Jacobs

Work Order 3:

First Street Neighborhood Improvement Project

September 15th, 2021

Master Design Consultant for Integrated Water Management

RFQ No. 2018-312-KB – Resolution No. 2018-30613

Contents

Tables

Figures

Background

The City of Miami Beach (CITY) requests that the Jacobs Engineering Group Inc. Team (CONSULTANT TEAM) provide technical support and integrated engineering design services for a new stormwater pump station and stormwater treatment facility to serve the South of Fifth/South Pointe neighborhoods. The proposed First Street Stormwater Pump Station (First Street PS) is part of the CITY's Neighborhood Improvement Projects program, and will include a new stormwater pump station, treatment system, stormwater gravity collection system, stormwater outfall force main, as well as replacement in kind of existing water main, gravity sanitary sewer, and above-ground neighborhood improvements to street scape and urban canopy.

This project is one of the first capital projects to be implemented after the CITY of Miami Beach Urban Land Institute "Red Team Review" and creation of the READY Team. This will be the first project to incorporate the Commission-approved City of Miami Beach Blue-Green Stormwater Infrastructure (BGSI) Concept Plan and Urban Forestry Master Plan with the expectation that as the CITY adapts to climate change to resolve flooding issues, and it will seek to scale-up the implementation of blue-green practices across the CITY.

The CITY conducted a comprehensive alternative analysis and selected a **Base Alternative (Base**) for the project. The base alternative (Option 5-B) defined the location of the First Street PS (intersection of First Street and Washington Avenue), appurtenances (corner of parking lot near intersection) and delimited the scope of the project. Figures 1, 2, 3 and Table 1 provide a description of the base alternative, typical section and main components. The CONSULTANT TEAM used this base alternative to estimate the Level of Effort to complete the scope of services for this project.

The CONSULTANT TEAM understands the importance of addressing aesthetics and community impact in the above-ground infrastructure design to build public support for the project. The CONSULTANT TEAM will provide technical support to the CITY during the public information and community outreach effort to gather input and to present the progress of First Street PS design. In addition, the CONSULTANT TEAM will work with the CITY and provide support during discussion with private properties for the harmonization following the CITY'S Project Development Outreach guidelines at the corresponding design toll gates.

