traffic signals and pedestrian mid-blocks.

General Traffic Engineering Service (Key West)

City of Key West: 05/2018 - Present

Engineer responsible for providing MOT support during construction for the implementation of signalization updates along Flagler Avenue at Bertha Street/First Street. As part of the MOT signal update support, he was responsible for reviewing and providing recommendations in regard to the MOT work zone plans.

Signal Operational Support Consultant

Monroe County: 07/2016 - 06/2018

Client PM: Judith Clarke (305) 295-4329 Engineer maintaining and operating the traffic signals within the responsibility of Monroe County. Responsibilities included programing controllers, signal retiming, troubleshooting signal controllers and cabinets, programming preemption operations, traffic signal inspection, and addressing citizen's complaints. Assisted with standardization of signal equipment by converting primarily to McCain 2070E controllers and tasked to manage the signal controller databases via McCain's Transparity IMS laptop software. In addition, responsible for retiming Stock Island to address/target seasonal traffic congestion.

FM No.: 435755-1-12-01 Client PM: Kenneth Jeffries (305) 470-5445

Client PM: Bruce Boyd (561) 743-9737

FM No.: 435201-4-32-01 Client PM: Yamilet Diaz, PE (305) 470-5757

FM No.: 435755-1-12-01

Client PM: Kelly Crowe (305) 809-3967

Jessica Garcia, MSCE, EI, RSP1

Transportation Engineer

YEARS OF EXP: 3

CERTIFICATION:

Prof. Registration: E.I. No. 1100023993, 2020 PE Passed 2020

EDUCATION:

BS in Civil Engineering, FIU 2020 MS in Civil Engineering, FIU 2021

SUMMARY

Jessica has gained experience with safety and fatal crash reviews, traffic operations and safety analysis, traffic impact studies, traffic signal plans development, and planning studies. She has gained traffic data collection experience with turning movement counts, travel time & delay counts, pedestrian/bicycle counts, etc. Additionally, she has extensive experience using Synchro to prepare traffic models. Jessica has performed signal retiming efforts for the State Highway System and Strategic Intermodal System. She has efficient skills in the preparation of traffic reports, including the development of traffic and crash data, and signal timing tables and figures.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / JANUARY 2021 TO PRESENT

Mallory Square Master Plan Parking Study

Miami-Dade: 08/2022-Present

Engineer responsible for performing the parking study and related efforts for the Mallory Square Master Plan which includes redeveloping the Mallory Square located in Key West, FL. The scope of work includes: quantitative and qualitative evaluation of the study area's existing parking inventory during typical and special event periods, parking circulation plan, identification of vehicular and pedestrian traffic patterns, field reviews, and improvement development for the adjacent roadway networks.

Pedestrian and Bicycle Safety

FEID: F930964447

FM No.: 415239-4-32-01

Statewide: 01/2021-Present

Client PM: John "Jack" Freeman (407) 540-0555

Client PM: Isis Sotolongo (305) 470-5187

Client: Marin Braco (607) 206-6863

Engineer performing ped/bike safety studies. Tasks include existing conditions, traffic data collection, field reviews, speed data collection, ped counts, crash analysis operational analysis to determine practical and cost-effective solutions that are feasible and constructible.

Plans Review Consultant and Support Services - Ped/Bike (FDOT D6)

Districtwide: 01/2021-Present

Transportation Engineer performing pedestrian and bicycle safety studies. This task work order driven contract addresses citizen requests by performing midblock crossing evaluations, exclusive and leading pedestrian interval signal phasing evaluation, ped/bike safety assessment, and development of improvement sketches. This includes the coordination of data collection [72-hr machine counts for vehicle volume and speed, Turning Movement Counts (vehicles, trucks, ped & bike), and ped/bicycle counts], and preparation of cost estimates, and benefit/cost analysis.

Traffic Engineering and Planning Studies Miami-Dade: 01/2021-Present

EDP-PSA-2017 R Client PM: Yamilet Senespleda (305) 375-2746

FM No.: 435201-4-32-01 & 250662-5-32-01

Client PM: Yamilet Diaz. PE (305) 640-7333

FM No.: 250662-4-32-01

Transportation Engineer performing traffic studies to measure operational benefits or impact of opening NW 154 St bridge over I-75. The study area is bounded by SR 860/Miami Gardens Dr/NW 186 St to the north. NW 138 St and I-75/SR 924 to the south. SR 826/Palmetto Expwy and NW 77 Ave to the east, and the Florida's Turnpike to the west. Work includes collection of 72-hr vehicle counts to determine peak hour of analyses; 4-hr Turning Movement Counts, traffic percent growth evaluation, origin-destination data using Streetlight, safety & operational field review assessments, existing and future operational analyses, planning level roadway segment analysis, future roadway link traffic volume development using SERPM, future year turning movement volume development, and mitigation strategies.

Signal Retiming Services Consultant (FDOT D6)

Districtwide: 01/2021-Present

Transportation Engineer supporting the effort of improving overall performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using Synchro, field fine tuning, and performing before and after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, various TSM&O/ITS studies and plans development.

Traffic OPS / Safety Studies (FDOT D6) Districtwide: 01/2021-Present

Client PM: Lee-Fang Chow, PE (305) 470-5212 Transportation Engineer supporting the traffic engineering group in performing safety studies (intersections and segments), pedestrian & bicycle studies (including midblock crossing evaluations and conceptual developments), office and field based fatal crash reviews, Signal Warrant Analysis, Qualitative Analysis reports, Left-Turn Signal Phase Warrants, Speed Studies, Intersection Control Evaluation (ICE), and data collection. In addition, study efforts have included coordinating with different FDOT offices and public agencies.
Osvaldo A. Rodriguez, El Transportation Engineer

YEARS OF EXP: 5

CERTIFICATIONS:

Prof. Registration: E.I. No. 1100022879, 2019 IMSA Traffic Signal Field Technician, Level II IMSA Traffic Signal Inspector for Advanced Technologies Intermediate MOT

EDUCATION: MS in Civil Engineering, FIU 2022 BS in Civil Engineering, FIU 2018

SUMMARY

Osvaldo has gained experience including TSM&O initiatives, maintenance of traffic, signal retiming, signal inspection, traffic operations/ safety analysis, signal warrant studies, and traffic signalization plans development. His experience also includes the development and preparation of safety and operations studies for arterials, freeways, and composite roadway networks for FDOT District Six. He has developed traffic data collection experience with turning movement counts, travel time & delay counts, pedestrian/bicycle counts, etc. He has also supported in the development of the Arterial Management Plan for the FDOT District 6 TSM&O unit, in which network screening and priority ranking of all state roads were conducted. Osvaldo has efficient skills in the preparation of various tables and figures to summarize both traffic and crash data and has extensive experience using MicroStation and AutoCAD to produce several engineering documents. He has experience working with simulation software such as HCS-7, CORSIM, and SYNCHRO and is certified in Intermediate Temporary Traffic Control (No. 51663), IMSA Traffic Signal Technician Level II (No. BE_123523), and IMSA Traffic Signal Inspector for Advanced Technologies (No. AT_123523) and FDOT Systems Engineering 100 CBT.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / JULY 2018 TO PRESENT

Keys COAST Design-Build Connected Vehicles Project (FDOT D6) Monroe County: 07/2021-Present

Designer supporting with benching testing proposed signal operating plans (SOP), site investigations and inventory for signalization and ITS improvements along SR 5/ US-1/Overseas Highway from Key West to Key Largo (approximately 104 miles) at 59 project sites (traffic signals, weigh-in-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions. This project also includes implementation of ATSPM and Connected Vehicle Central Software at the SunGuide TMS and integration of Onboard Units (OBU) for 250 vehicles.

