



# Surveying & Mapping Consulting Services to the CRA for Phase IV Streetscape & A1A BCRA 19-001

# Title Page

Request for Qualifications to Provide Surveying &  
Mapping Consulting Services to the CRA for Phase IV  
Streetscape & A1A

BCRA 19-001

F.R. Aleman & Associates, Inc.  
1820 N. Corporate Lakes Boulevard, Suite 206-8  
Weston, Florida 33326

305-591-8777

Contact Person: Lis Tolstoy, PSM

August 27, 2019

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# Letter of Transmittal



F.R. Aleman and Associates, Inc. (FRA) is a Minority Owned engineering and geospatial firm that has provided professional services to government and private agencies since 1987. FRA has a staff of 70 professionals who take pride in their jobs. FRA has vast knowledge and expertise in the areas of engineering, surveying and mapping, and subsurface utility engineering. FRA's survey experience includes both prime and subconsultant roles on numerous roadways, drainage, design, and construction contracts throughout South Florida for clients such as the City of Fort Lauderdale, City of Miami Beach, City of Miami, City of Doral, Miami-Dade County, Florida Department of Transportation, and the South Florida Water Management District.

Our dynamic surveying and mapping team is composed of professionals with a long-standing commitment to excellence and unsurpassed performance with over a century of combined surveying and mapping experience in South Florida. We understand the City flourishes by continuously improving its existing conditions and creating innovative concepts for its residents and visitors. The dynamic associated with the City is unique and critical to the success of this contract.

## A Qualified Team

FRA and our team of subconsultants have the most qualified survey experts in the area. We have experience in all aspects of surveying and mapping and will be able to successfully complete any task given throughout the life of this contract.

## The Right Approach

FRA approach to this contract will start with clear lines of communication. We will ensure that all parties have a thorough understanding of the scope of work for each task. This knowledge base will start at the project management level and be instilled in all team members, including field crews. FRA is a stickler for quality control and will enforce an approved quality control plan (including subconsultants) that has been vetted by the City. Any work done by subconsultants will be reviewed by FRA prior to submittal to the City. Our number one goal is to provide a stress-free project for the City and your staff.

## Authorized Representative



Lis Tolstoy, PSM – Survey Director  
10305 NW 41st Street  
Suite 200  
Miami, FL 33178  
305-591-8777

## Office Locations

### WESTON

1820 N Corporate Lakes  
Boulevard, Suite 206-8  
Weston, FL 33326

### MIAMI

10305 NW 41st Street,  
Suite 200  
Miami, FL 33178

### ORLANDO

725 Primera Boulevard,  
Suite 205  
Lake Mary, FL 32746

### TAMPA

3014 US Highway 301  
N, Suite 300  
Tampa, FL 33619

### JACKSONVILLE

6196 Lake Gray  
Boulevard, Suite 101  
Jacksonville, FL 32244

# Standard Form 330

# ARCHITECT - ENGINEER QUALIFICATIONS

## PART I - CONTRACT-SPECIFIC QUALIFICATIONS

### A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

**Request for Letters of Interest for  
Request for Qualifications to Provide Surveying & Mapping Consulting Service for Phase IV Streetscape & A1A**

2. PUBLIC NOTICE DATE

3. SOLICITATION OR PROJECT NUMBER

BCRA 19-001

### B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Yvette A. Aleman, PE – President

5. NAME OF FIRM

**F.R. Aleman & Associates, Inc.**

6. TELEPHONE NUMBER  
(305) 591-8777

7. FAX NUMBER  
(305) 599-8749

8. EMAIL ADDRESS  
Marketing@fr-aleman.com

### C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

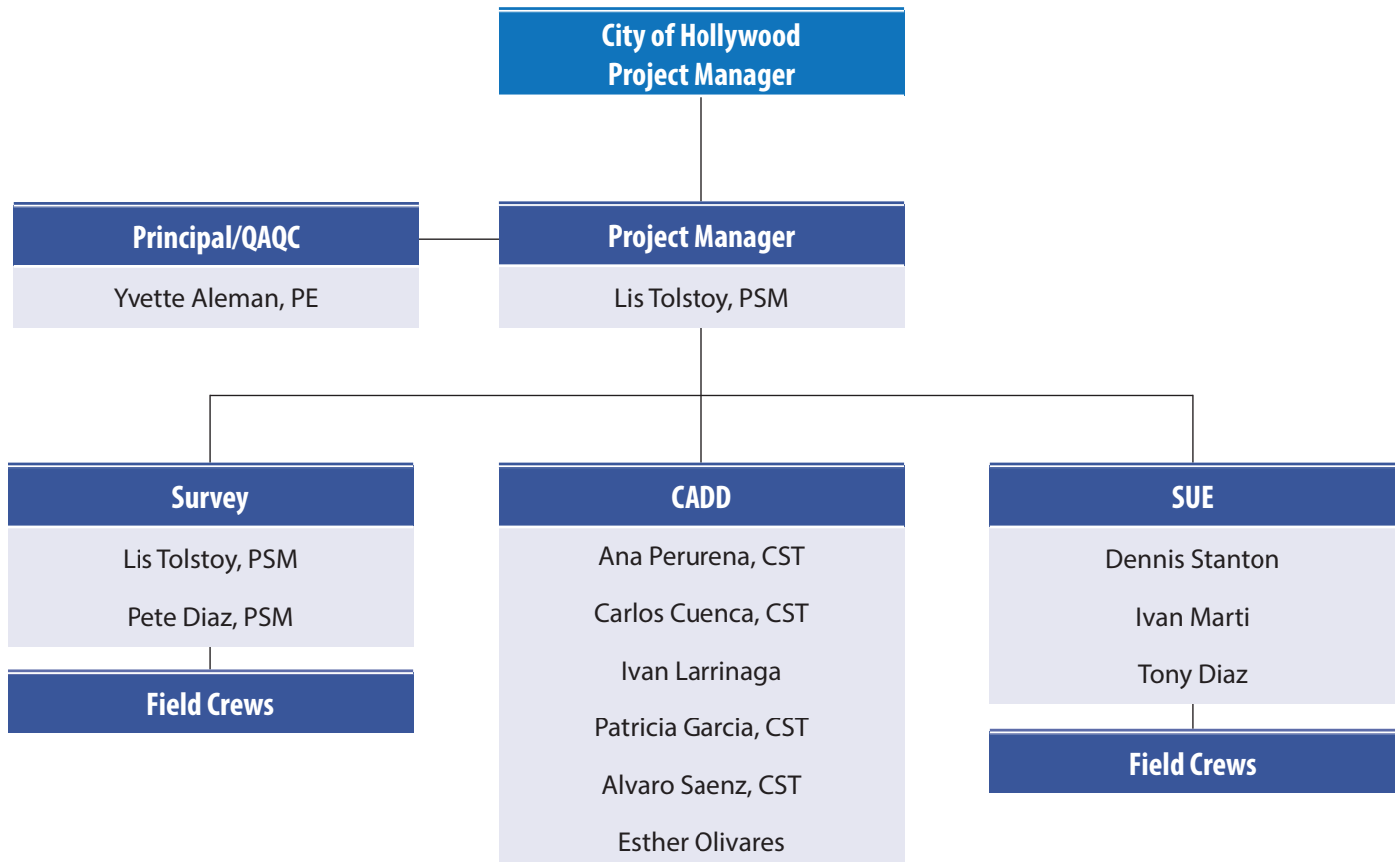
	PRIME	J-V PART- NER	SUB- CON- TRAC- TOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	✓			F.R. Aleman & Associates X CHECK IF BRANCH OFFICE	1820 N Corporate Lakes Boulevard Suite 206-8 Weston, FL 33326	Surveying & SUE
b.	✓			F.R. Aleman & Associates	10305 NW 41 <sup>st</sup> Street Suite 200 Miami, FL 33178	Surveying & SUE
c.						
d.						
e.						
f.						
g.						

### D. ORGANIZATIONAL CHART OF PROPOSED TEAM

☒ (Attached)

***\*Because each RFP is different, there will be a different Org chart each time, therefore there will be no standard Org Chart Here***

# Organizational Chart



# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Lis Tolstoy, PSM		Project Manager	a. TOTAL 25	b. WITH CURRENT FIRM 2
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)				
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science, Land Survey Engineering, UDELAR University (1994)		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Surveyor & Mapper (Florida LS6759)		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)				
19. RELEVANT PROJECTS				
a.	(1) TITLE AND LOCATION (City and State) FDOT District 4, Design Services West Park Various Off System Locations (Fort Lauderdale, FL)		(2) YEAR COMPLETED	
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
			2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE Horizontal and vertical control, alignment and existing ROW lines, aerial targets, topography/DTM, planimetric, roadway cross-sections/profiles, underground utilities, drainage survey, sectional/grant survey, subdivision location. Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.			
b.	(1) TITLE AND LOCATION (City and State) Miami-Dade County Health Systems, Jackson North Medical Center (Miami, FL)		(2) YEAR COMPLETED	
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
			2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE FRA provided miscellaneous survey services for professional architectural engineering services in support of construction improvements to the Jackson North Medical Center, in accordance with Jackson Health System Master Plan recommendations. FRA prepared a boundary survey, a topographic survey including DTM and SUE services (DPR and locating) tentative and final plat, title research and review, and determination of property lines along existing FDOT right-of-way, City of North Miami Beach, and Miami-Dade County. FRA delivered electronic copies of the survey in 2015 CIVIL 3D, including the point cloud, in 3D format after performing a HD scan.			
c.	(1) TITLE AND LOCATION (City and State) WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects (Miami, FL)		(2) YEAR COMPLETED	
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
			2019	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE FRA served as a sub to MWH Americans, Inc. (now Stantec) on this Professional Services Agreement (PSA) contract. As a subconsultant, FRA provided topographic surveys, DTM, boundary surveys, GPS, survey control points, utility coordination, GPR, and SUE services. FRA also surveyed the sanitary and storm sewer manholes and catch basin invert elevations. All this information to be used to develop site and grading plans for the proposed project. These services were in support of WASD's Pump Station Improvement Program for upgrading the wastewater collection and transmission system.			
d.	(1) TITLE AND LOCATION (City and State) City of Doral, Canal Bank Stabilization Program Management (Doral, FL)		(2) YEAR COMPLETED	
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
			2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE As part of the ADA Engineering team, FRA provided survey services during the design portion of multiple projects. Services included canal cross-sections every 50 feet, right-of-way delineation along the canal, and topographic survey of all above-ground features within the canal and the adjacent streets' right-of-way. FRA provided approximately 20,000 linear feet of survey.			
e.	(1) TITLE AND LOCATION (City and State) Miami Dade County Public Works, General Land and Engineering Surveying Services (Miami, FL)		(2) YEAR COMPLETED	
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
				N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE As a Prime Consultant, FRA provided the monumentation and re-monumentation of property boundaries and subdivisions; the measurement and preparation of plans showing existing improvements after construction; underground utility and improvements location; the layout of proposed improvements; the preparation of descriptions for use in legal instruments of conveyance of real property and property rights, the preparation of subdivision planning maps and record plats; the determination of, but not the design of, grades and elevations of roads and land in connection with subdivisions or divisions of land; and the creation and perpetuation of alignments related to maps, record plats, field notes, records, reports, property descriptions, plans and drawings that represent them. This work also included topographic, hydrographic, and geodetic surveying and mapping services. Lis served as a Project Manager.			



# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Pete Diaz, PSM		Project Surveyor		a. TOTAL 34	b. WITH CURRENT FIRM 2
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)					
16. EDUCATION (DEGREE AND SPECIALIZATION) Coursework; Miami-Dade Community College; Miami, Florida		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Surveyor & Mapper Florida License No. LS-6052 (2000)			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Management Academy (2011), Supervisors Academy (2010), CPM Course - Levels I & II (2013), Resolving Interpersonal Conflict (2011), D4 Negotiations Process (2010), D4 Consultant Invoice Trans (2010), Mutual Gains Negotiations (2010)					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) FDOT District 4, I-95 at Glades Rd (Fort Lauderdale, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2018	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
	FRA provided surveying services for the design of SR 9/I-95 at the Glades Road interchange. FRA established the horizontal and vertical control; performed a topographic survey and DTM; provided 2D and 3D files; completed 3D LiDAR scan (HDS) survey of the underside of the bridge over Glades Road and SR 9 (I-95) and the bridge over Military Trail. Right-of-way lines were analyzed and verified surveying along existing subdivision adjoined to the project. FRA provided services of locating underground utilities by GPR techniques (Level B) and soft digs (Level A).				
b.	(1) TITLE AND LOCATION (City and State) FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2019	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
	The purpose of this multi-task CEI contract was to provide services to verify both existing pre-construction and post-construction conditions, to ensure design criteria was met by the contractors. As a Prime consultant, FRA provided survey and mapping support to the District. This task work order contract involved field surveys for construction projects, including re-establishment of survey baselines, control points, benchmarks, drainage surveys and bridge data, original and final cross-sections, and mast arm bearings, among other scopes.				
c.	(1) TITLE AND LOCATION (City and State) Miami-Dade County Health Systems, Jackson North Medical Center (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2017	\$121,000,000 (est)	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
	FRA provided miscellaneous survey services for professional architectural engineering services in support of construction improvements to the Jackson North Medical Center. FRA prepared a boundary survey, a topographic survey including DTM and SUE services (DPR and locating) tentative and final plat, title research and review, and determination of property lines along existing FDOT ROW, City of North Miami Beach, and Miami-Dade County. FRA delivered electronic copies of the survey in 2015 CIVIL 3D, including the point cloud, in 3D format after performing a HD scan.				
d.	(1) TITLE AND LOCATION (City and State) WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2019	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
	FRA served as a sub to MWH Americans, Inc. (now Stantec) on this Professional Services Agreement (PSA) contract. As a subconsultant, FRA provided topographic surveys, DTM, boundary surveys, GPS, survey control points, utility coordination, GPR, and SUE services. FRA also surveyed the sanitary and storm sewer manholes and catch basin invert elevations. All this information to be used to develop site and grading plans for the proposed project. These services were in support of WASD's Pump Station Improvement Program for upgrading the wastewater collection and transmission system.				
e.	(1) TITLE AND LOCATION (City and State) Surveying, Topographical & Mapping Services, City of Miami Beach (2011 – Present).		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2018	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
	FRA's in-house Surveying Department supports the City of Miami Beach in this multi-task, multi-year Survey/SUE contract. Tasks include Specific Purpose Surveys, Control Surveys, Boundary Surveys and the location of the Mean High-water Line. Mr. Diaz serves as project surveyor performing multiple Survey tasks at locations including Nautilus Middle/Polo Park, Fisher Park, and South Pointe Park, among others.				