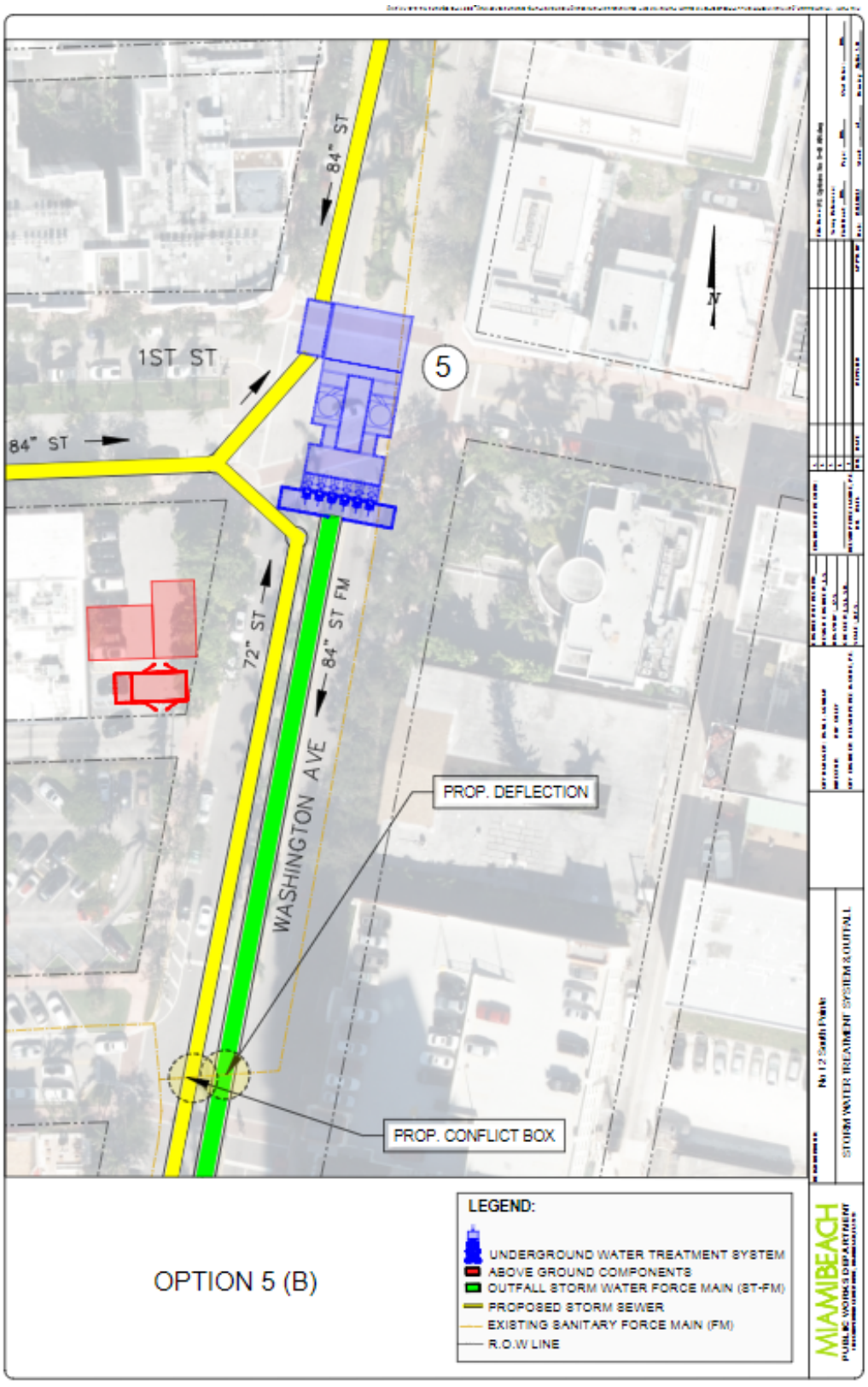


Figure 1. Proposed Pump Station Location Map (Base Alternative), Provided by City of Miami Beach