Signal Retiming Services Consultant (FDOT D6) Districtwide: 08/2018-Present

TSM&O Arterial Specialist supporting the overall management and performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System. Osvy has retimed 14 corridors which accounts for 212 traffic signals over the course of fiscal years 2019-2022. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using Synchro, field fine tuning, and performing before & after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, support on various TSM&O/ITS initiatives such as Development of D6 Arterial Management Plan, Arterial Performance Reporting, on-going Automated Traffic Signal Performance Metrics (ATSPMs) implementation plan and the transition of City of Key West Traffic Signals O&M to the District.

Traffic Operations Studies (FDOT D6)

Districtwide: 07/2018-Present

Traffic Specialist responsible for providing traffic engineering services to produce operational studies and other traffic engineering studies to support the Traffic Operations Office. This is a task work order driven contract that addresses citizen requests by performing tasks including field reviews, traffic data collection, crash analysis, and operational analysis to determine practical and cost-effective engineering solutions that are feasible and constructible.

Signal Operational Support Consultant Monroe County: 07/2018-Present

Transportation Specialist assisting the support efforts in Monroe County with maintaining and operating the traffic signals within the responsibility of Monroe County. Responsibilities included, but not limited to, programing controllers, signal retiming, troubleshooting signal controllers and cabinets, programming preemption operations, traffic signal inspection, and addressing citizens' complaints. Assisted with the standardization of signal equipment by converting to primarily to McCain 2070E controllers and tasked to manage the signal controller databases via McCain's Transparity IMS laptop software.

FM No.: 444920-1-52-01 Client PM: Bruce Boyd (561) 743-9737

FM No.: 409521-6-32-01 Client PM: Julio Polo (305) 640-7424



FM No.: 435201-4-32-01

Client PM: Isabel Hernandez (305) 640-7355



Henrique Fernandes, El Transportation Engineer

YEARS OF EXP: 3

CERTIFICATIONS:

Intermediate MOT

Prof. Registration: E.I. No. 1100023811, 2020 PE Passed 2021 IMSA Traffic Signal Field Technician Level II

EDUCATION: BS in Civil Engineering, FIU 2020

FM No.: 418064-1-32-04

SUMMARY

Henrique has acquired considerable experience in TSM&O analysis and ADA evaluations. He collects, computes, analyzes and interprets various types of traffic data. He has experience using MicroStation to prepare collision diagrams. He has additional skills in the preparation of various tables and figures to summarize traffic and collision data. Henrique is certified in Intermediate Temporary Traffic Control (No. 66243), IMSA Traffic Signal Technician Level II (No. BE 131569), FDOT Systems Engineering 100 CBT.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS 🖊 SEPTEMBER 2019 TO PRESENT

ADA Compliance Consultant (FDOT D6) Miami-Dade: 01/2021-Present

Client PM: Tiffany Gehrke (305) 470-5308 Engineer responsible for design of several push button projects deploying innovative pedestrian operation infrastructure, including deployment of remote pedestrian actuation through the Polara PedApp at SW 6 Street and SW 8 Avenue, deployment of passive pedestrian detection at Sunset Drive and US-1/S Dixie Highway, and the deployment of a Scramble pedestrian phase at Brickell Avenue at SE 8 Street. Responsibilities included all aspects of design analysis, field evaluations, plans productions, and coordination with technology vendors, ensuring a functional design.

Keys COAST Design-Build Connected Vehicles Project (FDOT D6) Monroe County: 07/2021-Present

Designer responsible for supporting design, production of plans, site investigations and inventory for signalization and ITS improvements along SR 5/ US-1/Overseas Highway from Key West to Key Largo (approximately 104 miles) at 59 project sites (traffic signals, weighin-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions. This project also includes implementation of ATSPM and Connected Vehicle Central Software at the SunGuide TMS and integration of Onboard Units (OBU) for 250 vehicles.

General Traffic Engineering Services (City of Key West)

Districtwide: 09/2019-Present

Designer responsible for analysis and design for the implementation of signalization improvements along Flagler Ave at Bertha St/First St and Kennedy Blvd. Project improvements include upgrading to full actuation and addition pedestrian signalization at Bertha St/First St and redesign of the eastbound left turn lane and addition of pedestrian signalization at the intersection of Kennedy Blvd.

Signal Retiming Services Consultant (FDOT D6)

FM No.: 435201-2-32-01 & 435201-4-32-01 Client PM: Jacques Defrant, PE & Yamilet Diaz, PE (305) 470-5308

Districtwide: 09/2019-Present Transportation Specialist supporting the overall performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, development of traffic models using SYNCHRO, field fine tuning, and performing before & after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, support on various TSM&O/ITS initiatives such as Development of D6 Arterial Management Plan, Arterial Performance Reporting, on-going Automated Traffic Signal Performance Metrics (ATSPMs) implementation plan and the transition of City of Key West Traffic Signals O&M to the District. In addition, Henrique has support with the development of existing condition diagrams for various studies associated with SIS corridor studies and improvements.

FIU APS Signalization Improvements (FDOT D6) Districtwide: 09/2019-Present

Junior Designer responsible for the design of pedestrian signal improvements at FIU's SW 1100 Block signalized entrance. Improvements include the addition of Audible/Accessible Pedestrian Signals (APS) and realignment of median crossing to address pedestrian safety issues for visually impaired users of the intersection. Additionally, responsible for review of existing plans and conditions, as well as production of plans for all improvements, including signalization plans and roadway plans, as well as tallving quantities and determining appropriate pay items to be used according to bid contract.

FM No.: 429536-4-52-01 Client PM: Tiffanv Gehrke (305) 470-5308

Client PM: Kelly Crowe, PE (305) 809-3967

FM No.: 444920-1-52-01 Client PM: Bruce Boyd (561) 743-9737

Elizabeth Correal, El Transportation Engineer

YEARS OF EXP: 4

CERTIFICATIONS:

Prof. Registration: E.I. No. 1100023664, 2019 IMSA Traffic Signal Technician, Level I Intermediate MOT

EDUCATION: BS in Civil Engineering, FIU 2019

SUMMARY

Elizabeth Correal has gained transportation engineering experience with safety and fatal crash reviews, traffic operations and safety analysis, traffic impact studies, and traffic signal plans development, originating from safety projects, citizen inquiries and crash occurences. She has gained traffic data collection experience with turning movement counts, travel time & delay counts, pedestrian/ bicycle counts, etc. She also has extensive experience using MicroStation and AutoCAD to prepare existing condition diagrams and collision diagrams. Elizabeth has also performed signal retiming efforts for the State Highway System and Strategic Intermodal System. She has efficient skills in the preparation of traffic reports, including the development of traffic and crash data, field reviews, and signal timing tables and figures.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS

Traffic OPS / Safety Studies (FDOT D6)

Districtwide: 05/2022

Traffic Specialist supporting the traffic engineering group in the development of various traffic engineering studies for District 6. Responsibilities included field measurements for existing condition diagrams, CADD preparation of existing and collision diagrams, summarizing crash data, and report production. Assignments include Qualitative Analysis reports, Technical Memorandums, Pedestrian and Bicycle Studies, Office Based Fatal Crash Review, Field Based Crash Reviews, support in the Hazard Reduction Program and overall traffic engineering studies, including traffic data collection.

Pedestrian and Bicycle Safety

Statewide: 10/2020-Present

Traffic Specialist supporting to provide traffic engineering services to produce pedestrian and bicycle safety studies. This task work order includes existing conditions, traffic data collection, field reviews, speed data collection, pedestrian counts, crash analysis operational analysis to determine practical and cost-effective engineering solutions that are feasible and constructible.