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Carlos Cuenca, CST III	Survey Technician	a. TOTAL	b. WITH CURRENT FIRM
		29	25
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)			
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science- Civil Engineering, Jose A. Echevarria Technological School	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) N/A		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certified Survey Technician (CST), IMSA Work Zone Safety			
19. RELEVANT PROJECTS			
a. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Fort Lauderdale, Civil Engineering Consultant Services (Fort Lauderdale, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA served as a subconsultant of Tetra Tech, Inc. for this continuing services contract for Civil Engineering Services to the City of Fort Lauderdale, included but not limited to, planning, architectural, engineering and construction support services. Tasks included: East Las Olas 12" Force Main Replacement (From SE 17 <sup>th</sup> Avenue to Lido Drive) Pump Station D-37, Lakes Estates Small Water Main Improvements 441 NW 7 <sup>th</sup> Avenue Sewer Extension, East Las Olas Easement, Pump Station D-10 and D-11 Flow Analysis, Tanbark Lane (SW 21 <sup>st</sup> Street) Water Main Improvements.			
b. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Miami Beach, Citywide Surveying, Topographical & Mapping Services (Miami Beach, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA provided as-needed surveying and mapping services to the City of Miami Beach in this multi-task, multi-year survey and SUE contract. Tasks included preliminary engineering surveys (establishing benchmarks, horizontal control using existing right-of-way, locating all improvements and culture, measuring distances and angles, measuring elevations of existing improvements, and miscellaneous office calculations); boundary/right-of-way surveys/legal descriptions (locating all public land corners, street monumentation, property corners, and gathering of parcel evidence as required to determine the existing land lines and/or right-of-way lines); legal descriptions; engineering; right-of-way survey; specific purpose survey; topographical surveys; general land and aerial photography surveying services; mean high water line; submerged/filled lands; GPS and GPR surveys; and horizontal and vertical control and points. FRA has performed these survey tasks at multiple locations throughout Miami Beach, including Nautilus Middle/Polo Park, Fisher Park, and South Pointe Park, among others.			
c. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Miami Beach, Topographic Survey and SUE for 11th Street (Miami Beach, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
As a subconsultant to A & P Consulting Transportation Engineer, FRA provided miscellaneous survey and SUE services along 11th Street in Miami Beach. Services included topographic survey, underground utility survey, and SUE related work. Under miscellaneous survey three steps were developed. 1) Extend the exiting topographic survey to cover the areas where new design was proposed. 2) FRA opened all existing manholes within the pump station area and obtained the invert information, pipe size, and material. FRA also designated all underground utility lines within the pump station area and the adjacent alley. Underground lines were shown on the topographic survey. 3) As a final step FRA extended the topographic survey 150 linear feet north from the existing topographic information at the intersection and alleys within the project areas were developed.			
d. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
FDOT District 4, I-95 at Glades Rd (Fort Lauderdale, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2018	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA provided surveying services for the design of SR 9/I-95 at the Glades Road interchange. FRA established the horizontal and vertical control; performed a topographic survey and DTM; provided 2D and 3D files; completed 3D LiDAR scan (HDS) survey of the underside of the bridge over Glades Road and SR 9 (I-95) and the bridge over Military Trail. Right-of-way lines were analyzed and verified surveying along existing subdivision adjoined to the project. FRA provided services of locating underground utilities by GPR techniques (Level B) and soft digs (Level A).			
e. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Doral, Canal Bank Stabilization Program Management: Year 7 (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
As part of the ADA Engineering team, FRA provided survey services during the design portion of multiple projects. Services included canal cross-sections every 50 feet, right-of-way delineation along the canal, and topographic survey of all above-ground features within the canal and the adjacent streets' right-of-way. FRA provided approximately 20,000 linear feet of survey.			

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Ivan Larrinaga, CST III	Survey Field Supervisor	a. TOTAL 32	b. WITH CURRENT FIRM 22
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)			
16. EDUCATION (DEGREE AND SPECIALIZATION) Advanced GPS Surveying (Leica Geosystems) Electronic Field Book User Group Training CAICE Developer (AGA's Five Day Seminar)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)  N/A		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certified Survey Technician (CST), Workzone Traffic Control: Intermediate Level			
19. RELEVANT PROJECTS			
a. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Fort Lauderdale, Civil Engineering Consultant Services (Fort Lauderdale, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA served as a subconsultant of Tetra Tech, Inc, for this continuing services contract for Civil Engineering Services to the City of Fort Lauderdale, included but not limited to, planning, architectural, engineering and construction support services. Tasks included: East Las Olas 12" Force Main Replacement (From SE 17th Avenue to Lido Drive) Pump Station D-37, Lakes Estates Small Water Main Improvements 441 NW 7th Avenue Sewer Extension, East Las Olas Easement, Pump Station D-10 and D-11 Flow Analysis, Tanbark Lane (SW 21st Street) Water Main Improvements.			
b. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Miami Beach, Topographic Survey and SUE for 11th Street (Miami Beach, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
As a subconsultant to A & P Consulting Transportation Engineer, FRA provided miscellaneous survey and SUE services along 11th Street in Miami Beach. Services included topographic survey, underground utility survey, and SUE related work. Under miscellaneous survey three steps were developed. 1) Extend the exiting topographic survey to cover the areas where new design was proposed. 2) FRA opened all existing manholes within the pump station area and obtained the invert information, pipe size, and material. FRA also designated all underground utility lines within the pump station area and the adjacent alley. Underground lines were shown on the topographic survey. 3) As a final step FRA extended the topographic survey 150 linear feet north from the existing topographic information at the intersection and alleys within the project areas were developed.			
c. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
FDOT District 4, Continuing Services for Surveying, Mapping and SUE (Fort Lauderdale, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2023	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA provides as-needed surveying, mapping, and SUE support to District 4 on this 5-year districtwide contract. Under this contract, FRA provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services provided includes LiDAR, field surveys, maintenance of traffic, historical baseline and existing right-of-way determination, GPS Surveys, topographic surveys and DTM, general land and aerial photography survey, monumentation surveys, bathymetric surveys, utility designation and excavation including GIS files, tree surveys, right-of-way control survey maps, right-of-way maps, maintenance maps, right-of-way monumentation maps, boundary surveys, quality assurance reviews, title search plotting maps, sketches, parcel staking, and legal descriptions.			
d. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
FDOT District 4, I-95 at Glades Rd (Fort Lauderdale, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2018	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA provided surveying services for the design of SR 9/I-95 at the Glades Road interchange. FRA established the horizontal and vertical control; performed a topographic survey and DTM; provided 2D and 3D files; completed 3D LiDAR scan (HDS) survey of the underside of the bridge over Glades Road and SR 9 (I-95) and the bridge over Military Trail. Right-of-way lines were analyzed and verified surveying along existing subdivision adjoined to the project. FRA provided services of locating underground utilities by GPR techniques (Level B) and soft digs (Level A).			
e. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED	
City of Doral, Canal Bank Stabilization Program Management: Year 7 (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE			
FRA is part of the ADA Engineering team, FRA provided survey services during the design portion of multiple projects. Services included canal cross-sections every 50 feet, right-of-way delineation along the canal, and topographic survey of all above-ground features within the canal and the adjacent streets' right-of-way. FRA provided approximately 20,000 linear feet of survey.			

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Ana Perurena, CST III		Survey Technician		a. TOTAL 24	b. WITH CURRENT FIRM 12
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)					
16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science-Telecommunication Engineering; ISP JAM		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) N/A			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Certified Survey Technician (CST)					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) City of Miami Beach, Citywide Surveying, Topographical & Mapping Services (Miami Beach, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2017	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA provided as-needed surveying and mapping services to the City of Miami Beach in this multi-task, multi-year survey and SUE contract. Tasks included preliminary engineering surveys (establishing benchmarks, horizontal control using existing right-of-way, locating all improvements and culture, measuring distances and angles, measuring elevations of existing improvements, and miscellaneous office calculations); boundary/right-of-way surveys/legal descriptions (locating all public land corners, street monumentation, property corners, and gathering of parcel evidence as required to determine the existing land lines and/or right-of-way lines); legal descriptions; engineering; right-of-way survey; specific purpose survey; topographical surveys; general land and aerial photography surveying services; mean high water line; submerged/filled lands; GPS and GPR surveys; and horizontal and vertical control and points. FRA has performed these survey tasks at multiple locations throughout Miami Beach, including Nautilus Middle/Polo Park, Fisher Park, and South Pointe Park, among others.					
b.	(1) TITLE AND LOCATION (City and State) FDOT District 4, Design Services West Park Various Off System Locations (Fort Lauderdale, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
				N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA is providing surveying services for this project that is adding bikes lanes along 48 <sup>th</sup> Avenue from County line to Pembroke Road; adding sidewalks to Sutton Road between Hallandale Beach Boulevard and William Road; and adding approximately 600 feet of sidewalks to 21 <sup>st</sup> Street along the NW corner of the Mary Saunders Park.					
c.	(1) TITLE AND LOCATION (City and State) FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2019	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
The purpose of this multi-task CEI contract was to provide services to verify both existing pre-construction and post-construction conditions, to ensure design criteria was met by the contractors. As a Prime consultant, FRA provided survey and mapping support to the District. This task work order contract involved field surveys for construction projects, including re-establishment of survey baselines, control points, benchmarks, drainage surveys and bridge data, original and final cross-sections, and mast arm bearings, among other scopes.					
d.	(1) TITLE AND LOCATION (City and State) Miami-Dade County Health Systems, Jackson North Medical Center (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2017	\$121,000,000 (est)	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA provided miscellaneous survey services for professional architectural engineering services in support of construction improvements to the Jackson North Medical Center, in accordance with Jackson Health System Master Plan recommendations. FRA prepared a boundary survey, a topographic survey including DTM and SUE services (DPR and locating) tentative and final plat, title research and review, and determination of property lines along existing FDOT right-of-way, City of North Miami Beach, and Miami-Dade County. FRA delivered electronic copies of the survey in 2015 CIVIL 3D, including the point cloud, in 3D format after performing a HD scan.					
e.	(1) TITLE AND LOCATION (City and State) WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects (Miami, FL)		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2019	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA served as a sub to MWH Americans, Inc. (now Stantec) on this Professional Services Agreement (PSA) contract. As a subconsultant, FRA provided topographic surveys, DTM, boundary surveys, GPS, survey control points, utility coordination, GPR, and SUE services. FRA also surveyed the sanitary and storm sewer manholes and catch basin invert elevations. All this information to be used to develop site and grading plans for the proposed project. These services were in support of WASD's Pump Station Improvement Program for upgrading the wastewater collection and transmission system.					



# E. RESUMES OF KEY PERSONNEL FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
Patricia Garcia, CST	Survey Technician	a. TOTAL 5	b. WITH CURRENT FIRM 5
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)			
16. EDUCATION (DEGREE AND SPECIALIZATION) BS, Accounting and Finance, Jose Marti University (Cuba)	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) N/A		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)			

## 19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) City of Miami Beach, Citywide Surveying, Topographical & Mapping Services (Miami Beach, FL)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE FRA provided as-needed surveying and mapping services to the City of Miami Beach in this multi-task, multi-year survey and SUE contract. Tasks included preliminary engineering surveys (establishing benchmarks, horizontal control using existing right-of-way, locating all improvements and culture, measuring distances and angles, measuring elevations of existing improvements, and miscellaneous office calculations); boundary/right-of-way surveys/legal descriptions (locating all public land corners, street monumentation, property corners, and gathering of parcel evidence as required to determine the existing land lines and/or right-of-way lines); legal descriptions; engineering; right-of-way survey; specific purpose survey; topographical surveys; general land and aerial photography surveying services; mean high water line; submerged/filled lands; GPS and GPR surveys; and horizontal and vertical control and points.		
b.	(1) TITLE AND LOCATION (City and State) City of Miami Beach, Topographic Survey and SUE for 11th Street (Miami Beach, FL)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE As a subconsultant to A & P Consulting Transportation Engineer, FRA provided miscellaneous survey and SUE services along 11th Street in Miami Beach. Services included topographic survey, underground utility survey, and SUE related work. Under miscellaneous survey three steps were developed. 1) Extend the exiting topographic survey to cover the areas where new design was proposed. 2) FRA opened all existing manholes within the pump station area and obtained the invert information, pipe size, and material. FRA also designated all underground utility lines within the pump station area and the adjacent alley. Underground lines were shown on the topographic survey. 3) As a final step FRA extended the topographic survey 150 linear feet north from the existing topographic information at the intersection and alleys within the project areas were developed.		
c.	(1) TITLE AND LOCATION (City and State) FDOT District 4, Continuing Services for Surveying, Mapping and SUE (Fort Lauderdale, FL)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2023	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE FRA provides as-needed surveying, mapping, and SUE support to District 4 on this 5-year districtwide contract. Under this contract, FRA provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services provided includes LiDAR, field surveys, maintenance of traffic, historical baseline and existing right-of-way determination, GPS Surveys, topographic surveys and DTM, general land and aerial photography survey, monumentation surveys, bathymetric surveys, utility designation and excavation including GIS files, tree surveys, right-of-way control survey maps, right-of-way maps, maintenance maps, right-of-way monumentation maps, boundary surveys, quality assurance reviews, title search plotting maps, sketches, parcel staking, and legal descriptions.		
d.	(1) TITLE AND LOCATION (City and State) WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects (Miami, FL)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2019	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE FRA served as a sub to MWH Americans, Inc. (now Stantec) on this Professional Services Agreement (PSA) contract. As a subconsultant, FRA provided topographic surveys, DTM, boundary surveys, GPS, survey control points, utility coordination, GPR, and SUE services. FRA also surveyed the sanitary and storm sewer manholes and catch basin invert elevations. All this information to be used to develop site and grading plans for the proposed project. These services were in support of WASD's Pump Station Improvement Program for upgrading the wastewater collection and transmission system.		
e.	(1) TITLE AND LOCATION (City and State) City of Doral, Canal Bank Stabilization Program Management: Year 7 (Miami, FL)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
		2017	N/A
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE As part of the ADA Engineering team, FRA provided survey services during the design portion of multiple projects. Services included canal cross-sections every 50 feet, right-of-way delineation along the canal, and topographic survey of all above-ground features within the canal and the adjacent streets' right-of-way.		