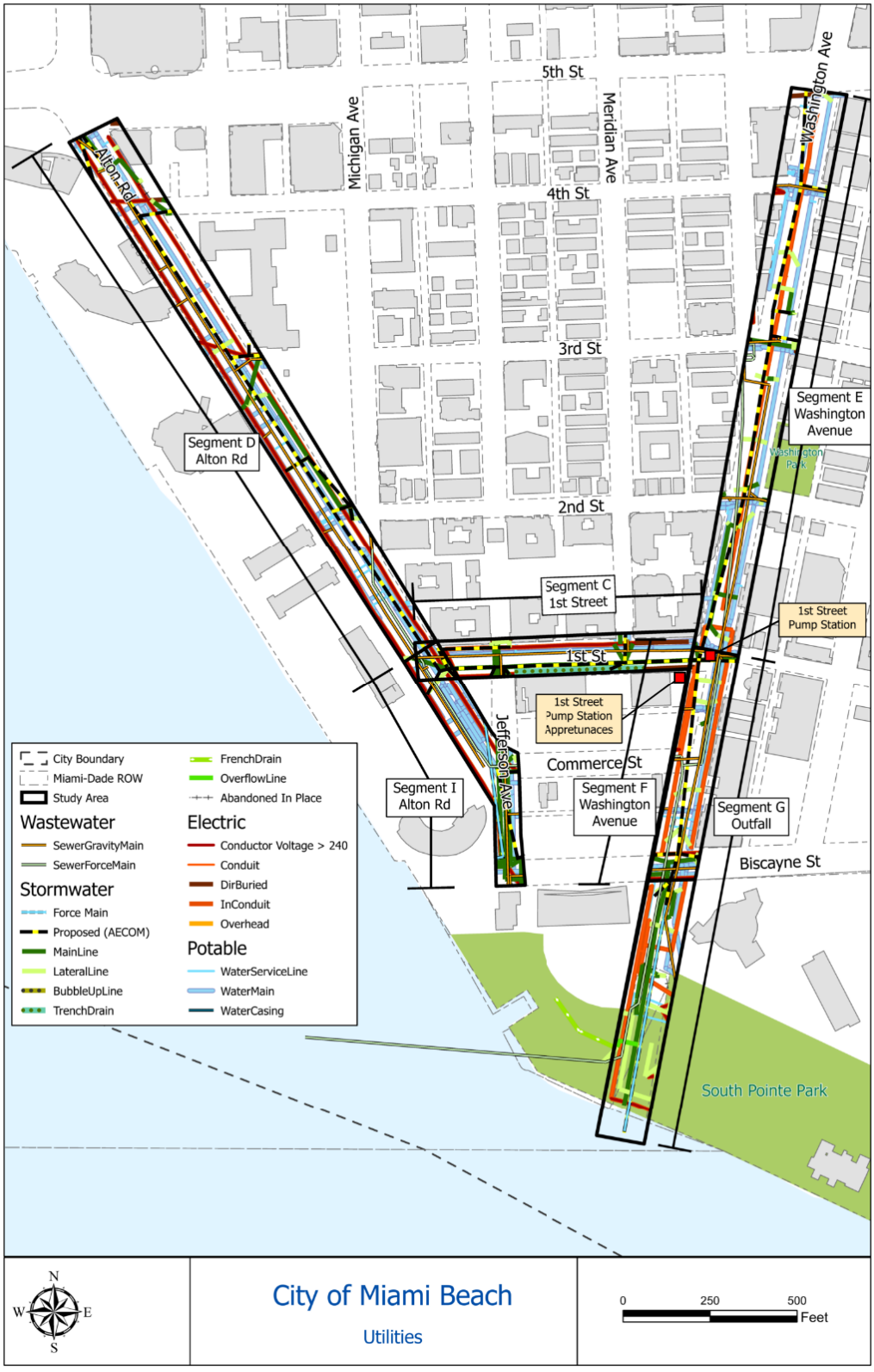


Figure 2. Project Limits and Existing Utilities (Base Alternative)

Project Understanding

The CITY requested Jacobs to provide technical support and integrated design services for the design of the First Street Pump Station Base alternative as described in Table 1. This Base alternative (Project) includes a new pump station including a stormwater treatment system, below ground, at the intersection of Washington Avenue and 1st Street, and above ground appurtenances (emergency generator, Florida Power & Light electrical vault and controls) at an adjacent parking lot at the southwest corner of the Washington Avenue and First Street intersection. In addition, the base Project includes gravity lines along 1st Street, Alton Avenue, Washington Avenue, and a discharge force main from the First Street PS to Biscayne Bay through South Point Park. This Base alternative was approved by the City Commission. The anticipated planning level cost estimate is approximately $47 Million, inclusive of consulting fees, contingencies, and the elements outlined below.