Traffic Operations Plans Review (FDOT D6)

Districtwide: 09/2019-Present

Traffic Specialist serving as support for additional work that has been added to the contract to perform pedestrian and bicycle safety studies. These additional efforts include data collection, crash analysis, collision diagrams, operational analysis, development of CADD based improvement concepts, preparation of cost estimates, and benefit/cost analysis.

Signal Retiming Services Consultant (FDOT D6)

Districtwide: 09/2019-Present

Transportation Specialist responsible for supporting the overall performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System and Strategic Intermodal System. She has retimed 12 corridors which accounts for 62 traffic signals. These efforts include extensive data collection efforts, field review assessments, coordination with the multiple maintaining agencies, development of traffic models using Synchro, field fine tuning, and performing before and after analysis using RITIS data, documentation of improvements, Active Arterial Management Studies, various TSM&O/ITS studies and plans development.

Traffic OPS / Safety Studies (FDOT D6)

Districtwide: 09/2019- Present

Traffic Specialist supporting traffic engineering services for performing safety studies (intersections and segments), pedestrian & bicycle studies (including midblock crossing evaluations and conceptual developments), office and field based fatal crash reviews, Road Safety Audits, Signal Warrant Analysis, Qualitative Analysis reports, Left-Turn Signal Phase Warrants, review and follow-up studies for the Skid Hazard Program, Speed Studies, Intersection Control Evaluation (ICE), a Speed Calming & Pedestrian Safety Study, a No-Passing Zone Study, a Feasibility Study, and data collection. Study locations have included SR 90 at SW 157 Ave, SR 976 at SW 92 Ave, and SR 5 at SW 137 Ave Safety Studies; SR 7 at NW 15 St Pedestrian Study, SR 968 from SW 22 Ave to SW 17 Ave Pedestrian Study; SR 944 at NW 22 Ave Qualitative Assessment; Brickell Ave Feasibility Study; and Traffic Calming & Pedestrian Study SR A1A (in Bal Harbour).

FEID: F930964447

Client PM: John "Jack" Freeman (407) 540 0555

FM No.: 250662-5-32-01

Client PM: Lee-Fang Chow. PE (305) 470-5212

FM No.: 435201-4-32-01





Client PM: Yamilet Diaz, PE (305) 470-5757

FM No.: 414052-2-32-01

Client PM: LeeFang Chow (305) 470-5335





Consultants in 2021 and assumed the role of Data Collection Supervisor managing our data collection division. His hands-on experience includes field data collection tasks, processing, as well as CADD production and document preparation for submittal and presentations using the latest industry's standard systems and technologies. His project background merges CADD developments from Collision Diagrams to Existing and Proposed Conditions Diagrams.

EXPERIENCE

CHOICE ENGINEERING CONSULTANTS / FEBRUARY 2021 TO PRESENT

Traffic Operation Studies Consultant (FDOT D6) Districtwide: 01/2022-Present

Engineering Technician providing support to traffic engineering group in the development of various traffic engineering studies for District 6. Responsibilities included performing various types of studies including vehicle volume, classifications, speed, pedestrians and bike, delay & saturation flow, among others. In addition he has supported on numerous large scale crash analysis by reviewing detailed police reports, updating crash summaries and preparing crash collision diagrams. He developed knowledge to identify crash patterns.

Traffic Operation Pedestrian Review (FDOT D6)

Districtwide: 01/2022-Present

Client PM: Isis Sotolongo, PE (305) 470-5187 Engineering Technician providing support to traffic engineering group in to assist in tasks related to the production of traffic ops plans reviews. Responsibilities included performing various types of studies including vehicle volume, classifications, speed, pedestrians and bike, delay & saturation flow, among other. In addition he has supported on numerous large scale crash analysis by reviewing detailed police reports, updating crash summaries and preparing crash collision diagrams. He developed knowledge to identify crash patterns.

General Traffic Engineering Services Kev West: 02/2021-Present

Lead CADD Technician supporting the engineering staff with the performance of traffic engineering services to support the efforts in Monroe County with maintaining and operating the traffic signals within its jurisdiction. Efforts include field traffic operation assessments, traffic volume reviews, and roadway/signal timing improvement development.

Signal Retiming Services Consultant (FDOT D6) Districtwide: 02/2021-Present

FM No.: 435201-4-32-01 Client PM: Yamilet Diaz. PE (305) 470-5757

Client PM: Kellv Crowe (305) 809-3967

FM No.: 409521-6-32-01

FM No.: 415239-4-32-01

Client PM: Julio Polo (305) 470-5335

Lead CADD Technician supporting the performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System. Israel has retimed 13 corridors which accounts for 216 traffic lights. His role also includes CADD processing & data collection efforts, coordination with the multiple maintaining agencies, field fine tuning, performing before & after analysis, and data documentation & plans development. He was responsible for overseeing the data collection activities for FY 22 Signal Retiming and generating the travel reports for the following corridors:

- SR 997/Krome Ave from N 8 St/SW 312 St to US 41/SR 90/SW 8 St
- SR 916/NW 135 St from W 16 Ave to NE 16 Ave
- SR 916/Opa Locka Blvd from NW 2 Ave to NW 22 Ave
- SR 5/US 1/Biscayne Blvd from NE 87 St to NE 151 St
- SR 907/Alton Rd from 6 St to Michigan Ave
- SR 973/SW 87 Ave from SW 132 St to SW 16 St
- SR 968/ SW 1 St from SW 24 Ave to SW 2 Ave
- SR 986/Sunset Dr from SW 117 Ave to SW 72 Ave
- SR A1A/Collins Ave from 38 St-39 St to The Strand

Stefan Escanes, PE, PTOE

Traffic Engineering Lead



Technical Expertise Project Management Traffic Operations Analysis & Design TSM&O Applications Signalization Transportation Planning Traffic Analysis & Modeling Traffic Noise Analysis Project Development & Environment Studies

Years of Experience 14 Years

Education

• B.S., Civil Engineering, Florida International University (2010)

Professional Registrations

- Professional Engineer FL #80578 (2016)
- Professional Traffic Operations Engineer - FL #4502 (2020)
- Profession Engineer CO #PE.0061104 (2022)

Certifications

- Advanced MOT Certification Cert#: 61796 FDOT Prov#: 185
- FDOT Traffic Noise Analysis Course BT-19-0005
- FDOT TTC Advanced Cert# 61796 (exp 02/2024) Professional Affiliations
- Member, Institute of Transportation Engineers (ITE)

Professional Profile

Mr. Escanes currently serves as Project Manager and South Florida Traffic Division Manager. His traffic engineering expertise spans from transportation planning to signalization design and smart work zone systems implementation. His management experience includes management of multiple concurrent work orders and data intensive large-scale projects through the various TSM&O, traffic operations, signalization, transportation planning, and PD&E Study contracts. Additional experience includes traffic analyses for Traffic Operations and PD&E Studies using the latest traffic simulation software including Vissim, Aimsun, Synchro, Sidra, Corsim and more.

His 14 years of experience includes Active Arterial Management (AAM) and signal retiming and implementation in Florida. He has also worked on adaptive and Transit Signal Priority (TSP) projects, knowing when to apply these operational technologies for maximum agency benefit. Stefan is one of the main transportation engineers at Metric who performs in-depth traffic modeling and simulation services, including for roundabouts statewide.