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Alvaro Saenz, CST		Survey Technician		a. TOTAL 13	b. WITH CURRENT FIRM 1
15. FIRM NAME AND LOCATION (City and State) F.R. Aleman & Associates, Inc. (Doral, Florida)					
16. EDUCATION (DEGREE AND SPECIALIZATION) AA, Civil Engineering		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) N/A			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Asphalt Paving Technician Level 1 and 2, Earthwork Construction Inspection Level 1 and 2, Nuclear Gauge Safety Certification, FDOT QC Manager					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2019	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
The purpose of this multi-task CEI contract was to provide services to verify both existing pre-construction and post-construction conditions, to ensure design criteria was met by the contractors. As a Prime consultant, FRA provided survey and mapping support to the District. This task work order contract involved field surveys for construction projects, including re-establishment of survey baselines, control points, benchmarks, drainage surveys and bridge data, original and final cross-sections, and mast arm bearings, among other scopes.					
b.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	Miami-Dade County Health Systems, Jackson North Medical Center (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2017	\$121,000,000(est)	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
FRA provided miscellaneous survey services for professional architectural engineering services in support of construction improvements to the Jackson North Medical Center, in accordance with Jackson Health System Master Plan recommendations. FRA prepared a boundary survey, a topographic survey including DTM and SUE services (DPR and locating) tentative and final plat, title research and review, and determination of property lines along existing FDOT right-of-way, City of North Miami Beach, and Miami-Dade County. FRA delivered electronic copies of the survey in 2015 CIVIL 3D, including the point cloud, in 3D format after performing a HD scan.					
c.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	FDOT D4, Continuing Services for Surveying, Mapping and SUE (Broward/Palm Beach County, Florida)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
			2023	N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
FRA provides as-needed surveying, mapping, and SUE support to District 4 on this 5-year districtwide contract. Under this contract, FRA provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services provided include LiDAR, field surveys, maintenance of traffic, historical baseline and existing right-of-way determination, GPS Surveys, monumentation surveys, bathymetric surveys, utility designation and excavation, tree surveys, right-of-way control survey maps, right-of-way maps, maintenance maps, right-of-way monumentation maps, boundary surveys, quality assurance reviews, title search plotting maps, sketches, parcel staking, and legal descriptions. Alvaro served as a Survey Technician.					
d.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	FDOT D6, Districtwide Location Survey Consultant (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
				N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
FRA provides as-needed surveying and mapping support to District 6 on this contract. Assignments include re-establishment of survey baselines, establishing primary and secondary horizontal and vertical control points, permanent benchmarks, DTM, topographic surveys, drainage surveys, right-of-way surveys and maps, sketches, and legal descriptions. Alvaro served as a Survey Technician					
e.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	Miami-Dade County Public Works, General Land and Engineering Surveying Services (Miami, FL)		PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)	
				N/A	
	(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE				
As a Prime Consultant, FRA provided the monumentation and re-monumentation of property boundaries and subdivisions; the measurement and preparation of plans showing existing improvements after construction; underground utility and improvements location; the layout of proposed improvements; the preparation of descriptions for use in legal instruments of conveyance of real property and property rights, the preparation of subdivision planning maps and record plats; the determination of, but not the design of, grades and elevations of roads and land in connection with subdivisions or divisions of land; and the creation and perpetuation of alignments related to maps, record plats, field notes, records, reports, property descriptions, plans and drawings that represent them. This work also included topographic, hydrographic, and geodetic surveying and mapping services. Alvaro served as a Survey Technician.					

# E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT <b>SUE Director</b>		14. YEARS EXPERIENCE	
Dennis Stanton				a. TOTAL <b>27</b>	b. WITH CURRENT FIRM <b>22</b>
15. FIRM NAME AND LOCATION (City and State) <b>F.R. Aleman &amp; Associates, Inc. (Doral, Florida)</b>					
16. EDUCATION (DEGREE AND SPECIALIZATION) <b>BA, Liberal Arts</b>		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) <b>N/A</b>			
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Florida Intermediate Training, RedVectors Understanding Subsurface Utility Engineering, Workzone Traffic Control Intermediate Level, Confined Space Entry Training					
19. RELEVANT PROJECTS					
a. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
<b>City of Fort Lauderdale, Civil Engineering Consultant Services (Fort Lauderdale, FL)</b>		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)	
		2017		N/A	
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE					
FRA served as a subconsultant of Tetra Tech, Inc. for this continuing services contract for Civil Engineering Services to the City of Fort Lauderdale, included but not limited to, planning, architectural, engineering and construction support services. Tasks include: East Las Olas 12" Force Main Replacement (From SE 17 <sup>th</sup> Avenue to Lido Drive) Pump Station D-37, Lakes Estates Small Water Main Improvements 441 NW 7 <sup>th</sup> Avenue Sewer Extension, East Las Olas Easement, Pump Station D-10 and D-11 Flow Analysis, Tanbark Lane (SW 21 <sup>st</sup> Street) Water Main Improvements					
b. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
<b>City of Miami Beach, Citywide Surveying, Topographical &amp; Mapping Services (Miami Beach, FL)</b>		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)	
		2017		N/A	
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE					
FRA provided as-needed surveying and mapping services to the City of Miami Beach in this multi-task, multi-year survey and SUE contract. Tasks included preliminary engineering surveys (establishing benchmarks, horizontal control using existing right-of-way, locating all improvements and culture, measuring distances and angles, measuring elevations of existing improvements, and miscellaneous office calculations); boundary/right-of-way surveys/legal descriptions (locating all public land corners, street monumentation, property corners, and gathering of parcel evidence as required to determine the existing land lines and/or right-of-way lines); legal descriptions; engineering; right-of-way survey; specific purpose survey; topographical surveys; general land and aerial photography surveying services; mean high water line; submerged/filled lands; GPS and GPR surveys; and horizontal and vertical control and points.					
c. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
<b>City of Miami Beach, Topographic Survey and SUE for 11th Street (Miami Beach, FL)</b>		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)	
		2017		N/A	
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE					
As a subconsultant to A & P Consulting Transportation Engineer, FRA provided miscellaneous survey and SUE services along 11th Street in Miami Beach. Services included topographic survey, underground utility survey, and SUE related work. Under miscellaneous survey three steps were developed. 1) Extend the exiting topographic survey to cover the areas where new design was proposed. 2) FRA opened all existing manholes within the pump station area and obtained the invert information, pipe size, and material. FRA also designated all underground utility lines within the pump station area and the adjacent alley. Underground lines were shown on the topographic survey. 3) As a final step FRA extended the topographic survey 150 linear feet north from the existing topographic information at the intersection and alleys within the project areas were developed.					
d. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
<b>FDOT District 4, Continuing Services for Surveying, Mapping and SUE (Fort Lauderdale, FL)</b>		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)	
		2023		N/A	
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE					
FRA provides as-needed surveying, mapping, and SUE support to District 4 on this 5-year districtwide contract. Under this contract, FRA provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services provided includes LiDAR, field surveys, maintenance of traffic, historical baseline and existing right-of-way determination, GPS Surveys, topographic surveys and DTM, general land and aerial photography survey, monumentation surveys, bathymetric surveys, utility designation and excavation including GIS files, tree surveys, right-of-way control survey maps, right-of-way maps, maintenance maps, right-of-way monumentation maps, boundary surveys, quality assurance reviews, title search plotting maps, sketches, parcel staking, and legal descriptions.					
e. (1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED			
<b>FDOT District 4, Design Services West Park Various Off System Locations (Fort Lauderdale, FL)</b>		PROFESSIONAL SERVICES		CONSTRUCTION (If applicable)	
				N/A	
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE					
FRA is providing surveying services for this project that is adding bikes lanes along 48 <sup>th</sup> Avenue from County line to Pembroke Road; adding sidewalks to Sutton Road between Hallandale Beach Boulevard and William Road; and adding approximately 600 feet of sidewalks to 21 <sup>st</sup> Street along the NW corner of the Mary Saunders Park.					

**E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT***(Complete one Section E for each key person)*

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Antonio Diaz	SUR SUE Technician 3 Senior	22	22

15. FIRM NAME AND LOCATION (City and State)

**F.R. Aleman & Associates, Inc. (Miami, FL)**

16. EDUCATION (DEGREE AND SPECIALIZATION)

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

**Florida Intermediate Training-ATSSA (FL)**

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certified Scuba Diver, WorkZone Traffic Control Intermediate Level, Confined Space Entry Training Program

**19. RELEVANT PROJECTS**

a.	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	FDOT D4, Districtwide Survey & Mapping Services Support (Broward County, FL)	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
		2012-2017	
(3) BRIEF DESCRIPTION <i>(Brief scope size, cost, etc.)</i> AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm	
FRA serves as the Prime for this contract and provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services include Boundaries, Right of Way, Engineering, Design Surveys, Construction Lay-Out and As-Built Surveys, and Horizontal and Vertical Control surveying at various locations throughout the district. Mr. Diaz has performed as SUE Technician on almost every project for this contract.			
b.	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	FDOT D4, Districtwide Utility Location Services (2 Consecutive Prime Contracts) (Broward County, FL)	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
		2000-2011	
(3) BRIEF DESCRIPTION <i>(Brief scope size, cost, etc.)</i> AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm	
Mr. Diaz provided designating, locating, surveying, and mapping services for the existing surface and subsurface utilities to support the design of construction plans on projects selected by the Department. Exact horizontal and vertical locations of the existing underground utilities were provided by way of electromagnetic, sonic, and other geophysical location techniques including vacuum excavation.			
c.	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	FDOT D4, Design Services for NW 21st Avenue from Oakland Park Boulevard to Commercial Boulevard (Fort Lauderdale, FL)	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
		2017	
(3) BRIEF DESCRIPTION <i>(Brief scope size, cost, etc.)</i> AND SPECIFIC ROLE		<input checked="" type="checkbox"/> Check if project performed with current firm	
Mr. Diaz served as Lead SUE Technician for this Design Project which included the designation of the underground utility lines within the areas where improvements structures are proposed. The project length was 1.5 miles.			
d.	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	FDOT D4, Lyons Road from S of C-14 Canal to Sawgrass Expressway	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
		2017	
(3) BRIEF DESCRIPTION <i>(Brief scope size, cost, etc.)</i> AND SPECIFIC ROLE		<input type="checkbox"/> Check if project performed with current firm	
The project is an off-system MPO bicycle and sidewalk mobility project that requires the widening of the existing pavement between 4 and 7 feet to add bike lanes. Mr. Diaz served as Lead SUE Technician for this design project providing designation of the underground utilities along the corridor. The project length was 5 miles (Designation was 4 miles).			
e.	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
	FDOT D4, SR 845 (Powerline Road) from SR 838 to NW 19th Street	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
(3) BRIEF DESCRIPTION <i>(Brief scope size, cost, etc.)</i> AND SPECIFIC ROLE		Check if project performed with current firm	
Mr. Diaz served a SUE Technician for the complete design survey of this entire corridor. The Design Engineer for this project was FRA's roadway group. FRA performed Control Survey, PNC Sheets, and ground survey.			



## E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME  <b>Ivan Marti</b>	13. ROLE IN THIS CONTRACT  <b>SUR SUE Technician 3 Senior</b>	14. YEARS EXPERIENCE a. TOTAL <b>18</b> b. WITH CURRENT FIRM <b>18</b>	
15. FIRM NAME AND LOCATION (City and State) <b>F.R. Aleman &amp; Associates, Inc. (Miami, FL)</b>			
16. EDUCATION (DEGREE AND SPECIALIZATION) <b>High School Diploma, Carlos J. Finlay</b>		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) <b>Florida Intermediate Training-ATSSA (FL)</b>	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) <b>WorkZone Traffic Control Intermediate Level</b>			

### 19. RELEVANT PROJECTS

<b>a.</b>	(1) TITLE AND LOCATION (City and State) <b>FDOT D4, I-595 Corridor Improvements Design-Build</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES <b>2009-2013</b>		CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm				
This contract included full support survey for SUE work at the design stage of this project. The assignments included the verification of provided control and the survey location of over 1,500 VVHs and additional designated lines. This contract involved coordinating Surveying and SUE work in a very intense design environment to comply with the construction schedule. Mr. Marti was responsible for organizing the field groups and providing guidance and technical support on this complex project that involved performing VVHs in a highly complex situation, while maintaining traffic and ensuring the quality of and accuracy of the work.				
<b>b.</b>	(1) TITLE AND LOCATION (City and State) <b>FDOT D4, Lyons Rd from S of C-14 Canal to Sawgrass Expressway</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES <b>2017</b>		CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm				
The project is an off-system MPO bicycle and sidewalk mobility project that requires the widening of the existing pavement between 4 and 7 feet to add bike lanes. Mr. Marti served as Field Supervisor and Lead SUE Technician for this Design Project that included the designation of four miles of this corridor.				
<b>c.</b>	(1) TITLE AND LOCATION (City and State) <b>FDOT D4, I-95 (SR 9)/SR 808 (Glades Road)</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES <b>2015-2016</b>		CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm				
Mr. Marti served as SUE Technician for the designation of the entire project that extended along SR 808 (Glades Road) bridges over Military Trail and over I-95. Mr. Marti conducted all the Survey control and the 3D laser scanning for all four bridges within this project. FRA used the in-house 3D high definition laser scanner to obtain bridge information including beams, columns, etc. FRA performed the survey of a total of four bridges in the area. The survey included a very detailed DTM of the upper deck and location beams, foundations, columns etc. FRA was part of the AECOM Team.				
<b>d.</b>	(1) TITLE AND LOCATION (City and State) <b>FDOT D4, West Park Various Off-System Locations (Bike-Pedestrian)</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES <b>2016</b>		CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA is part of the APCTE Team for this project involving providing design and right-of-way survey services in Broward County. In addition, FRA is providing SUE services to verify potential conflicts along the limits of the proposed construction. The client benefits by receiving SUE and survey data enabling them to identify, address, and remedy any potential utility conflicts that may arise during the design phase of the project. Mr. Marti has recently completed the field work of this "off-system" project.				
<b>e.</b>	(1) TITLE AND LOCATION (City and State) <b>FDOT D6, PortMiami Tunnel (Miami, FL)</b>	(2) YEAR COMPLETED PROFESSIONAL SERVICES <b>2009-2010</b>		CONSTRUCTION (If applicable)
(3) BRIEF DESCRIPTION (Brief scope size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm				
FRA served as a subconsultant to Jacobs on this mega project; its budget was \$1.5 billion. Mr. Marti served as the SUE Field Supervisor. His team provided over 500 test hole locations and the exact horizontal and vertical locations of existing underground utilities by way of electromagnetic, sonic, and other geophysical location techniques included vacuum excavation. The client benefited by receiving SUE data enabling them to identify, address, and remedy potential utility conflicts during the projects design phase.				

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  1
21. Title and location: (City and State)	22. Year completed:	
City of Fort Lauderdale, Civil Engineering Consultant Services (Fort Lauderdale, FL)	Professional services:	Construction: (If applicable)
	2017	N/A
23. Project owner's information:		
A. Project owner: City of Fort Lauderdale	B. Points of contact name: Daniel Lizarazo, PE	C. Point of contact telephone number: (954) 828-6982
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>FRA served as a subconsultant of Tetra Tech, Inc, for this continuing services contract for Civil Engineering Services to the City of Fort Lauderdale, included but not limited to, planning, architectural, engineering and construction support services.</p> <p><b>East Las Olas 12" Force Main Replacement (From SE 17<sup>th</sup> Avenue to Lido Drive) Pump Station D-37</b> This work order was to design improvements for the replacement of the existing 1,900 linear foot 12" force main, which has previously been in disrepair due to aging. FRA provided a full topographic/route survey, including right-of-way lines, field recovery of centerline, and property corners. FRA established the horizontal and vertical control and set the baseline. FRA provided SUE services including a summary table of verified utility detailing the test hole information.</p> <p><b>Lakes Estates Small Water Main Improvements</b> This work order was to address water quality concerns due to the age of existing water distribution systems (approximately 10,850 linear feet). FRA provided a full topographic/route survey and SUE services.</p> <p><b>441 NW 7<sup>th</sup> Avenue Sewer Extension</b> This work order was to extend the existing gravity sewer collection system for approximately 300 linear feet. FRA provided SUE and Survey services for this project to be included in the City survey.</p> <p><b>East Las Olas Easement</b> FRA provided a sketch and legal description for a proposed utility easement at the parcel located north of Las Olas Boulevard and west of the Rio Navarro Canal.</p> <p><b>Pump Station D-10 and D-11 Flow Analysis</b> FRA prepared a topographic survey for the pump stations, including 100 feet north and south along the adjacent roads from the pump station limits. DTM and cross sections were provided. Horizontal and vertical control, including baseline were set along the project. Right-of-way lines were provided.</p> <p><b>Tanbark Lane (SW 21<sup>st</sup> Street) Water Main Improvements</b> FRA provided the horizontal and vertical location of utilities prior to excavation, performing test holes by vacuum excavation techniques. The location and elevations were tied to the survey provided by the City.</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  2
21. Title and location: (City and State)	22. Year completed:	
City of Miami Beach, Citywide Surveying, Topographical & Mapping Services (Miami Beach, FL)	Professional services:	Construction: (If applicable)
	2017	N/A
23. Project owner's information:		
A. Project owner: City of Miami Beach	B. Points of contact name: Elizabeth Wheaton	C. Point of contact telephone number: (305) 673-7000
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>FRA provided as-needed surveying and mapping services to the City of Miami Beach in this multi-task, multi-year survey and SUE contract. Tasks included preliminary engineering surveys (establishing benchmarks, horizontal control using existing right-of-way, locating all improvements and culture, measuring distances and angles, measuring elevations of existing improvements, and miscellaneous office calculations); boundary/right-of-way surveys/legal descriptions (locating all public land corners, street monumentation, property corners, and gathering of parcel evidence as required to determine the existing land lines and/or right-of-way lines); legal descriptions; engineering; right-of-way survey; specific purpose survey; topographical surveys; general land and aerial photography surveying services; mean high water line; submerged/filled lands; GPS and GPR surveys; and horizontal and vertical control and points.</p> <p>FRA has performed these survey tasks at multiple locations throughout Miami Beach, including Nautilus Middle/Polo Park, Fisher Park, and South Pointe Park, among others.</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Prime

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  3
21. Title and location: (City and State)	22. Year completed:	
City of Miami Beach, Topographic Survey and SUE for 11th Street (Miami Beach, FL)	Professional services:	Construction: (If applicable)
	2017	N/A
23. Project owner's information:		
A. Project owner: City of Miami Beach	B. Points of contact name: Elizabeth Wheaton	C. Point of contact telephone number: (305) 673-7000
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>As a subconsultant to A&amp;P Consulting Transportation Engineer, FRA provided miscellaneous survey and SUE services along 11th Street in Miami Beach. Services included topographic survey, underground utility survey, and SUE related work. Under miscellaneous survey three steps were developed.</p> <p>1) Extend the exiting topographic survey to cover the areas where new design was proposed. Topographic survey shows all above ground features and show elevations at 100-foot intervals (at a minimum). Driveways were located, and elevations shown along the right-of-way lines (back of sidewalk) and extend into the properties to the building lines. Topographic survey was extended approximately 150 linear feet north from the existing topographic information at the intersection with Euclid Avenue.</p> <ul style="list-style-type: none"> <li>- Extend topographic survey 150 linear feet north and south from the existing topographic information at the intersection with Meridian Avenue.</li> <li>- Extend topographic survey 150 linear feet south from the existing topographic information at the intersection with Jefferson Avenue.</li> <li>- Extend topographic survey 100 feet along 11th Street, east from existing topographic information to approximate the most easterly side of the alley on Block 42.</li> </ul> <p>2) FRA opened all existing manholes within the pump station area and obtained the invert information, pipe size, and material. FRA also designated all underground utility lines within the pump station area and the adjacent alley. Underground lines were shown on the topographic survey.</p> <p>3) As a final step FRA extended the topographic survey 150 linear feet north from the existing topographic information at the intersection and alleys within the project areas were developed.</p> <ul style="list-style-type: none"> <li>- Updated topographic survey provided. Creation of the GDTMRD file using the existing topographic information and combined it with the additional topographic/DTM information to be collected by FRA.</li> <li>- Obtained the drainage and sewer information along the corridor.</li> </ul> <p>FRA extended the existing baseline of survey as shown on survey provided easterly to Washington Avenue and Westerly to Alton Road. Right-of-way lines along Lennox Avenue, Michigan Avenue, and Pennsylvania Avenue shown on topographic file. The topographic survey was referenced to Florida State Plane Coordinate System, North American Datum 1983, Adjustment 1990 (NAD83/90). Elevations were based on North American Vertical Datum, 1988 (NAVD88).</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  4
21. Title and location: (City and State)	22. Year completed:	
FDOT District 4, Continuing Services for Surveying, Mapping and SUE (Fort Lauderdale, FL)	Professional services:	Construction: (If applicable)
	2023	N/A
23. Project owner's information:		
A. Project owner: Florida Department of Transportation, District 4	B. Points of contact name: Paul Doll	C. Point of contact telephone number: (954) 777-4603
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>FRA provides as-needed surveying, mapping, and SUE support to District 4 on this 5-year districtwide contract. Under this contract, FRA provides miscellaneous surveying services throughout Broward, Palm Beach, Martin, Indian River, and St. Lucie Counties. Services provided includes LiDAR, field surveys, maintenance of traffic, historical baseline and existing right-of-way determination, GPS Surveys, topographic surveys and DTM, general land and aerial photography survey, monumentation surveys, bathymetric surveys, utility designation and excavation including GIS files, tree surveys, right-of-way control survey maps, right-of-way maps, maintenance maps, right-of-way monumentation maps, boundary surveys, quality assurance reviews, title search plotting maps, sketches, parcel staking, and legal descriptions.</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Prime

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  5
21. Title and location: (City and State)	22. Year completed:	
FDOT District 4, Design Services West Park Various Off System Locations (Fort Lauderdale, FL)	Professional services:	Construction: (If applicable)
	2019	N/A
23. Project owner's information:		
A. Project owner: Florida Department of Transportation, District 4	B. Points of contact name: Paul Doll, PSM	C. Point of contact telephone number: (954) 777-4579
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>FRA is providing surveying services for this project that is adding bikes lanes along 48<sup>th</sup> Avenue from County line to Pembroke Road; adding sidewalks to Sutton Road between Hallandale Beach Boulevard and William Road; and adding approximately 600 feet of sidewalks to 21<sup>st</sup> Street along the NW corner of the Mary Saunders Park.</p> <p>Tasks performed by FRA included:</p> <ul style="list-style-type: none"> <li>• Horizontal project control along the entire corridor.</li> <li>• 8 primary control points and 16 secondary control points based on North American Datum 1983, adjustment 90 (NAD83/90).</li> <li>• Vertical project control/bench line along the entire corridor on North American Vertical Datum 1988 (NAVD88).</li> <li>• 10 benchmarks every 1,000 linear feet.</li> <li>• Elevations were obtained for all 50 aerial targets along the corridor using three wire (or digital) leveling.</li> <li>• Alignment and existing right-of-way (ROW) lines: computing historical baseline of survey for SW 48<sup>th</sup> Avenue from Broward/Dade County Line to Pembroke Road and for Sutton Road from Hallandale Beach Boulevard to Williams Road.</li> <li>• Set aerial targets along the entire corridor: 50 aerial targets were set along the entire corridor and the side streets. Coordinates were obtained on each target using RTK (point to point) survey.</li> <li>• Topography/DTM was performed for soft shots, from edge of pavement to 10 feet beyond the ROW and DTM survey on the obscure areas where not aerial information was obtained along the main corridor.</li> <li>• Topographic/DTM survey was extended 100 feet down on all side streets (a total of 2,700 linear).</li> <li>• Topographic survey included the location of the overhead lines along the corridor.</li> <li>• Roadway cross-sections/profiles were performed to analyze and process all data for comparison with DTM surface provided and a comparison table showing the relation between elevation of check cross-sections and the DTM Surface was prepared.</li> <li>• Underground utilities were marked in conjunction with the designates along the entire corridor.</li> <li>• Survey was performed for the underground utilities marked and UTEXRD01 file was prepared.</li> <li>• Sectional survey was performed with field location and verification of up to 15 section corners, and 1/4 section corners.</li> <li>• Subdivision location along the entire corridor was prepared under the consideration of recovering monumentation at a total of 20 subdivisions along the corridor to establish the ROW lines.</li> <li>• Preparation of project network control (PNC) Sheets depicting historical baseline of survey along SW 48<sup>th</sup> Avenue and Sutton Road. PNC Sheets also showed horizontal and vertical control points.</li> </ul>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  <div style="text-align: center;">6</div>
21. Title and location: (City and State)		
<b>FDOT District 4, I-95 at Glades Rd</b> (Fort Lauderdale, FL)		
22. Year completed:		
Professional services:		Construction: (If applicable)
2018		N/A
23. Project owner's information:		
A. Project owner:	B. Points of contact name:	C. Point of contact telephone number:
Florida Department of Transportation, District 4	Paul Capewell, PSM	(954) 777-4581
24. Brief description of project and relevance to this contract (Include scope, size, and cost)  <p>FRA provided surveying services for the design of SR 9/I-95 at the Glades Road interchange. FRA established the horizontal and vertical control; performed a topographic survey and DTM; provided 2D and 3D files; completed 3D LiDAR scan (HDS) survey of the underside of the bridge over Glades Road and SR 9 (I-95) and the bridge over Military Trail. Right-of-way lines were analyzed and verified surveying along existing subdivision adjoined to the project. FRA provided services of locating underground utilities by GPR techniques (Level B) and soft digs (Level A).</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  <div style="text-align: center;">7</div>								
21. Title and location: (City and State)  <b>FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys</b> (Miami, FL)		22. Year completed:  <table border="1"> <tr> <td>Professional services:</td> <td>Construction: (If applicable)</td> </tr> <tr> <td style="text-align: center;">2019</td> <td style="text-align: center;">N/A</td> </tr> </table>	Professional services:	Construction: (If applicable)	2019	N/A				
Professional services:	Construction: (If applicable)									
2019	N/A									
23. Project owner's information:										
A. Project owner: Florida Department of Transportation, District 6	B. Points of contact name: Keith McIntosh	C. Point of contact telephone number: (305) 470-5373								
24. Brief description of project and relevance to this contract (Include scope, size, and cost)  <p>The purpose of this multi-task CEI contract was to provide services to verify both existing pre-construction and post-construction conditions, to ensure design criteria was met by the contractors. As a Prime consultant, FRA provided survey and mapping support to the District. This task work order contract involved field surveys for construction projects, including re-establishment of survey baselines, control points, bench marks, drainage surveys and bridge data, original and final cross-sections, and mast arm bearings, among other scopes.</p>										
25. Firms from Section C involved with this project:										
<table border="1"> <thead> <tr> <th>a.</th> <th>(1) Firm Name</th> <th>(2) Firm Location (City and State)</th> <th>(3) Role</th> </tr> </thead> <tbody> <tr> <td></td> <td>F.R. Aleman &amp; Associates, Inc.</td> <td>Miami, FL</td> <td>Prime</td> </tr> </tbody> </table>			a.	(1) Firm Name	(2) Firm Location (City and State)	(3) Role		F.R. Aleman & Associates, Inc.	Miami, FL	Prime
a.	(1) Firm Name	(2) Firm Location (City and State)	(3) Role							
	F.R. Aleman & Associates, Inc.	Miami, FL	Prime							