Experience

Deputy Project Manager: Districtwide Traffic Engineering Support Services Consultant (2013 – 2018) (2018 – 2023), FDOT District 6: Perform miscellaneous Maintenance of Traffic (MOT) support services within work zones including, but not limited to (1) providing real time traffic monitoring and traffic data collection (2) implementation of smart technologies and concepts (3) signal timing support (4) reviewing MOT Plans and determining the need of the detailed analysis of MOT impacts (5) analysis of MOT alternatives (6) Traffic simulation and modeling of MOT alternatives (7) Coordination with traffic signal maintaining agencies, FDOT offices, and other public agencies (8) providing the data collection and analysis of traffic prior to the beginning of project construction (9) Miscellaneous activities to support the District traffic operations office such as traffic operations studies, coordination with municipalities and other agencies. Miscellaneous activities include performing traffic operations and safety studies, miscellaneous structural analysis, plans preparation, and assist the traffic operations office in developing initiatives such as the Bottleneck Identification and Prioritization List. Additional tasks under this contract have included review of: PD&E Traffic Analysis Methodology, Interchange Justification Report MLOU, Signalization & Signing & Pavement Marking Plans, Traffic Control Plans, Roadway Plans, PD&E Preliminary Engineering Reports; and Final Field Inspections related to Traffic Control.

Deputy Project Manager/Traffic Engineer: Districtwide Traffic Operations & Safety Studies Consultant Services (2013 – 2018), FDOT District 6: The general purpose of this Task Work Order (TWO) based contract is to provide traffic engineering services through the development of various traffic operations and safety studies that will be identified for intersections, arterials, etc., and related improvement recommendations and evaluations. Studies/Analysis along with supporting tasks include: Pedestrian Facilities Evaluations, Mid-Block Crosswalk Evaluations, Crash Evaluation and Mitigation Strategies, Signal Warrant Analysis, Arterial Analysis/Signal Retiming, D6 Bottleneck Location Identification & Prioritization, D6 Expected Value Analysis (EVA) Update, Traffic Calming Evaluations, Qualitative Assessments, Left Turn Phase Analysis, Signalization Plans, Speed Zone Study and Mast Arm Structural Analysis.

Arterial Analysis for Adaptive Signal Control Technology Pilot Project: SR 924/NW 119 Street from NW 32 Avenue to NW 5 Avenue, Miami, FL, FDOT District 6: This is a major TWO under Metric's DW Traffic Operations & Safety Studies Consultant Services contract which involves the Arterial Analysis of existing and four potential alternative scenarios, on SR 924/NW 119 Street from NW 32 Avenue to NW 5 Avenue in Miami, Florida. The Department is preparing to deploy an adaptive signal system as part of the SR 924/NW 119th Street Adaptive Signal Control Technology (ASCT) Pilot Project. The intent is to provide safety, mobility, and reliability improvements for commuters, freight and transit users along the corridor and also manage fluctuations due to regional special events, traffic incidents and the impacts from proposed regional developments.





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

RESUME

Jennifer Borges, PE, PTOE, MS

Transportation Operations Manager

Ms. Borges has extensive experience in traffic operations, specifically traffic studies and pedestrian/bicyclist evaluations. Prior to being a traffic analyst, Ms. Borges did roadway design for two years which helped establish a strong foundation of standards applicable to providing feasible recommendations.

Project Experience

Miscellaneous Assignments – Miami, FL: Review conceptual designs and provide comments for feasibility of implementation, pedestrian and bicyclist considerations, etc. Prepare man hours for new modal transportation development project.

*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.

*Florida Department of Transportation (FDOT) - District 6, Miami, FL: As a traffic analyst and in-house consultant for the Traffic Operations Office, 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. Assisted the District Pedestrian and Bicyclist Coordinator with request and study reviews. 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.

*Project Engineer – Miami, FL: Completed multiple assignments as project engineer. Worked as a Utility Coordinator for Miami International Airport's Central Boulevard. 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.





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CITY OF KEY WEST

QUALIFICATIONS

Experience with Key West, Monroe County, FDOT District 6

The list below offers an extensive listing of recent local projects where the **Choice Team** staff have played a prevalent role. These are all projects which are related to specific services identified in the scope of services for this RFQ.

Similar Projects	Agency	Project ID	Dates of Service
SR 5/N. Roosevelt Blvd from Eisenhower Dr to Overseas Hwy-RRR	FDOT D6	FM 446011-1-32-01	3/2023 to Present
Districtwide Traffic Operations Studies Consultant	FDOT D6	FM 409521-8-32-01	9/2022 to Present
Continuing Services Contract TSM&O Signal Retiming Consultant	FDOT D6	FM 435201-6-32-01	7/2022 to Present
KeysCOAST Connected Vehicles Design-Build Project	FDOT D6	FM 444920-1-52-01	6/2021 to Present
Districtwide Traffic Ops / Safety Studies Consultant	FDOT D6	FM 250662-5-32-01	8/2021 to Present
SR 994/Quail Roost Dr from Krome Ave to SW 137 Ave-RRR	FDOT D6	FM 443907-1-32-01	5/2021 to Present
Districtwide ADA Compliance Consultant	FDOT D6	FM 418064-1-32-04	1/2021 to Present
Districtwide Traffic Ops Plans Review/Ped & Bike Safety Consultant	FDOT D6	FM 415239-4-32-01	9/2019 to Present
Continuing Services Contract TSM&O Signal Retiming Consultant	FDOT D6	FM 435201-4-32-01	09/2018 to Present
General Traffic Engineering Services	City of Key West	Resolution 18-143	5/2018 to Present
Districtwide Traffic Operations Studies Consultant	FDOT D6	FM 409521-6-32-01	11/2017 to 3/2023
I-195/SR 112 from NW 12 Ave to Alton Rd – Planning Study	FDOT D6	FM 440228-1-22-01	12/2017- 09/2020
Districtwide Traffic Ops / Safety Studies Consultant	FDOT D6	FM 250662-4-32-01	7/2016 to 7/2021
Districtwide Traffic Operations Signal Retiming Consultant	FDOT D6	FM 435201-2-32-01	11/2015 to 11/2020
Districtwide Traffic Operations Plans & Permit Reviews Consultant	FDOT D6	FM 415239-2-32-01	09/2014 to 4/2015
Districtwide Traffic Ops / Safety Studies Consultant	FDOT D6	FM 249796-3-32-01	10/2011 to 4/2015
NW 74 Street SIS/NHS Connector Planning Study	FDOT D6	FM 432639-4-22-01	09/2013 to 06/2014
Districtwide Public Transp. Office/ADA Compliance Consultant	FDOT D6	FM 418064-1-12-01	12/2010 to 4/2015
Districtwide Public Transportation Consultant	FDOT D6	FM 409323-1-12-01	01/2007 to 12/2011
Districtwide Traffic Ops / Plans Review Consultant	FDOT D6	-	2/2003 to 12/2005
FDOT D6/SR 94 Kendall Drive – RRR	FDOT D6	FM 431170-1-52-01	02/2016 to Present
Districtwide ADA Compliance Consultant	FDOT D6	FM 418064-1-32-03	10/2015 to Present
SR 968 W Flagler Street – Reconstruction	FDOT D6	FM 418091-1-52-01	07/2014 to 6/2015
Districtwide Pushbutton Design Contract	FDOT D6	-	6/2008 to 07/2014
Districtwide ADA Compliance Consultant	FDOT D6	-	5/2007 to 07/2014
Districtwide Intermodal Systems Planning Consultant	FDOT D6	-	06/2014 to 12/2015

Team Approach

Our goal is to provide the City access to industry experts in the Traffic Engineering and Signalization community, not only to meet the compressed schedule set by the City, but rather to exceed it and provide additional value through miscellaneous professional support services.

Choice Staff has worked with each of the subs proposed for this project in multiple occasions in the past. We have both personal as well as professional relationships with the staff of our subs. Our team members are all selected to be active participants in the contract not just to fill a box in the org chart. We share similar philosophies and goals (responsiveness, quality, being proactive) when it comes to providing services to the City.



REPRESENTATIVE ENGINEERING EXPERIENCE & CLIENT REFERENCES

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Representative Engineering Experience and Client References

Reference Projects

The list below offers a brief description of several recent (within the last 5 years) **Choice Team** projects completed or ongoing which are related to specific services identified in the scope of services for this RFQ. We have included a project description, name of client, client contact information, assigned staff, and design services fee (as appropriate).

PROJECT	CLIENT/CONTACT	ASSIGNED	DATES OF	FEE
#		STAFF	SERVICE	AMOUNT
1	CITY OF KEY WEST Kelly Crowe & Ian McDowell 305-809-3753 cimcdowell@cityofkeywest-fl.gov Kcrowe@cityofkeywest-fl.gov	C. Francis E. Echezabal E. Lopez A. Socarras J. Garcia A. Ortega J. Espinales A. Sierra	05/2018 to Present	\$230,583

Project Description: Traffic Engineering Consultant

Serving as a Prime Consultant supporting the City of Key West with general traffic engineering services. Services provided included planning, traffic and safety engineering, design, signal retiming, and operational and maintenance support for the City maintained traffic signal equipment. Choice was responsible for implementing data collection and signal timing into various types of controllers and operating softwares. managing the signal timing databases, supporting Keys Energy with controller replacement as part of the Signal Retiming efforts along Flagler Avenue and White Street; both retiming efforts targeted weekday and weekend AM, MD, PM, and late night peaks. Traffic studies included 4-way stop warrant studies along Caroline Street and Whitehead Street intersections, Flagler Avenue at 3 Street Pedestrian Crosswalk enhancement study, and Bahama Village development traffic forecasting. Choice also supported the City with MOT related traffic impacts through implementation of temporary signal timing during MOT operations and MOT reviews. Design efforts included Truman Waterfront signing and pavement marking reviews and the development of construction plans for Flagler Avenue at Kennedy Drive and Bertha Street pedestrian improvements; this project is nearing construction, and Choice has provided post design services that ranged from request for information resolutions and inspections. Choice also provided technical support to address operational and hardware maintenance issues, such as controller replacement support, including programming two new controllers at Kennedy Drive at Flagler Avenue and Poinciana Crosswalk.

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CITY OF KEY WEST

RFQ # 23-003

PROJECT	CLIENT/CONTACT	ASSIGNED	DATES OF	FEE
#		STAFF	SERVICE	AMOUNT
2	FDOT DISTRICT 6 Yamilet Diaz, PE 305-640-7333 yamilet.diaz@dot.state.fl.us	C. Francis E. Echezabal E. Lopez L. Francis A. Socarras A. Ortega H. Fernandez O. Rodriquez A. Sierra J. Espinales	09/2018 to Present	\$4,960,000

Project Description: Districtwide Signal Consultant

Serving as the Prime Consultant responsible for the overall management and performance of signal retiming services for the nearly 1300 signalized intersection on the State Highway System utilizing multiple subconsultants. These efforts include extensive data collection efforts, coordination with the multiple maintaining agencies, field based retiming approach, development of traffic models using Synchro, field fine tuning, and performing before & after analysis using RITIS data/field collected travel time & delay data, and documentation. In addition, provided miscellaneous services, such as MOT support, signalization plans development, signal controller programming and integration, and addressed citizen request(s) related to signal timing.

PROJECT	CLIENT/CONTACT	ASSIGNED	DATES OF	FEE
#		STAFF	SERVICE	AMOUNT
3	FDOT DISTRICT 6 Julio Polo 305-470-5335 julio.polo@dot.state.fl.us	C. Francis A. Socarras E. Echezabal E. Lopez O. Rodriguez J. Espinales E. Correal	11/2017 to Present	\$1,500,000

Project Description: Districtwide Traffic Ops Studies Consultant

Serving as the Prime Consultant providing traffic engineering services to produce operational studies and other traffic engineering studies to support the Traffic Operations Office. This is a task work order driven contract that addresses citizen requests by performing traffic studies including field reviews, traffic data collection (72-hour traffic volume counts, turning movement counts, pedestrian counts, etc.), crash analysis, and operational analysis to determine practical and cost-effective engineering solutions that are feasible and constructible. Traffic engineering studies typically include signal warrant analysis, spot speed studies, traffic calming review, traffic signal optimization, midblock pedestrian crosswalk evaluations, Intersection Control Evaluations (ICE), and school related studies such as speed zone evaluation (15 MPH) and signing and pavement markings evaluation to ensure compliance with applicable standards and guidelines.

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PROJECT	CLIENT/CONTACT	ASSIGNED	DATES OF	FEE
#		STAFF	SERVICE	AMOUNT
4	FDOT DISTRICT 6 LeeFang Chow, PE 305-470-5335 Leefang.chow@dot.state.fl.us	R.S. Aguilar C. Francis E. Echezabal E. Lopez L. Francis J. Garcia E. Gonzalez I. Ortega	08/2021 to Present	\$591,000

Project Description: Districtwide Traffic Ops Studies Consultant

Serving as the Prime Consultant providing traffic engineering services to produce safety studies, fatal crash review (both office and field based), RRR safety reviews, and traffic engineering studies (including traffic data collection) to support the Hazard Reduction Program, the Safe Routes To School Program, and further the Strategic Highway Safety Plan. Also, serve as representative for the Traffic Operations Office for the Rail Diagnostic field reviews and study development.

PROJECT	CLIENT/CONTACT	ASSIGNED	DATES OF	FEE
#		STAFF	SERVICE	AMOUNT
5	FDOT DISTRICT 6 Yamilet Diaz, PE 305-640-7333 yamilet.diaz@dot.state.fl.us	E. Echezabal R.S. Aguilar C. Francis H. Fernandes	06/2021 to Present	\$456,206

Project Description: KeysCoast Design-Build Connected Vehicles Project

Choice, serving as the Prime ITS EOR, was responsible for signalization and ITS improvements along SR 5/US-1/Overseas Highway from Key West to Key Largo (approximately

104 miles) at 59 project sites (traffic signals, weigh-in-motion station, and drawbridge). Project improvements include deployment of 60 Road Side Units (RSU), 40 CCTV cameras, full actuation of vehicular movements with lane-by-lane detection with video/microwave/loops, automated traffic signal performance measures (ATSPM), managed field ethernet switch with edge computing capabilities, rephasing signal controllers, cellular communication, and fiber communications to overcome POE power restrictions. This project also includes implementation of ATSPM and Connected Vehicle Central Software at the SunGuide TMC and integration of Onboard Units (OBU) for 250 vehicles. Choice is also provided initial integration support and controller programming support. Choice was also tasked with performing the study and integration efforts to deploy Transit Signal Priority.

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ADDENDUM NO. 1

Traffic Engineering Services RFQ 23-003

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

Question: As currently worded, we believe that the language contained in the Indemnification Form on pages 51 of the RFQ is not in compliance with FL Statute 725.08 and is unenforceable. Will you agree to reword the indemnification to conform with the statute? Suggested language per FL Statute 725.08: "The design professional shall indemnify and hold harmless the agency, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the design professional and other persons employed or utilized by the design professional in the performance of the contract." **Answer: The Indemnification Form on page 13 will remain as is.**

Question: We request the City consider limiting our liability in section 7.8.1 Indemnification of City on page 51 of the RFQ to a flat dollar amount per FS 725.06.

Answer: The limits of liability in section 7.8.1 Indemnification of City can be negotiated before contract execution.