F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  8
21. Title and location: (City and State)  <b>Miami-Dade County Health Systems, Jackson North Medical Center</b> (Miami, FL)		22. Year completed:  Professional services: 2017  Construction: (If applicable) \$121,000,000 (est)
23. Project owner's information:		
A. Project owner: Miami-Dade County Jackson Health System	B. Points of contact name: Isa Nunez, PE	C. Point of contact telephone number: (305) 470-5373
24. Brief description of project and relevance to this contract (Include scope, size, and cost)  <p>FRA provided miscellaneous survey services for professional architectural engineering services in support of construction improvements to the Jackson North Medical Center, in accordance with Jackson Health System Master Plan recommendations. FRA prepared a boundary survey, a topographic survey including DTM and SUE services (DPR and locating) tentative and final plat, title research and review, and determination of property lines along existing FDOT right-of-way, City of North Miami Beach, and Miami-Dade County. FRA delivered electronic copies of the survey in 2015 CIVIL 3D, including the point cloud, in 3D format after performing a HD scan.</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  9
21. Title and location: (City and State)	22. Year completed:	
<b>WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects</b> (Miami, FL)	Professional services:	Construction: (If applicable)
	2019	N/A
23. Project owner's information:		
A. Project owner: Miami-Dade County Water & Sewer Department	B. Points of contact name: Juan Cordero, PSM	C. Point of contact telephone number: (305) 665-7477
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>FRA served as a sub to MWH Americans, Inc. (now Stantec) on this Professional Services Agreement (PSA) contract. As a subconsultant, FRA provided topographic surveys, DTM, boundary surveys, GPS, survey control points, utility coordination, GPR, and SUE services. FRA also surveyed the sanitary and storm sewer manholes and catch basin invert elevations. All this information to be used to develop site and grading plans for the proposed project. These services were in support of WASD's Pump Station Improvement Program for upgrading the wastewater collection and transmission system.</p>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

F. Example projects which best illustrate proposed team's qualifications for this contract: <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. Example project key number:  10
21. Title and location: (City and State)	22. Year completed:	
City of Doral, Canal Bank Stabilization Program Management: Year 7 (Miami, FL)	Professional services:	Construction: (If applicable)
	2017	N/A
23. Project owner's information:		
A. Project owner: City of Doral	B. Points of contact name: Edward Rojas	C. Point of contact telephone number: (305) 593-6740
24. Brief description of project and relevance to this contract (Include scope, size, and cost)		
<p>As part of the ADA Engineering team, FRA provided survey services during the design portion of multiple projects. Services included canal cross-sections every 50 feet, right-of-way delineation along the canal, and topographic survey of all above-ground features within the canal and the adjacent streets' right-of-way. FRA provided approximately 20,000 linear feet of survey for the following locations:</p> <ul style="list-style-type: none"> <li>- North-line (NW 58th Street) Canal from NW 97th Avenue to NW 99th Avenue</li> <li>- C2 Canal Extension (NW 117th Avenue) from NW 25th Street to NW 34th Street</li> <li>- C2 Canal Extension (NW 117th Avenue) from NW 50th Street to NW 58th Street</li> <li>- Dressels Canal between NW 87th Avenue and Palmetto Expressway (Year 5)</li> <li>- Dressels Canal between NW 58th Street and NW 52nd Street (Year 5)</li> <li>- Dressels Canal between NW 97th Avenue to NW 87th Avenue (Year 6)</li> </ul>		
25. Firms from Section C involved with this project:		
a.	(1) Firm Name	(2) Firm Location (City and State)
	F.R. Aleman & Associates, Inc.	Miami, FL
		(3) Role
		Subconsultant

### G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, Block 12)	27. ROLE IN THIS CONTRACT (From Section E, Block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Examples Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role.)									
		1	2	3	4	5	6	7	8	9	10
Lis Tolstoy, PSM	Survey Director					X			X	X	
Pete Diaz, PSM	Sr. Survey Manager						X	X	X	X	
Carlos Cuenca, CST	Sr. Survey Technician	X	X	X	X	X	X	X	X	X	X
Ivan Larrinaga, CST	Survey Field Supervisor	X	X	X	X		X	X	X	X	X
Ana Perurena, CST	Survey Technician		X			X		X	X	X	
Patricia Garcia	Survey Technician		X	X	X			X	X	X	X
Alvaro Saenz	Survey Technician							X	X		
Dennis Stanton	SUE Director	X	X	X	X	X		X	X	X	X
Antonio Diaz	SUR SUE Technician 3 Senior	X	X	X	X	X		X	X	X	X
Ivan Marti	SUR SUE Technician 3 Senior	X	X	X	X	X		X	X	X	X

### 29. Example Projects Keys

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	City of Fort Lauderdale, Civil Engineering Consultant Services	6	FDOT District 4, I-95 at Glades Rd
2	City of Miami Beach, Citywide Surveying, Topographical & Mapping Services	7	FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys
3	City of Miami Beach, Topographic Survey and SUE for 11th Street	8	Miami-Dade County Health Systems, Jackson North Medical Center
4	FDOT District 4, Continuing Services for Surveying, Mapping and SUE	9	WASD, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects
5	FDOT District 4, Design Services West Park Various Off System Locations	10	City of Doral, Canal Bank Stabilization Program Management: Year 7

## H. ADDITIONAL INFORMATION

F.R. Aleman and Associates, Inc. (FRA) is a Minority Owned engineering and geospatial industry leader that has provided professional services in the State of Florida for over 30 years. With a staff of 70+, FRA has extensive knowledge and expertise in the areas of surveying and mapping, subsurface utility engineering, and utility coordination. FRA's South Florida survey and mapping experience includes contracts for clients such as the City of Fort Lauderdale, City of Miami Beach, City of Miami, City of Doral, Miami-Dade County, Florida Department of Transportation, South Florida Water Management District, and more.

Our team of survey professionals are committed to providing the highest level of services and quality control on all projects.

### An Award-Winning Firm

FRA exemplifies a history of dependable service. This is evidenced by being continuously recognized in the industry for our outstanding service to our clients. Some examples of this recognition include:

- 2017 Small Business Enterprise - Architectural & Engineering Award - Miami-Dade County
- Top 500 largest Hispanic-Owned Companies in the United States - Hispanic Business Magazine
- One of the 100 Largest Hispanic Business Enterprises in Miami-Dade County - Greater Miami Chamber of Commerce

### A Qualified Team of Professionals

Our team consists of qualified multi-disciplined professionals with broad experience in all phases of surveying, mapping, utility locating and designating, land and aerial photography, mobile/terrestrial lidar, GPS, GIS. The FRA team is made up of experienced and knowledgeable Surveyors, Party Chiefs, Photogrammetrist, Field and CADD Technicians, and Instrument and Rod Persons. We have seven crews readily available at moment's notice to perform any required task. Knowledge of procedures, personnel, and local conditions is a special strength of the FRA team.

This background will make the FRA team particularly attentive to details. The team we have proposed for this project is intimately familiar with the City's procedures. We have experience on city, municipal, and FDOT districtwide surveying and mapping contracts, giving us the knowledge and expertise to successfully complete all assignments on this contract. In addition, our survey personnel are fully trained and consistently updated in the use of the state-of-the-art equipment FRA has to offer for this contract. FRA's survey experience includes both prime and subconsultant roles on numerous surveying and mapping contracts on city, county, and state levels; as well as project specific design and construction contracts. Our experienced professionals analyze and master every detail, leaving no room for error.

We have collected hundreds of miles of surveys. Our experience in preparing sketch and legal descriptions for public right-of-way or easement acquisitions, boundary surveys, preparation of plats and maps, certification of tentative and final plats for compliance to City Code, Broward County Code, and State of Florida statutory requirements; establishment of vertical project network controls, establishment of alignment and right-of-way lines, hydrographic surveys, construction-related surveys including as-built/record survey, layouts, spot surveys, foundation surveys, drainage surveys, manhole locations and invert elevations; subsurface utility engineering (SUE) for existing underground utilities that may utilize the ground penetrating radar (GPR) method, utility coordination, review all public records to determine the recordation of easements, rights-of-way, public utilities on the premises, and adjacent right-of-way, setting of photogrammetric control, performing water boundary surveys is extensive and can be easily verified from our clients. Our team is experienced in the state-of-the-art techniques for mobile LiDAR, LAMP, and terrestrial scanning


### Familiarity with Current Standards

Our Project Manager's expertise is legendary, she is a stickler for detail and will not let right-of-way maps or parcel sketches be submitted until they are in absolute compliance with the City's standards. FRA staff is intimately familiar with the above listed standards which together with instructions provided by the designated City Project Manager will define the technical standards for conducting the daily activities. FRA fully understands the requirements, the issues, and the process associated with surveying and mapping activities for City projects. Our understanding and knowledge base come from over two decades of survey experience.

## I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

8/26/2019

33. NAME AND TITLE

Yvette A. Aleman, PE

# Profile of Consultant

# Profile of Consultant



F.R. Aleman and Associates, Inc. (FRA) is a Minority Owned engineering and geospatial firm that has provided professional services to government and private agencies since 1987. FRA has a staff of 70 professionals who take pride in their jobs. FRA has vast knowledge and expertise in the areas of engineering, surveying and mapping, and subsurface utility engineering. FRA's survey experience includes both prime and subconsultant roles on numerous roadways, drainage, design, and construction contracts throughout South Florida for clients such as the City of Fort Lauderdale, City of Miami Beach, City of Miami, City of Doral, Miami-Dade County, Florida Department of Transportation, and the South Florida Water Management District.

FRA has the technical expertise, performance efficiency, staff availability, and capabilities necessary to successfully complete the requirements of this contract.

FRA has reviewed the Scope of Services for this project and understands that the City's primary objective is to team with a qualified and experienced team that can provide all surveying services for the Beach CRA district from Hollywood Boulevard to Hallandale Beach Boulevard between the intracoastal waterway and the ocean. These services may include:

- » Design Surveys
- » Construction Layouts
- » Boundary Surveys
- » Preparation of Sketches and Legal Descriptions
- » Mapping
- » AutoCAD Drafting
- » Calculations
- » Other Misc Survey Services

## An Award-Winning Firm

FRA exemplifies a history of dependable service. This is evidenced by being continuously recognized in the industry for our outstanding service to our clients. Some examples of this recognition include:

- » 2017 Small Business Enterprise - Architectural & Engineering Award - Miami-Dade County
- » Top 500 largest Hispanic-Owned Companies in the United States - Hispanic Business Magazine
- » One of the 100 Largest Hispanic Business Enterprises in Miami-Dade County - Greater Miami Chamber of Commerce

## Office Locations

The work for the contract will be performed out of FRA's Weston office, as well as the headquarters in Miami. Other offices will support, as needed.

### WESTON

1820 N Corporate Lakes Boulevard, Suite 206-8  
Weston, FL 33326

### MIAMI

10305 NW 41st Street, Suite 200  
Miami, FL 33178

### ORLANDO

725 Primera Boulevard, Suite 205  
Lake Mary, FL 32746

### TAMPA

3014 US Highway 301 N, Suite 300  
Tampa, FL 33619

### JACKSONVILLE

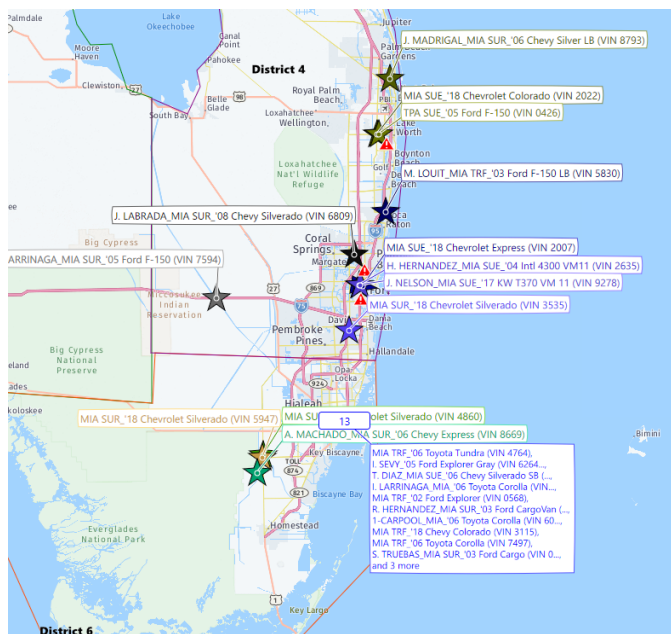
6196 Lake Gray Boulevard, Suite 101  
Jacksonville, FL 32244

## MAINTAINING THE BUDGET

- » Conduct weekly meetings to discuss the project budget through the life of the project.
- » Involve senior staff in all stages of the project.

Costs will be minimized based on our extensive experience with surveying and mapping projects and having a strong understanding of coordination issues. Our experience and understanding of the anticipated issues along with their solutions will lead to a complete survey package, which translates into cost savings for both design and construction.

Unlike any other firm, FRA has a dedicated staff, training, and equipment scheduler accomplished in forecasting, scheduling, and monitoring workloads from field to office to deliverable. FRA provides this valuable organizational asset to our clients, at no cost, as part of FRA's corporate commitment to schedule adherence and always having the right depth of resources for any assignment, no matter the size or location. FRA commits to submitting all deliverables in a timely manner.



FRA has established a fluid working relationship with our clients allowing us to fully understand the project requirements and anticipate their needs. FRA is fully committed to quality control. We continuously improve our QA/QC Plan, which is based on a proactive management of the processes, rather than accepting or rejecting results at the end of the project – Error Prevention vs Error Detection. It includes prompt responses to comments, resolution meetings, and preparation of submittals.

**Level One (Field Review):** The Sr. Party Chief oversees scheduling the work force, performs survey tasks, evaluates methods, and performs the collection of all data. He is also responsible for basic maintenance of the surveying equipment and enforcing the compliance of surveying procedures by the field crew. FRA recognizes that the Sr. Party Chief is the first step in the QA/QC Plan. We have spent considerable resources in training the Sr. Party Chief in field surveying procedures and standards of accuracy. Level One review is conducted in the field to ensure accuracy before returning to the office.

## QUALITY CONTROL PROCEDURES

### Field Check List

Zone Degradation (Check for degradation in the following order):

Zone	Description
1	General Topography (Slopes, embankments, ditches, etc.)
2	Vegetation (Trees, shrubs, grass, etc.)
3	Soil (Type, color, texture, etc.)
4	Water (Flow, level, etc.)
5	Structure (Type, material, etc.)
6	Other (Any other features)

#### 1. Area of Observation:

- Observe and describe the Scope of Work, including the location of the work.
- Observe and describe the location of the work.
- Observe and describe the location of the work.

#### 2. Instruments Checks and Tests:

- Check the accuracy of Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.

#### 3. Visual Checks:

- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.
- Check the accuracy of the Level Run, and check the level of the instrument.