Question: How many companies do you plan to bring on board with this contract? Answer: Page 1 A.1 Purpose, states: "The City intends to retain one or more qualified firms to provide the services for a period of three years with an additional two-year option."

Question: Do the resumes and projects are part of the page count limitation? Answer: Page 4, C.1 Response Information, last sentence, should read and be followed "Total Proposal length (not including required forms or tabs) will not exceed 20 double-sided or 40 single pages."

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

Signature

Liboice Engineering Consultants

Name of Business

Page 1 of 1

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA) : SS COUNTY OF MONROE)

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

By:

Sworn and subscribed before me this

28 day of <u>March</u>, 2023. ut

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: Oct. 18, 2026

ELIVETTE P DIAZ Notary Public - State of Florida Commission # HH 304497 My Comm. Expires Oct 18, 2026 Bonded through National Notary Assn.

NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA) : SS COUNTY OF MONROE)

I, the undersigned hereby declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

Ву:

Sworn and subscribed before me this

28 day of March . 2023.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: Oct. 18, 2026



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

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

 This sworn statement is submitted with Bid, Bid or Contract No. <u>RFQ# 23-003</u> for <u>Traffic Engineering Services</u>
 This sworn statement is submitted by Choice Engineering Consultants, Inc

This sworn statement is submitted by <u>Choice Engineering Consultants, Inc</u> (Name of entity submitting sworn statement)

whose business address is 12855 SW 132nd St, Suite 200, Miami, FL 33186

______and (if applicable) its Federal Employer Identification Number (FEIN) is <u>47-3395906</u> (If the entity has no FEIN,

include the Social Security Number of the individual signing this sworn statement.)

3. My name is <u>Carlos Francis, PE, PTOE</u> and my relationship to (Please print name of individual signing)

the entity named above is <u>President</u>

- 4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), <u>Florida Statutes</u>, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other states and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.
- 5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), <u>Florida Statutes</u>, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
- 6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 - 1. A predecessor or successor of a person convicted of a public entity crime: or
 - 2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services

TRAFFIC ENGINEERING SERVICES

let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

- Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)
 - \checkmark Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
 - The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)
 - There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)
 - The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)
 - ____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(Signature) Morch

STATE OF Florida (Date)

COUNTY OF Miami - Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

(Name of individual signing)

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

ELIVETTE P DIAZ Notary Public - State of Florida Commission # HH 304497 My Comm. Expires Oct 18, 2026 Bonded through National Notary Assn.

space provided above on this <u>28</u> day of March , 2023. My commission expires: Oct. 18, 20 26

8.

CITY OF KEY WEST INDEMNIFICATION FORM

CONTRACTOR agrees to protect, defend, indemnify, save and hold harmless The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, City's Consultant, agents, servants and employees, including volunteers, from and against any and all claims, debts, demands, expense and liability arising out of injury or death to any person or the damage, loss of destruction of any property which may occur or in any way grow out of any act or omission of the CONTRACTOR, its SUBCONTRACTOR(S), its agents, servants, and employees, or any and all costs, expense and/or attorney fees incurred by the City as a result of any claim, demands, and/or causes of action except of those claims, demands, and/or causes of action arising out of the negligence of The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, agents, servants and employees. The CONTRACTOR agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent. The City of Key West does not waive any of its sovereign immunity rights, including but not limited to, those expressed in Section 768.28, Florida Statutes. Nothing contained herein shall be construed to alter or waive the City's sovereign immunity under 768.28, Florida Statutes. CONTRACTOR understands and agrees that any and all liabilities regarding the use of any subcontractor for services related to this agreement shall be borne solely by the CONTRACTOR. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. Ten dollars of the consideration paid by the City is acknowledged by CONTRACTOR as separate, good and sufficient consideration for this indemnification.

This indemnification shall be interpreted to comply with Section 725.06 and 725.08, Florida Statutes.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, CONTRACTOR shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate CONTRACTOR to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West's option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by CONTRACTOR, or persons employed or utilized by CONTRACTOR. The CONTRACTOR'S obligation to indemnify, defend and pay for the defense of the CITY, or at the CITY's option, to participate and associate with the CONTRACTOR in the defense and trial of any claim and any related settlement negotiations,

shall be triggered immediately upon the CONTRACTOR'S receipt of the CITY'S notice of claim for indemnification. The notice of claim for indemnification shall be deemed received if the CITY sends the notice in accordance with the formal notice mailing requirements set forth in this AGREEMENT.

The CONTRACTOR'S evaluation of liability or its inability to evaluate liability shall not excuse the CONTRACTOR'S duty to defend and indemnify the CITY under the provisions of this AGREEMENT. Only an adjudication or judgment, after the highest appeal is exhausted, specifically finding the CITY was solely negligent shall excuse performance of this provision by the CONTRACTOR.

The CONTRACTOR'S obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the CONTRACTOR's limit of or lack of sufficient insurance protection. This indemnification shall continue beyond the date of completion of the work.

COMPANY SEAL

CONTRACTOR:	Choice Engineering Consultants, Inc	_
	12855 SW 132nd St, Suite 200	_
Address	Miami, FL 33186	_
		-
Signature	12 M	_
	Carlos Francis	3 28 2023
	Print Name	Date
	President	
	Title	

NOTARY FOR THE CONTRACTOR STATE OF Florida COUNTY OF Migmi - Dade

RFQ # 23-003

The foregoing instrument was acknowledged before me by means of [/] physical presence, or [] online notarization, this <u>28</u> day of <u>March</u>, 2023, by <u>Carlos Francis</u>, authorized person of <u>Choice Engineering</u> on behalf of the Company.



X

Signature of Notary Public-State of Florida

Elivette P. Diaz Name of Notary

Personally Known

OR Produced Identification

Type of Identification Produced _____

RFQ # 23-003

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

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

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

By:

Sworn and subscribed before me this

__day of March , 2023 NOTARY PUBLIC, State of <u>Florida</u> at Large

My Commission Expires: Oct. 18,2026



CONE OF SILENCE AFFIDAVIT

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

I the undersigned hereby duly sworn depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of Choice Engineering Consultants have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence (attached).

(signature)

Mourch 28,2023 (date)

Sworn and subscribed before me this

_Day of March , 2023. 28 Fut NOTARY PUBLIC, State of Florida at Large

My Commission Expires: Oct. 18, 2026



VENDOR CERTIFICATION REGARDING

SCRUTINIZED COMPANIES LISTS

Respondent Vendor Name: Choice Engineering Consultants					
Vendor FEIN:	Vendor FEIN:				
Vendor's Authoria	zed Representative Name and Title:	Carlos Francis, PE, PTO	E / President		
Address: 12855	SW 132nd St, Suite 200				
City: <u>Miami</u>	State: FL	Zip:	33186		
Phone Number:	786-250-5526				
Email Address:	cfrancis@ChoiceEng.com				

SECTION 287.135(2)(A), FLORIDA STATUTES, PROHIBITS A COMPANY FROM BIDDING ON, SUBMITTING A PROPOSAL FOR, OR ENTERING INTO OR RENEWING A CONTRACT FOR GOODS OR SERVICES OF ANY AMOUNT IF, AT THE TIME OF CONTRACTING OR RENEWAL, THE COMPANY IS ON THE SCRUTINIZED COMPANIES THAT BOYCOTT ISRAEL LIST, CREATED PURSUANT TO SECTION 215.4725, FLORIDA STATUTES, OR IS ENGAGED IN A BOYCOTT OF ISRAEL. SECTION 287.135(2)(B), FLORIDA STATUTES, FURTHER PROHIBITS A COMPANY FROM BIDDING ON, SUBMITTING A PROPOSAL FOR, OR ENTERING INTO OR RENEWING A CONTRACT FOR GOODS OR SERVICES OVER ONE MILLION DOLLARS (\$1,000,000) IF, AT THE TIME OF CONTRACTING OR RENEWAL, THE COMPANY IS ON EITHER THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST OR THE SCRUTINIZED COMPANIES WITH ACTIVITIES IN SUDAN LIST, BOTH CREATED PURSUANT TO SECTION 215.473, FLORIDA STATUTES, OR THE COMPANY IS ENGAGED IN BUSINESS OPERATIONS IN CUBA OR SYRIA.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above in the section entitled "Respondent Vendor Name" is not listed on either the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject such company to civil penalties, attorney's fees, and/or costs and termination of the contract at the option of the awarding governmental entity.