Field Check

Field Supervisor

### Office Check List

#### CAECI Processing

##### Project Setting

- Settlement Column
- Settlement Column
- Settlement Column
- Settlement Column

##### Segment

- Original Name and Description
- Original Name and Description
- Original Name and Description
- Original Name and Description

##### Tolerance

- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"

##### Other

- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"
- Settlement Tolerance: 1.00"

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### QA/QC Plan

#### Production Check - COLOR CODE

In order to ensure the deliverables are complete and ready for a validated QA Review, the project team will complete the appropriate QA/QC and QA/QC Checklist. Once the QA Review is complete, the project team will complete the appropriate QA/QC and QA/QC Checklist. Once the QA Review is complete, the project team will complete the appropriate QA/QC and QA/QC Checklist.

A standard level of acceptable deliverables must be used to ensure that all information contained in the deliverables is submitted as required a production check. The stamp below is used for the following purposes:

#### CHECKED

Change (Red)

PREPARED BY REVIEWER

Correct (Yellow Highlighter)

PREPARED BY EDITOR

#### CHANGE INCORPORATION

Blue Highlighter (yellow + blue will be green)

PREPARED BY REVIEWER

#### VERIFICATION

Correct (Green Highlighter)

PREPARED BY REVIEWER



**Level Two (Office Review):** This level is performed by the Project Surveyor who coordinates activities between staff and the FRA Project Manager. He assures that all supporting documents are signed and dated by the individual involved when the work is performed; verifies that field notes are filled appropriately and turned in daily; and that the data collector is downloaded each afternoon for daily review. The Project Surveyor will also check for proper traverse closure and instruct the Party Chief in the correct use of surveying techniques. He is also responsible for enforcing and following of established survey procedures by field personnel under his supervision. This level will establish the procedures for revision of the final CAD products. These revisions are performed by the Project Surveyor, after the final copies are printed. The Project Surveyor will red mark all these copies with his comments and will then return it to the CAD technician to incorporate these into the digital file. The CAD Technician together with the survey technician will highlight in yellow color every red mark once it has been corrected in the CAD file. A new print will be prepared and delivered to the Project Manager to compare and approved the final print. All red-marked files will be filed within the QA/QC folder of this task.

**Level Three (Project Manager Review):** This level is overseen by the Project Manager and will include the independent revision by senior level staff for compliance with the Standards of Practice for Land Surveyors, Rule 5J-17, F.A.C. and with any standards or requirements set by the City. The independent reviewer will conduct peer reviews throughout the different portions of the project. Before its delivery to the City, a final check will be conducted that will include all the delivery files, reports, QA/QC documents, etc. They will red mark the plans and will provide the appropriate annotations and comments.

### Current Capability

FRA has successfully managed multiple \$5 million districtwide contracts for the Florida Department of Transportation, as well as several city and county wide contract. FRA, and our well-rounded team of subconsultants are more than capable of handling any number task work orders assigned on this contract. We have the staff, equipment, and resources to complete every task to the City's complete satisfaction.

### STAFF RESOURCES:

- » 80+ Staff
- » 6 Professional Surveyors
- » Party Chiefs, Field and CADD Technicians, and Instrument and Rod Persons
- » 7 Survey Crews
- » 5 SUE Crews
- » 11 CST Survey Technicians
- » Part 107 Licensed Pilots

### EQUIPMENT RESOURCES:

- » Mobile LiDAR
- » Leica HD Scanstation P20
- » Leica Total Stations
- » Husky and Carlson Data Collectors
- » Topcon Digital Levels
- » Leica VIVA15 GPS Receivers
- » Leica Infinity
- » Remote controlled bathymetric boat
- » Phantom 4 Pro drone
- » Vac Trucks
- » GPRs

### Similar Municipal Experience

FRA has a proven track record of providing this same scope of services to a variety of public sector agencies. Some of the relevant projects that we provided survey services on include:

- » City of Fort Lauderdale, Civil Engineering Consultant Services
- » City of Miami Beach, Citywide Surveying, Topographical & Mapping Services
- » City of Miami Beach, Topographic Survey and SUE for 11th Street
- » FDOT District 4, Continuing Services for Surveying, Mapping and SUE
- » FDOT District 4, Design Services West Park Various Off System Locations
- » FDOT District 4, I-95 at Glades Road
- » FDOT District 6, Districtwide Location Survey Consultant

- » FDOT District 6, Districtwide Construction Engineering Inspection (CEI) Consultant Surveys
- » Miami-Dade County Public Works, General Land & Engineering Surveying Services
- » Miami-Dade County, Jackson North Medical Center
- » Miami-Dade County Water & Sewer Department, Design Services for Wastewater Treatment Plants Related to Consent Decree Projects
- » City of Doral, Canal Bank Stabilization Program Management: Year 7
- » City of Doral, Professional General Engineering & Architectural Services

Below are several references for some of the above projects:

Project	Client References
City of Fort Lauderdale Civil Engineering Consultant Services	Daniel Lizarazo, PE (954) 828-6982 dlizarazo@fortlauderdale.gov
City of Miami Beach Citywide Surveying, Topographical & Mapping Services	Elizabeth Wheaton (305) 673-7000 elizabethwheaton@miamibeachfl.gov
FDOT District 4 Continuing Services for Surveying, Mapping and SUE	Paul Doll, PSM paul.doll@dot.state.fl.us
Miami-Dade County Water & Sewer Department Design Services for Wastewater Treatment Plants Related to Consent Decree Projects	Juan Cordero, PSM (305) 665-7477 juan.cordero@miamidade.gov
City of Doral Professional General Engineering & Architectural Services	Edward Rojas (305) 593-6740 Edward.Rojas@cityofdoral.com

Full descriptions of our most relevant projects are included in the SF330.

## Litigation

FRA has not been involved in any litigation over the past five years.

## Staff Experience

Describe the experience in conducting similar projects for each of the staff assigned to the engagement. Describe the relevant educational background of each individual.

## A QUALIFIED TEAM OF PROFESSIONALS

Our team consists of qualified multi-disciplined professionals with broad experience in all phases of surveying, mapping, utility locating and designating, land and aerial photography, mobile/terrestrial LiDAR, global positioning system (GPS), geographic information systems (GIS). The FRA team is made up of experienced and knowledgeable Surveyors, Party Chiefs, Photogrammetrist, Field and CADD Technicians, and Instrument and Rod Persons. We have seven crews readily available at moment's notice to perform any required task.

The team we have proposed for this project is familiar with the City of Hollywood's procedures, personnel, and local conditions. We have experience on city, municipal, and FDOT districtwide surveying and mapping contracts, giving us the knowledge and expertise to successfully complete all assignments on this contract. In addition, our survey personnel are fully trained and consistently updated in the use of the state-of-the-art equipment FRA has to offer for this contract. FRA's experience includes both prime and subconsultant roles on numerous surveying and mapping contracts across the State of Florida. Our experienced professionals analyze and master every detail, leaving no room for error.

## A QUALIFIED PROJECT MANAGER

FRA is proposing **Lis Tolstoy, PSM** as the Project Manager for this contract. Lis has over 24 years of experience in all aspects of surveying and mapping. She is well-known and trusted in the industry and always serves as a great leader on the projects she oversees. She is a stickler for detail and holds her survey team to the highest of standards, ensuring that our clients receive a quality project.

She has served as a Project Manager on multiple contracts for FDOT (design, right-of-way, control, and CEI), WASD (Consent Decree Program), and construction projects such as Jackson Memorial Hospital and the Miami Science Museum. Through this experience, Lis has gained familiarity with the standards, policies, and procedures for the local

agencies. She is responsible for ensuring that the best practices are followed, and quality assurance goals are achieved. Lis is an effective team player with excellent leadership skills and an analytical approach to problem solving.

Her experience has included high-pressure management roles that have required the prioritization and planning of work activities in order to not only meet but exceed productivity standards. Additionally, Lis' extensive experience covers the areas of HD scanning, GIS data collection, data conversion, GPS and geo-referencing, digital mapping, remote sensing, and SQL programming.

To support Lis on this contract, we have added key qualified staff with tons of relevant experience. These individuals come from FRA and our subconsultant, Brown & Phillips, that we have hand-picked for this project.

**Pete Diaz, PSM** has 30 years of experience covering all levels of surveying and mapping, from field to office analysis/processing. His extensive experience spans the areas of control surveys, topographic surveys, design surveys, boundary surveys, digital terrain modeling, global positioning system (GPS), boundary dispute resolution, right-of-way (ROW) mapping (control maps, row maps, maintenance maps, sketch and legal descriptions, surplus documents, license agreements, and donations), as-built surveys, bathymetric surveys, and mean high-water surveys. He is also familiar with GIS (developing database schema, data management, training/supervising staff in ArcMap data entry and editing). Over his career, Pete has worked for FDOT at District 6 as both the District Surveyor and Survey Project Manager, and at District 4 4 as the Right-of-Way Mapping Section Leader - making him intimately familiar with FDOT standards, procedures, and processes.

**Dennis Stanton** will serve as the SUE Task Leader for this project. He has over 30 years of experience and has successfully managed consecutive utility contracts. His thorough knowledge of utility infrastructure, combined with survey, utility coordination, and location experience make him a valuable member of our team.

Our other key staff includes the following individuals:

Staff	Role	Years of Exp
Lis Tolstoy, PSM	Project Manager	25
Pete Diaz, PSM	Sr Surveyor	34
Carlos Cuenca, CST III	Sr Survey Technician	29
Ivan Larrinaga, CST III	Sr Survey Technician	32
Ana Perurena, CST III	Survey Technician	24
Patricia Garcia, CST	Survey Technician	5
Alvaro Saenz, CST	Survey Technician	13
Esther Olivares	Survey Technician	21
Dennis Stanton	SUE Director	27
Tony Diaz	Sr SUE Technician	22
Ivan marti	Sr SUE Technician	19

Resumes for this staff are included in the SF330.

## Organization of the Proposed Project Team

To provide the City with the best service possible, we have added several subconsultants to round out our team. An organizational chart is shown below. Resumes of the key personnel listed below are included at the end of this section. SF 330 Resumes are included in Section 3 - Firm Qualifications & Experience.

An organization chart is included in the SF330.

## Municipal Staff Support

FRA has successfully completed numerous survey contracts for local municipalities. These have included city-wide and project specific contracts. With this experience, FRA knows what staff support is needed to tackle any task. We have an abundance of resources and will appropriately allocate the required staff to each task.

## Approach to Performing Work

Our team of survey professionals are committed to providing the highest level of services and quality control on all projects.

Our survey experience includes:

- » Topographic surveys and DTMs
- » Sketch and legal descriptions for public right-of-way or easement acquisitions
- » Boundary surveys
- » Plats and maps
- » Establishment of vertical project network controls
- » Establishment of alignment and right-of-way lines
- » Construction-related surveys, as-built/record survey, layouts, spot surveys, foundation surveys, drainage surveys, manhole locations and invert elevations
- » Subsurface utility engineering (SUE)
- » Ground penetrating radar (GPR)
- » Review of public records to determine the recordation of easements, rights-of-way, public utilities on the premises, and adjacent right-of-way
- » Water boundary surveys
- » Expert testimony
- » Our team is experienced in the state-of-the-art techniques for mobile LiDAR, LAMP, and terrestrial scanning

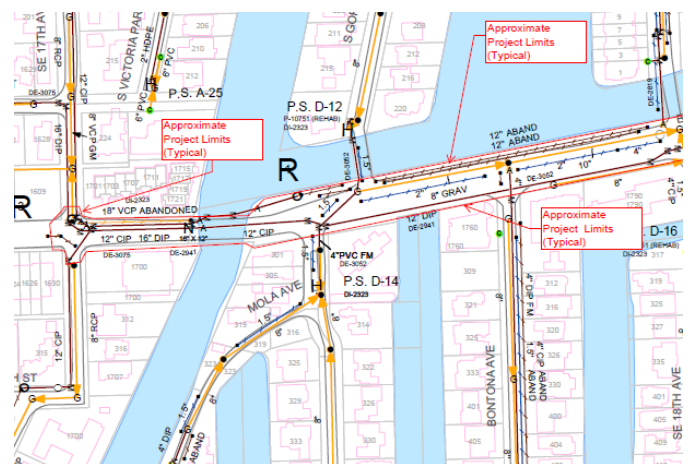
## ENGINEERING/DESIGN SURVEYS

The FRA team is experienced in establishing horizontal and vertical control with the purpose of preparing topographic surveys, right-of-way determination, obtaining elevations, and locating specific improvements, as well as any other survey that the City of Hollywood may require. All survey tasks will be performed along with City field books, following standard note keeping techniques, and will be supplemented with digital data collected, including files downloaded directly from our digital data collectors, GPS (RTK & Static) receivers, point clouds from HD scanner and mobile LiDAR, and digital levels. FRA will also provide the City with the electronic files in the format of DWG. All office calculations will be available to the City, if requested.

FRA will research any existing survey information, including but not limited to right-of-way maps, aerial photography, horizontal and vertical control, field books, as-built information, previously prepared construction plans, and any digital files available. Any extra information, including Recorded Plats or Parcels Legal Description will be obtained from the County Records Departments. LABINS and NGS websites will be researched to extract First Order Horizontal Control Points and Vertical Control and to obtain Certified Sections Corners for the sections the corridor runs through.

The following is our methodology and approach to Engineering/Design Surveys:

Field task will begin by performing reconnaissance of the project site, identifying and recovering existing horizontal and vertical control, and establishing the location form Primary Control Points on North American Datum 1983/2011 adjustment (NAD83/2011), Florida State Plane Coordinate System; A horizontal control network would then be completed either with GPS or by conventional methods. FRA will establish horizontal control points using at least three National Geodetic Survey Control Points (NGS datasheet). Horizontal control points will be intervisible, avoiding any obstructing objects such as buildings, trees, etc., and the location should also ensure strong survey geometry. Primary control points may also be used as vertical benchmarks. Control points will be referenced and recorded in the field books. Lis will designate the most experienced survey crew to set the primary control points.





After all horizontal control points are set, and coordinates values have been obtained, FRA will proceed to tie centerlines, sections corners, subdivision corners, lot and block corners, permanent reference monuments, and right-of-way monuments, to the control points. FRA will analyze the relative position of the found evidence, compare this evidence with the recorded documents (i.e., plats, as-builts, right-of-way maps), and will show any discrepancies with the modern measurements. Using the analysis performed with all the evidence collected, FRA will then calculate the baseline of survey (centerline alignment) and the right-of-way lines along the project.

FRA will establish permanent benchmarks at 1,000-foot intervals (a minimum of two benchmarks per site) and outside of the construction limits; the vertical project control will be completed using levels running a three-wire closed level loop between two known benchmarks or a digital Level. Every bench mark will be observed as a part of the closed loop (no side shots) between at least two known benchmarks, if possible, established and published by NGS or any governmental agency, assuring the use of the North American Vertical Datum of 1988 (NAVD'88) as required by Broward County for construction projects. After the elevation is adjusted proportionally in relation with the total level run distance, the adjusted value will then be incorporated to the project database. It is important to note that as part of our quality assurance (QA)/quality control (QC) plan, FRA requires our crews to perform a peg test every time a level loop is run. That peg test is recorded in the field book and is reviewed daily by the Field Supervisor.

FRA will then set the baseline of survey (centerline alignment), all PIs, PCs, PTs, and the beginning and ending and of the project will be staked out, and all horizontal and vertical control points will be referenced to the baseline of survey. The baseline effectively ties the right-of-way to section lines, property lines, right-of-way lines, etc.

Based instructions from the City, we will then perform the specific tasks of the project that may include preparing a Digital Terrain Model (DTM) or a topographic survey of the length of the project or do only the cross sections at 50-foot intervals (10 feet spacing on pavement). RW cross sections will include back of sidewalk, type and top of curb, gutter line, edge of pavement, centerline/median and intersection centerline. All the features identified in the

reconnaissance phase would be located including any roadways, structures, and utilities as required by scope. We will perform as-builts on the storm and sanitary structures, or whatever the project may require. We will collect all this data electronically and process it in the City's preferred software, assigning all the features to their corresponding layers and symbology, per City instructions.

We will use all the City forms and directives to make sure that our final product will comply with the City's directives.

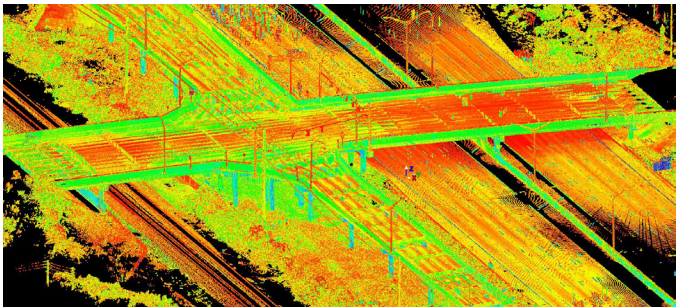
## BOUNDARY & TOPOGRAPHIC SURVEYS

Boundary surveys show the natural or artificial separation that delineates the confines of real property, usually, calls for the preparation of a map or plan showing the boundaries of property including the monuments or markers that ascertain their location. All boundary surveys have a legal description that is complete enough so that a piece of land can be located and identified. There are also surveys that show the topographical features, elevations, utilities, easements, and other matters that affect the property of the land involved. When a boundary survey is requested, we will check with the City of Hollywood's Project Manager for the availability of a legal description of the property, so we can research the plats where the property is located and compute the position and prepare a sketch for the field crews to do the location of the monuments and adjacent properties. Depending on the purpose and type of the survey and the detail required, we determine the scale, size of the map, surveyor's reports, and notes to comply with the applicable standards for the survey preparation.

After the field crew locates all required public land corners, street monumentation, permanent reference monuments (PRM), property corners, block corners, and any other potential evidence of existing right-of-way or property line, FRA will analyze this information and will proceed to calculate the boundary limits FRA will then set monuments at all angle points, point of curvatures, block corners, property corners, and right-of-way and center line monuments. FRA will then prepare a boundary survey map, documenting the perimeters of the property, the monuments and boundary lines, showing fixed improvements and the legal description of the parcel. This process will have in consideration the mathematical closures, the measured distances and recorded information. The

boundary survey map will also show any special notes that the signing surveyor consider to be necessary to complement the map.

Boundary and Topographic surveys will show the headings and distances of property lines and the dimension and location of buildings adjacent to the property lines with found monuments, right-of-way lines, subdivisions, government lots and section lines. Additionally, the Boundary Survey will show the existing Easements and existing and proposed rights-of-way, setbacks, encroachments on the site, lots, block, and street numbers. All aboveground improvements within the properties and adjacent streets will be shown including, but not limited to, existing buildings, walls, fences, edge of pavement, curbs, sidewalks, driveways (identifying if asphalt, concrete, pavers, etc.), valves, water meters, utility poles including guy wires, traffic signal poles, transformers, fire hydrants, service boxes, drainage and sewer structures, utility manholes and vaults, underground and overhead utilities, etc. This type of survey will show the Legal Description of the property, said Legal to be provided by client. It will also show the survey monumentation, if monumentation does not exist, FRA will set permanent monuments stamped with the company LB number (LB 6785).



Topographic survey will also accurately show the property lines together with found monuments, right-of-way lines, subdivisions, government lots, and section lines. The sources of said lines will be depicted in the survey.

Topographic and DTM surveys (2D/3D) will be performed using EFB compatible data collectors and processed using Leica Infinity or EFBP software. This information will ultimately be processed in AutoCAD Civil 3D Survey Database. FRA will set its total station unit on previously set control points and will make observations to a minimum of two control points. All segments will be checked for closure and a report will be printed and first signed by the Survey Technician

and then by the Project Surveyor. In addition to the information described above, the topographic survey will identify all significant or unusual changes in grade delineation with elevations, as well as ground floor elevations of all existing buildings adjacent to the site. Elevations will be accurate to 1/100 of a foot at all building entrances, driveways, sidewalk, top or curb, edge of pavement, and low points and 1/10 of a foot at natural ground.

Based on the project needs, FRA can also provide the rim elevation or top of the structure elevation, pipeline inverts, material and diameters, contours, and cross-section elevations along the project including, but not limited to, buried tanks and septic fields serving the property together with the name of the operating authority of each utility, if available. Additionally, existing trees will be identified by their common name and their botanical name (if possible), trunk sizes, and approximate foliage areas can be provided.

## LEGAL DESCRIPTIONS/EASEMENTS

FRA will also prepare sketches to accompany legal descriptions for acquisition or disposal of the City of Hollywood's property and for the dedication of parcels of land such as permanent easements. These sketches will depict the parcel of land being described and its relationship with the Parent Tract, together with the completed legal description, properly describing the parcel (easement) and tying the new parcel to a well establish monument.

## CONSTRUCTION PROJECTS

FRA's survey crews have worked in multiple site construction projects. Our survey technicians have conducted spot surveys, setback surveys, final, elevation certificates, tie-beam elevation, building & sidewalk layouts, utility layout including water, drainage layout, and all aspects of construction related activities. FRA's survey professionals have worked in the construction sector for many years, have intrinsic knowledge of working with contractors, and understand the importance of communicating with contractors and performing layouts while under tight schedules.

## RIGHT-OF-WAY SURVEYS

FRA is intimately familiar with this area and its ROW issues. FRA prepared the ROW Control Survey Map for FDOT District 4 along State Road A1A/South Ocean Drive. If any additional ROW is required, our deep

involvement with FDOT will make any ROW situation to be managed seamless.

**Right-of-Way Mapping** activities are oriented to the acquisition of real property required for the construction of transportation facilities and to support the real property management of the City. These activities, the preparation of base survey map (control survey), right-of-way maps, maintenance maps, parcel sketches, legal descriptions, title search map, and title search review will all adhere to the City's standards.

**Base Survey Map** is the first step to start the process. This map will show the previously approved baseline of survey together with found property corner monuments, right-of-way lines, block, government lots, and section lines and side street baselines. This survey map provides a consolidated geometry and becomes the foundation of future right-of-way maps.

**Initial Right-of-Way Map** will include topographic data, all platted information, bearing and distances of the existing right-of-way lines, recorded deeds, TITF parcels, dedications and easements. The approval of this map will be constrained to a field review to ensure all conditions depicted on the map are correct. It will also include Parent Tracts depicting the property lines, and measured, platted and deed distances. Information from title searches is analyzed in detail to make property boundary determinations. Understanding deeds, instruments, chain, and color of title is crucial in this phase. The title search report number will be added on the CADD file for reference. A preliminary tabulation sheet will be prepared with ownership information.

**Final Right-of-Way Map** will add the right-of-way requirements and limits of construction, include easements and/or license agreements, parcel bubbles, field surveyed building ties and the completed TAB Sheet. Legal descriptions will be prepared at this phase.

**Final Right-of-Way Map Approval** will be obtained after conducting a "map-in-hand" field review in coordination with the City for acceptance. Our team will conduct a recheck with municipalities for any right-of-way changes that would affect the corridor being mapped for new plats and any instruments of conveyance creating/vacating additional public right-of-way. The final right-of-way map will include the cover sheet, the key map, detail sheet, tabulation sheet

and the project network control tabulation sheet. Legal descriptions will be provided separately in a Word file.

**Maintenance Map** will be created after the conditions are met to call for Section 95.361 FS rule on improvements or grounds outside of the acquired right-of-way to document and statutory ownership for this portion of land. This signed and sealed survey map is prepared to be filed in the Clerk of the Circuit Court.

## MOBILE LIDAR/HD SCAN

Terrestrial Mobile LiDAR (TML) uses a laser scanner(s) in combination with Global Navigation Satellite System (GNSS) receivers, Inertial Measurement Unit (IMU), and Distance Measuring Instrument (DMI) to produce accurate and precise geospatial data from a moving terrestrial platform.



LiDAR sensors use an active (projected) light signal to measure the relative x, y, z, position and reflective properties of a point on an object. In practice, this results in a point cloud with image qualities like other remote sensing technologies. This allows the value of a point cloud to be extended when it is mined for topographic features and information beyond what was required of the intended survey. The origin and accuracy of the point cloud data will be supported by a survey report for it to be used with confidence and to ensure the survey information with any byproducts are not misused. This technique can be used for high accuracy surveys like design engineering topographic, as-built, structures and bridge clearance and deformation surveys.

FRA has all the equipment in the TML system used to collect, process, and adjust data with sufficient precision to meet the accuracy requirements of the project. FRA has been using HD scanning for several



years and has recently purchased a mobile LiDAR unit.

When determining if TML is appropriate for a survey project, the following are some of the key factors:

- » Safety
- » Deliverables
- » Budget
- » Schedule
- » GNSS data collection environment
- » Terrain
- » Length/size of project
- » Traffic volumes
- » Available observation times

To maximize the quality and production of measurements, mission planning should be conducted before starting the collection of TML data. An important step in the QA/QC process is to monitor various component operations, such as:

- » Loss of GNSS reception
- » Uncorrected IMU drift both in distance and time
- » Proper functioning of the laser scanner
- » Vehicle speed

The operator should be aware of when the system encountered the most difficulty and be prepared to take the appropriate action in adverse circumstances. In order to improve the local accuracy of the collected TML point cloud data, a local geometric correction must be applied. The method employed for this process requires local targeted control points visually identifiable in the TML point cloud, measured independently, and having greater local accuracies than the TML data. Validation (i.e., check) points must be established with the same local accuracies as the control.

The LAS file deliverable for TML is the result of a transformed/adjusted point cloud. The next form of the TML point cloud data is the transformed/adjusted point cloud image, also saved in a LAS specific binary format. The point cloud data is now ready to be imported into various software packages (i.e., TopoDot, Cyclone, Cloud Works, etc.) for further data analysis and feature extraction, as well as fusing with other types of data and analytical tools creating a variety of value-added products.

Digital CADD products, such as topographic design files, surface/TIN files, and a survey report are produced after data extraction and will be provided to the City.

## GPS (GLOBAL POSITIONING SYSTEM)

FRA survey teams are all equipped with state-of-the-art GPS (RTK) equipment, connected to Florida Permanent Reference Network (FPRN), allowing us to obtain very precise horizontal and vertical information in an expedited manner. We also have the technical capability to create local GPS (RTK) networks (point to point setup), obtaining more precise survey information. One of FRA's main activities is providing project network control surveys using GPS static methods.



## SUBSURFACE UTILITY ENGINEERING

**Subsurface Utility Designating:** FRA's designating services will provide the City the most precise horizontal locations possible of existing buried utilities during the civil design phase of this project. This is intended to replace traditional records-based utilities plotting and survey of the 'One Call' locates. The designators use a proven survey-friendly marking system and prepare field drawings for surveyor's use. On this project, all utilities will be located by FRA personnel. This allows us to present and certify information to +1.0', exceeding the requirements of the State. The critical path of events for designating is described as follows:

1. FRA will meet with appropriate City personnel to establish project limits or areas of investigation, nature of the proposed work on-site, utilities or structures of interest to the City, and other special or unusual situations.
2. Coordinate with inspectors, property owners, and others, as required to ensure efficient completion of the designating service.



3. Conduct a thorough review of records made available during the research portion of the project. These materials shall be used as an aid in the identification of the number, identity, size, and material or utilities and structures located in the field, and they shall not be used as a substitute for actual geophysical location.
4. A MOT plan will be developed upon evaluation of the site conditions in accordance with MUTCD and Index 600. The MOT plan will be submitted to the appropriate office. The project schedule will also be coordinated.
5. FRA will use the most current geophysical prospecting equipment with various frequencies to detect a wide range of utilities. We will designate the horizontal location of all existing buried utilities as precisely and professionally as current utility locating, including providing an approximate depth technique will allow at intervals determined by the City. APWA codes with paint, pin flags, or laths will be used.
6. Our personnel will perform an electronic sweep for unknown and undocumented utilities, which may be within the project limits, but not appear on the plans.
7. Produce field marking sketches reflecting the approximate location of all painted and flagged buried utilities. This will include any relevant field notes pertaining to the designating phase of the project.
8. FRA will survey utility designations to the level of detail required by the City.
9. Compile information using our automated systems and quality assurance procedures. Format and present field notes and comments to the surveyors for correction. This procedure is referred to as a final check and ensures proper designating, survey, and drafting of utilities.