CERTIFIED BY: Carlos Francis	Print Name	President PRINT TITLE	,
WHO IS AUTHORIZED TO	SIGN ON BEHALF OF THE	ABOVE REFERENCED CC	MPANY.
Authorized Signature:	c n'	· ·	

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA) : SS COUNTY OF MONROE MIAMI-DADE

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

By: Robert Linares, PE	The
•	

Sworn and subscribed before me this

22nd	day of	March	, 2023.
1/		4	

NØTARY PUBLIC, State of Florida at Large

My Commission Expires: 1/6/24



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

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

- This sworn statement is submitted with Bid, Bid or Contract No. <u>RFO# 23-003</u> for 1. Traffic Engineering Services
- This sworn statement is submitted by Metric Engineering, Inc.
 (Name of entity submitting sworn statement) 2.

whose business address is 13940 SW 136th Street Miami, FL 33186

and (if applicable) its Federal

and my relationship to

Employer Identification Number (FEIN) is 59-1685550 (If the entity has no FEIN,

include the Social Security Number of the individual signing this sworn statement.)

My name is Robert Linares, PE 3.

(Please print name of individual signing)

the entity named above is Executive Vice President of Transportation

- 4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.
- 5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
- 6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 - 1. A predecessor or successor of a person convicted of a public entity crime: or
 - 2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services

let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

- 8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)
 - \checkmark Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
 - The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)
 - There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)
 - The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)
 - ____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

nature) March 22, 2023

STATE OF Florida (Date)

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

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

> My Comm. Expires Jan 6, 2024 Bonded through National Notary Assn.

space provided above on this 22nd	_day of March	<u>,</u> 2023.
My commission expires: 1/6/24 NOTARY PUBLIC	AuteKI	helas
KRISTINE KUREK MELANSON Notary Public - State of Florida		

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

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

I, the undersigned hereby duly sworn, depose and say that the firm of

<u>Metric Engineering</u>, Inc. provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: <u>Robert L</u>inares, PE

Sworn and subscribed before me this

22nd day of March . 2023.

NOTARY PUBLIC, State of <u>Florida</u> at Large

My Commission Expires: <u>1/6/24</u>



CITY OF KEY WEST INDEMNIFICATION FORM

CONTRACTOR agrees to protect, defend, indemnify, save and hold harmless The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, City's Consultant, agents, servants and employees, including volunteers, from and against any and all claims, debts, demands, expense and liability arising out of injury or death to any person or the damage, loss of destruction of any property which may occur or in any way grow out of any act or omission of the CONTRACTOR, its SUBCONTRACTOR(S), its agents, servants, and employees, or any and all costs, expense and/or attorney fees incurred by the City as a result of any claim. demands, and/or causes of action except of those claims, demands, and/or causes of action arising out of the negligence of The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, agents, servants and employees. The CONTRACTOR agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent. The City of Key West does not waive any of its sovereign immunity rights, including but not limited to, those expressed in Section 768.28. Florida Statutes. Nothing contained herein shall be construed to alter or waive the City's sovereign immunity under 768.28, Florida Statutes. CONTRACTOR understands and agrees that any and all liabilities regarding the use of any subcontractor for services related to this agreement shall be borne solely by the CONTRACTOR. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. Ten dollars of the consideration paid by the City is acknowledged by CONTRACTOR as separate, good and sufficient consideration for this indemnification.

This indemnification shall be interpreted to comply with Section 725.06 and 725.08, Florida Statutes.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, CONTRACTOR shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate CONTRACTOR to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West's option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by CONTRACTOR, or persons employed or utilized by CONTRACTOR. The CONTRACTOR'S obligation to indemnify, defend and pay for the defense of the CITY, or at the CITY's option, to participate and associate with the CONTRACTOR in the defense and trial of any claim and any related settlement negotiations,

shall be triggered immediately upon the CONTRACTOR'S receipt of the CITY'S notice of claim for indemnification. The notice of claim for indemnification shall be deemed received if the CITY sends the notice in accordance with the formal notice mailing requirements set forth in this AGREEMENT.

The CONTRACTOR'S evaluation of liability or its inability to evaluate liability shall not excuse the CONTRACTOR'S duty to defend and indemnify the CITY under the provisions of this AGREEMENT. Only an adjudication or judgment, after the highest appeal is exhausted, specifically finding the CITY was solely negligent shall excuse performance of this provision by the CONTRACTOR.

The CONTRACTOR'S obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the CONTRACTOR's limit of or lack of sufficient insurance protection. This indemnification shall continue beyond the date of completion of the work.

		CUMPANY SEAL
CONTRACTOR:	Metric Engineering, Inc.	- NGINEER
Address	13940 SW 136th Street Miami, FL 33186	$= \underbrace{\underbrace{SEAL}_{1976}}_{1976}$
Signature	T (fug	******
	Robert Linares, PE	March 22, 2023
	Print Name	Date
	Executive Vice President of Transportation	
	Title	

NOTARY FOR THE CONTRACTOR

STATE OF Florida

COUNTY OF Miami-Dade

COMDANIV CEAL

The foregoing instrument was acknowledged before me by means of [] physical presence, or [x] online notarization, this <u>22nd</u> day of <u>March</u>, 2023, by <u>Robert Linares, PE</u>, authorized person of <u>Metric Engineering, Inc.</u> on behalf of the Company.



Signature of Notary Public-State of Florida

Kristine Melanson Name of Notary

Personally Known X

Type of Identification Produced <u>N/A</u> OR Produced Identification

CONE OF SILENCE AFFIDAVIT

STATE OF <u>FLORIDA</u>) : SS COUNTY OF <u>MIAMI-DADE</u>)

I the undersigned hereby duly sworn depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of <u>Metric Engineering, Inc.</u> have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence (attached).

(ature)

(Signature)

March 22, 2023

(date)

Sworn and subscribed before me this

22nd March , 2023. Day of ____

NOTARY PUBLIC, State of <u>Florida</u> at Large

My Commission Expires: <u>1/6/24</u>



ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA) : SS COUNTY OF MONROE)

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

By: Kyle Henry, Vice President

Sworn and subscribed before me this

<u>27</u> day of <u>March</u>, 2023.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: 7/7/2025



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

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

1.	This sworn statement is submitted with Bid, Bid or Contract No. <u>RFQ# 23-003</u> for	
	Traffic Engineering Services	
2.	This sworn statement is submitted by EXP U.S. Services Inc.	
	(Name of entity submitting sworn statement)	
	whose business address is 201 Alhambra Circle, Suite 800 Coral Gables, FL 33134	_
	and (if applicable) its Feder	ral
	Employer Identification Number (FEIN) is <u>46-0523964</u> (If the entity has no FEI	N,
	include the Social Security Number of the individual signing this sworn statement.)	
3.	My name is Kyle Henry and my relationship to	
	(Please print name of individual signing)	

the entity named above is Vice President

- 4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), <u>Florida Statutes</u>, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any Bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other states and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.
- 5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(l)(b), <u>Florida Statutes</u>, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
- 6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means
 - 1. A predecessor or successor of a person convicted of a public entity crime: or
 - 2. An entity under the control of any natural person who is active in the management of t entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which Bids or applies to Bid on contracts for the provision of goods or services

let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

- 8. Based on information and belief, the statement, which I have marked below, is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies.)
 - \checkmark Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
 - The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)
 - There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)
 - The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)
 - ____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(Signature) Kyle Henry, Vice President

STATE OF Florida

COUNTY OF Monroe

(Date) <u>3/27/2023</u> PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Kyle Henry (Name of individual signing)

who, after first being sworn by me, affixed his/her signature in the

space provided above on this <u>27</u> day of <u>March</u>, 2023.