**Subsurface Utility Locating:** FRA uses state-of-the-art vacuum excavation equipment to obtain the exact positions horizontally and vertically of existing utilities in conflict with proposed structures. The critical path of events for locating is described as follows:

1. FRA will coordinate with the City to establish limits of investigation, the nature of the proposed work on site, utilities in possible conflict with proposed construction, and other unusual situations, which may relate to the project. FRA's crew will be mobilized in less than 48 hours for this project.
2. Prior to excavation, FRA will examine and obtain permits required to perform the requested services.
3. FRA will coordinate with all the concerned parties as required to insure efficient completion of the service and will adhere to all regulations and laws regarding notification of utility companies, including Florida Statute 556.101-111 and Sunshine State One-Call.
4. A MOT plan will be developed upon evaluation of the site conditions in accordance with MUTCD and Index 600. The MOT plan will be submitted to the appropriate City office. The project schedule will also be coordinated with the City.
5. FRA will investigate all appropriate records which include drawings, plans, plats and maps obtained during the research phase of the project.
6. By using the plans supplied by the City, FRA will check any proposed structures that may conflict with existing utilities.
7. FRA will determine horizontal locations of buried utilities at the exact point of possible conflict with the City's proposed construction. A second scan of the proposed features will be conducted to search for utilities which may not appear on available records.
8. FRA will excavate test holes not to exceed 225 square inches to expose the utility in order to investigate, evaluate, measure and record the following information:
  - » Horizontal and vertical location of top and/or bottom of utility referenced to project datum, tie all vertical control to NAVD 1988 datum using third order three-wire method;
  - » The elevation of existing grade over utility at test hole referenced to project datum;

- » The outside diameter of utility and configuration of none-encased multi-conduit systems, compositions, when reasonably ascertainable;
  - » Paving thickness and type, where applicable;
  - » General soil type and site conditions; and
  - » Other pertinent information reasonably ascertainable from test hole site.
9. Backfill the test hole with the select material compacted in lifts to prevent later subsidence of the test hole.
  10. Provide permanent restoration of the pavement within limits of the original cut. When test holes are excavated in areas other than roadway pavement, these disturbed areas shall be restored as reasonably possible to the condition before excavation. FRA will guarantee pavement restoration for three years.
  11. Furnish and install permanent markers directly above the centerline of the utility structure and in each excavated test hole and record the elevation of the above ground marker.
  12. Record location of the survey marker and reference to project control and datum.
  13. FRA will perform survey to the level of detail required by the City for this project.
  14. Review and compare utility records with survey information and resolve any conflicts prior to proceeding with test hole data reports.
  15. Produce location of vacuum excavation in the City CADD files by station and offset supplied by survey sub-consultant. Convert any pertinent CADD files to a compatible format.
  16. Submit final deliverables to the City.

## RESEARCH & REPORT WRITING METHODS

FRA will obtain all available existing survey information including, but not limited to, boundary surveys, legal descriptions, easement records, plats, design plans, horizontal and vertical control, field books, as-built information previously prepared, and any other files available from the City. Any deeds and maps that are in the City possession would be an asset in performing the assigned task. We will communicate with Broward County and any other relevant agencies to obtain any additional information. LABINS and NGS websites will be researched to extract control points within the

project and to obtain Certified Section Corners. If no information is available, we are willing and capable of providing a search of available public records.

FRA will provide a Surveyor's Report for each assigned project. This Report will be incorporated in the Survey Map, or it will provide as a separate document signed and sealed by the Florida Professional Surveyor.

## TITLE SEARCH, TECHNICAL REPORTS, STATEMENTS, CONTRACTS & LEGAL DOCUMENTS

FRA is well versed in the analysis of Title Searches. We have vast experience in the resolution of intricate boundary surveys, right-of-way acquisition, easements, etc. The Professional and technical support for this contract can provide technical reports, statements, review contracts and legal documents.

## ADDITIONAL SURVEY SERVICES

FRA is also experienced on the preparation of specific purpose surveys, vertical (elevation) control and horizontal control. All vertical control and elevations will refer to North American Vertical DATUM 1988 (NAVD88), unless otherwise requested by the City's Project Manager. Horizontal control will be referenced to North American Datum 1983/2011 (NAD83/2011), unless the project will be tied to FDOT horizontal control, and the latest Project Network Control will be used.

## APPLICABLE FEDERAL, STATE & LOCAL LAWS & REGULATIONS

FRA staff is intimately familiar with the above listed standards, which together with instructions from the City's Project Manager, will define the technical standards for conducting the daily activities. FRA fully understands the requirements, challenges, and the process associated with surveying and mapping activities for City projects. Our understanding and knowledge base come from over three decades of survey experience.

Surveying and mapping and utility locating and designating functions will be performed in compliance with the latest version of the applicable standards, including, but not limited to, the following items:

- » Chapter 472.027 Florida Statutes
- » Chapter 177 Florida Statutes, Department of Environmental Rules for Mean High Water and

## Jurisdictional Surveys

- » Florida State Board of Professional Surveyors and Mappers Standards of Practice, Rule 5J-17/Florida Administrative Code
- » Florida Statute 556.101-111 (Sunshine State One Call)
- » ASCE Standard 38-02
- » City standards for design and construction, as well as any specifications for the CRA section

## Principles, Practices, Methods & Techniques of Field Surveying, Data Researching & Preparing Survey Plans

### PROJECT START-UP

FRA's survey group is aware of the importance of establishing and following a well-defined approach to each project and its specific scope. After receiving an assignment, FRA's Project Manager, Lis Tolstoy, PSM, will immediately schedule a kick-off meeting with the City Project Manager. Lis will review the scope of services, project limits, schedule, budget, and any special provisions the City's staff have developed. By working with the City engineers and/or surveyors to create a scope of services that meets the project needs, FRA can assure that both the budget and the schedule are maintained. This kick-off meeting will help to identify potential challenges, such as safety, maintenance of traffic (MOT), subconsultant utilization, staff requirements, and methodology of collecting the survey information.

After the kick-off meeting, Lis will schedule an initial field visit of the project site in order to identify the type of equipment and personnel required, as well as any potential challenges that may affect the residents and stakeholders. This field walk-through is imperative and allows the Project Surveyor to pro-actively identify any special conditions and incorporate mitigation methods in our work plan to eliminate the any delivering of insufficient or inaccurate information.

### STAFF HOURS & SCHEDULE

After these initial steps, FRA will submit an estimate of staff hours and project schedule to the City's Project Manager for review and comments. Lis will then adjust the estimate and schedule to accommodate any specific requests. Starting with a well-defined and

understood scope of services, we can better meet budget and schedule needs. All project decisions will be made based on the task's complexity, schedule, available resources, and the experience of FRA and our subconsultant. Lis understands that the team's extensive resources are for the benefit of the City and with the support of the survey team, will ensure that the following approach will be adhered to in every Notice to Proceed (NTP) and purchase order and/or task order). FRA will not proceed with any assignment without written authorization from CRA.

Our willingness to respond to the City needs means our crews will be immediately available to start working for you and can be mobilized within 48 hours.

### INTERNAL KICKOFF MEETING

Upon receiving a written NTP, Lis will hold an internal meeting to brief all personnel who will be a part of this assignment, including Project Surveyors, Technicians, Field Crews, and subconsultants. During this meeting, the team will identify the best approach to the assignment and its objectives, procedures, schedule, and required deliverables. This meeting will also establish internal dates for task completions and periodic review milestones will be set. It will identify the individuals responsible for each task and the survey equipment and procedures to be used. Field personnel will be briefed on any unique safety situations that may exist and the survey procedures will be revisited to assure a complete understanding of the work required. Special instructions will be given to the field personnel to diminish the potential impact of survey field operations on the City residents and visitors.



Once survey operations begin, Lis will receive a daily debriefing from crews and all field work will be processed and reviewed daily. Lis will visit the crews in the field regularly to ensure all guidelines and policies



are being properly followed. Segment closures will be checked, and reports signed and filed accordingly. If any issues are found or items remain unclear, the crew will revisit the work on the following day. Prior to any submittals to the City, FRA will review deliverables from subconsultants to ensure compliance with the City's standards

## APPROPRIATE SAFETY PRECAUTIONS & PROCEDURES

FRA understands the commitment to provide a safe work environment to our employees and the public, as well as minimizing public inconveniences. When on the roadway, we always make sure to establish a well-planned maintenance of traffic plan, ensuring the safety of our field staff. FRA field crews are certified in First Aid, MOT, OSHA, CSX Railroad, and Confined Spaces, among others.

FRA has made a commitment to excel in the field of surveying and mapping by identifying innovative time and cost-saving concepts that enhance safety, the performance of the tasks, and the quality of the product.

Use of terrestrial mobile and static LiDAR allows us to obtain accurate survey information without the need of occupying points. This procedure enhances safety by eliminating the need of having the field surveyors on the pavement increasing security.

All submittals will be provided in digital format facilitating data transfer and document management.

We will occasionally videotape/record or photograph a project to provide a visual check for the office review.

## MAINTAINING COMPLETE & ACCURATE RECORDS

FRA will keep all records and supporting documentation, including accounting records, which concern or reflect its services hereunder for a period of six (3) years from the completion date of the project associated with the ATP; or such period of time as required by law (currently 6 years). The records will be available for inspection or copy as needed.

FRA will deliver all signed and sealed survey maps and reports to the City on approved formats and within the delivery time previously agreed upon with the City's Project Manager. FRA will provide the City with a CD-ROM containing all the CAD files, the ASCII files, field notes, and the files obtained from FRA's data collectors. The CD will also include any recorded information, plat of records, official record books, control information,

benchmark sheets, NGS Control Point Datasheet, or any other information that was used in the Survey Process.

We will submit the survey information in a digital .DWG file in AutoCAD 2016, or newer version. Underground utility files will be provided as a separate file in the same format. In addition to the AutoCAD files, we will also prepare the necessary hard copies in the adequate scale, signed and sealed by FRA Project Manager, Lis. AutoCAD Civil 3D Survey Database, control points datasheets, a copy of the field book, and/or any additional data related with the survey project will be included. A Surveyor Report will be prepared and signed for every project performed. This report will include benchmark information, the sources of data, FEMA Flood Zone, any issue and/or applicable survey notes arising from the survey. The Surveyor Report will meet the Survey Report Checklist as listed in the QA/QC Plan.

# Sample Insurance Certificate



FRALEMA-01

IMARTINEZ

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
05/10/2018

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

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

<b>PRODUCER</b> Anderson & Jacoby Insurance Consultants 3350 South Dixie Highway Miami, FL 33133	<b>CONTACT NAME:</b> Ileana Martinez <b>PHONE (A/C, No, Ext):</b> (305) 596-0500 <b>FAX (A/C, No):</b> (305) 270-1657 <b>E-MAIL ADDRESS:</b> imartinez@anderson-jacoby.com																					
<b>INSURED</b> F R Aleman & Associates Inc. 10305 NW 41st Street Ste#200 Miami, FL 33178	<table border="1"> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr> <tr> <td colspan="2">INSURER A : ALLIED INS CO</td><td>36528</td></tr> <tr> <td colspan="2">INSURER B : UNDERWRITERS AT LLOYDS LONDON</td><td>15792</td></tr> <tr> <td colspan="2">INSURER C :</td><td></td></tr> <tr> <td colspan="2">INSURER D :</td><td></td></tr> <tr> <td colspan="2">INSURER E :</td><td></td></tr> <tr> <td colspan="2">INSURER F :</td><td></td></tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A : ALLIED INS CO		36528	INSURER B : UNDERWRITERS AT LLOYDS LONDON		15792	INSURER C :			INSURER D :			INSURER E :			INSURER F :		
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COVERAGES				CERTIFICATE NUMBER:		REVISION NUMBER:				
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.										
INSR LTR	TYPE OF INSURANCE			ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X	COMMERCIAL GENERAL LIABILITY				ACP3036461755	12/31/2017	12/31/2018	EACH OCCURRENCE	\$ 1,000,000
		CLAIMS-MADE	X OCCUR		DAMAGE TO RENTED PREMISES (Ea occurrence)				\$ 300,000	
					MED EXP (Any one person)				\$ 5,000	
					PERSONAL & ADV INJURY				\$ 1,000,000	
					GENERAL AGGREGATE				\$ 2,000,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:								PRODUCTS - COMP/OP AGG	\$ 2,000,000
		POLICY		PRO-JECT		LOC				
	OTHER:									
A	AUTOMOBILE LIABILITY					ACP3036461755	12/31/2017	12/31/2018	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
		ANY AUTO OWNED AUTOS ONLY			BODILY INJURY (Per person)				\$	
	X	HIRED AUTOS ONLY	X	NON-OWNED AUTOS ONLY	BODILY INJURY (Per accident)				\$	
					PROPERTY DAMAGE (Per accident)				\$	
									\$	
A		UMBRELLA LIAB	X OCCUR			ACP3036461755	12/31/2017	12/31/2018	EACH OCCURRENCE	\$ 5,000,000
	X	EXCESS LIAB		CLAIMS-MADE	AGGREGATE				\$ 5,000,000	
		DED		RETENTION \$					\$	
WORKERS COMPENSATION AND EMPLOYERS' LIABILITY									PER STATUTE	OTH-ER
ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NJ)									E.L. EACH ACCIDENT	\$
If yes, describe under DESCRIPTION OF OPERATIONS below									E.L. DISEASE - EA EMPLOYEE	\$
									E.L. DISEASE - POLICY LIMIT	\$
B	Prof/Liability					FEI-AEP-10986	04/01/2018	04/01/2019	Aggregate	2,000,000
B	Prof/Liability					FEI-AEP-10986	04/01/2018	04/01/2019	Per Occurrence	2,000,000

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

<b>CERTIFICATE HOLDER</b>  PROOF OF INSURANCE	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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ACORD 25 (2016/03)

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<b>PRODUCER</b> Libertate Insurance LLC 707 East Washington Street Orlando, FL 32801  www.libertateins.com	<b>CONTACT NAME:</b> Libertate Insurance, LLC <b>PHONE (A/C, No, Ext):</b> 4076135475 <b>E-MAIL ADDRESS:</b> info@libertateins.com <b>INSURER(S) AFFORDING COVERAGE</b> INSURER A: Imperium Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
<b>INSURED</b> F.R. Aleman & Associates, Inc. 10305 NW 41st St, STE 200 Miami FL 33178	

### COVERAGES

**CERTIFICATE NUMBER:** 41755031

**REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGC
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE AGGREGATE
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N N/A			IERD0100303600	5/12/2018	5/12/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT

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

CERTIFICATE HOLDER

CANCELLATION