My commission expires: NOTARY PUBLIC	7/7/2025	Butglerd	
		BRIANNA KATHERINE GAGLIARDI MY COMMISSION # HH 150113 EXPIRES: July 7, 2025 Bonded Thru Notary Public Underwriters	

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF <u>______</u>) : SS COUNTY OF <u>_____</u> Monroe)

I, the undersigned hereby duly sworn, depose and say that the firm of <u>EXP U.S. Services Inc.</u> provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: Kyle Henry, Vice President



Sworn and subscribed before me this

<u>27</u> day of <u>March</u>, 2023.

Buzglerd

NOTARY PUBLIC, State of <u>Florida</u> at Large

My Commission Expires: <u>7/7/2025</u>
CITY OF KEY WEST INDEMNIFICATION FORM

CONTRACTOR agrees to protect, defend, indemnify, save and hold harmless The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, City's Consultant, agents, servants and employees, including volunteers, from and against any and all claims, debts, demands, expense and liability arising out of injury or death to any person or the damage, loss of destruction of any property which may occur or in any way grow out of any act or omission of the CONTRACTOR, its SUBCONTRACTOR(S), its agents, servants, and employees, or any and all costs, expense and/or attorney fees incurred by the City as a result of any claim, demands, and/or causes of action except of those claims, demands, and/or causes of action arising out of the negligence of The City of Key West, all its Departments, Agencies, Boards, Commissions, officers, agents, servants and employees. The CONTRACTOR agrees to investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (claims, etc.) is groundless, false or fraudulent. The City of Key West does not waive any of its sovereign immunity rights, including but not limited to, those expressed in Section 768.28, Florida Statutes. Nothing contained herein shall be construed to alter or waive the City's sovereign immunity under 768.28, Florida Statutes. CONTRACTOR understands and agrees that any and all liabilities regarding the use of any subcontractor for services related to this agreement shall be borne solely by the CONTRACTOR. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. Ten dollars of the consideration paid by the City is acknowledged by CONTRACTOR as separate, good and sufficient consideration for this indemnification.

This indemnification shall be interpreted to comply with Section 725.06 and 725.08, Florida Statutes.

These indemnifications shall survive the term of this agreement. In the event that any action or proceeding is brought against the City of Key West by reason of such claim or demand, CONTRACTOR shall, upon written notice from the City of Key West, resist and defend such action or proceeding by counsel satisfactory to the City of Key West.

The indemnification provided above shall obligate CONTRACTOR to defend at its own expense to and through appellate, supplemental or bankruptcy proceeding, or to provide for such defense, at the City of Key West's option, any and all claims of liability and all suits and actions of every name and description covered above which may be brought against the City of Key West whether performed by CONTRACTOR, or persons employed or utilized by CONTRACTOR. The CONTRACTOR'S obligation to indemnify, defend and pay for the defense of the CITY, or at the CITY's option, to participate and associate with the CONTRACTOR in the defense and trial of any claim and any related settlement negotiations,

shall be triggered immediately upon the CONTRACTOR'S receipt of the CITY'S notice of claim for indemnification. The notice of claim for indemnification shall be deemed received if the CITY sends the notice in accordance with the formal notice mailing requirements set forth in this AGREEMENT.

The CONTRACTOR'S evaluation of liability or its inability to evaluate liability shall not excuse the CONTRACTOR'S duty to defend and indemnify the CITY under the provisions of this AGREEMENT. Only an adjudication or judgment, after the highest appeal is exhausted, specifically finding the CITY was solely negligent shall excuse performance of this provision by the CONTRACTOR.

The CONTRACTOR'S obligation under this provision shall not be limited in any way by the agreed upon Contract Price as shown in this agreement, or the CONTRACTOR's limit of or lack of sufficient insurance protection. This indemnification shall continue beyond the date of completion of the work.

CONTRACTOR:	EXP U.S. Services Inc.	
Address	201 Alhambra Circle, Suite 800 Coral Gables, FL 33134	
Signature	huffer	_
	Kyle Henry	3/27/2023
	Print Name	Date
	Vice President Title	

NOTARY FOR THE CONTRACTOR STATE OF Florida COUNTY OF Monroe COMPANY SEAL

The foregoing instrument was acknowledged before me by means of [] physical presence, or [X] online notarization, this <u>27</u> day of <u>March</u>, 2023, by <u>Kyle Henry</u>, authorized person of <u>EXP U.S. Services Inc.</u> on behalf of the Company.

BRIANNA KATHERINE GAGLIARDI MY COMMISSION # HH 150113 EXPIRES: July 7, 2025 Bonded Thru Notary Public Underwriters

Signature of Notary Public-State of Florida

Brianna Katherine Gagliardi

Name of Notary

Personally Known X

Type of Identification
Produced <u>N/A</u>

OR Produced Identification _____

CONE OF SILENCE AFFIDAVIT

STATE OF <u>Florida</u>) : SS COUNTY OF <u>Monroe</u>)

I the undersigned hereby duly sworn depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of <u>EXP U.S. Services Inc.</u> have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence (attached).

Kyle Henry, Vice President

<u>3/27/2023</u> (date)



Sworn and subscribed before me this

27 Day of <u>March</u>, 2023.

NOTARY PUBLIC, State of <u>Florida</u> at Large

My Commission Expires: <u>7/7/2025</u>

Melanie S. Griffin, Secretary



STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

ECHEZABAL, ERIK ALEXANDER

10106 SW 77 CT MIAMI FL 33156

LICENSE NUMBER: PE82215

EXPIRATION DATE: FEBRUARY 28, 2025

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Melanie S. Griffin, Secretary



STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

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LOPEZ, EUGENIO SEBASTIAN 8601 SW 84 AVENUE

MIAMI FL 33143

LICENSE NUMBER: PE68213

EXPIRATION DATE: FEBRUARY 28, 2025

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Melanie S. Griffin, Secretary



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SOCARRAS, ALEXANDER GEORGE

16550 SW 137 AVENUE UNIT 1327 MIAMI FL 33177

LICENSE NUMBER: PE80510

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Melanie S. Griffin, Secretary



STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

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ESCANES, STEFAN ANDRE 9424 BEAVER BROOK DR COLORADO SPRINGS CO 80908

LICENSE NUMBER: PE80578

EXPIRATION DATE: FEBRUARY 28, 2025

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THE OFFICIAL SITE OF THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION





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LICENSEE DETAILS

10:51:34 AM 3/23/2023

Licensee Information		
Name:	BORGES, JENNIFER (Primary Name)	
Main Address:	1291 REDBIRD AVENUE MIAMI SPRINGS Florida 33166	
County:	DADE	

License Information

License Type:	Professional Engineer
Rank:	Prof Engineer
License Number:	78660
Status:	Current,Active
Licensure Date:	01/05/2015
Expires:	02/28/2025

Special Qualifications	Qualification Effective
Civil	01/05/2015

Alternate Names

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