Table 1. Base Scope Elements and Project Understanding

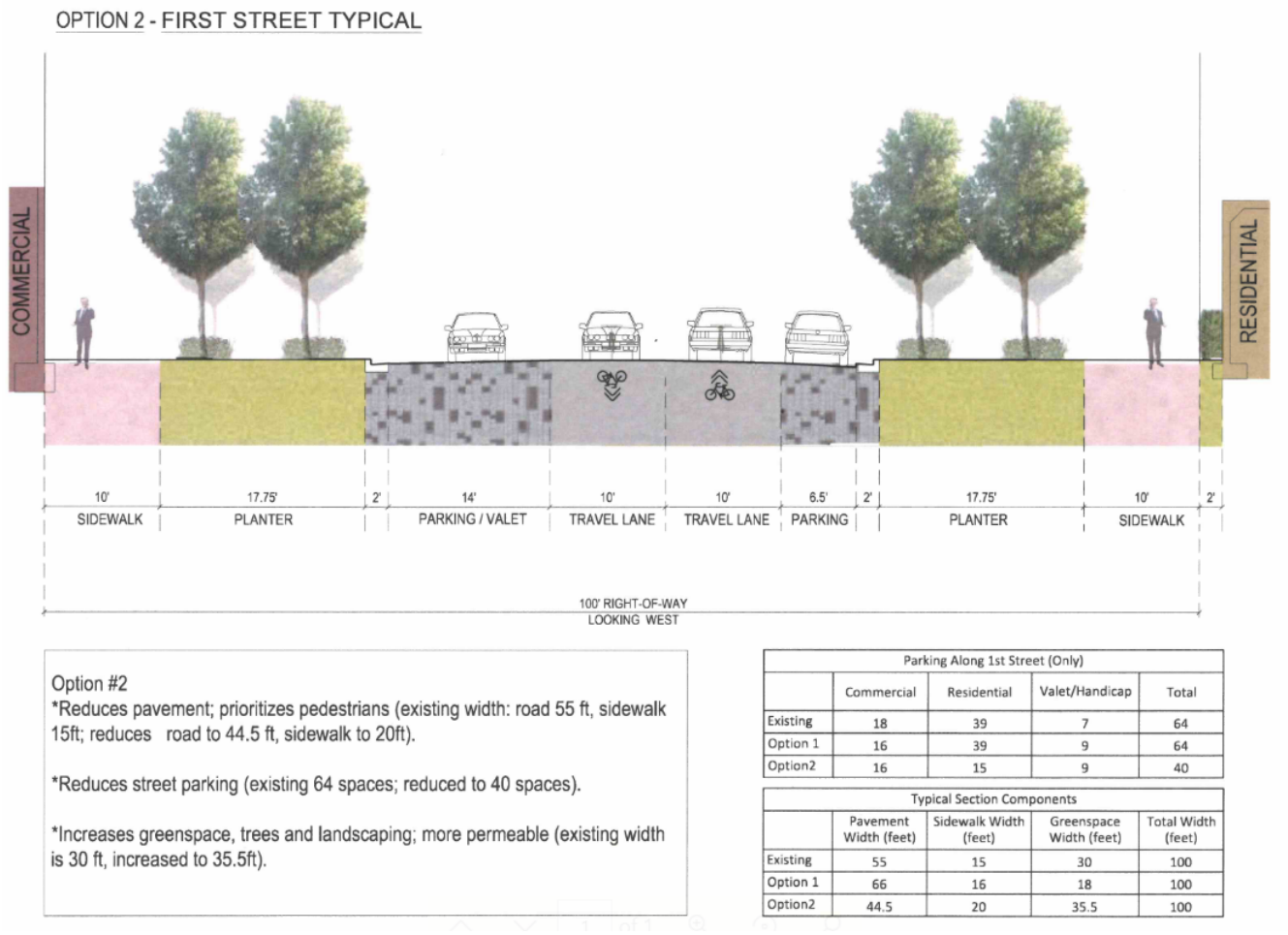
Item	Scope Elements and Corridors	From	To	Approx. Distance (Linear Feet (LFT))[1]	Scope Description[2]
A	First Street Pump Station (PS) located at Intersection of First Street and Washington Ave.				• Design services (process mechanical, site/civil, hydraulics, I&C, road restoration, and treatment) for an underground PS with Peak Flow of approximately 120,000 gpm (6 @ 20,000 gpm pumps and one 20,000 gpm spare pump) with the gravity system and discharge pipe for the entire south pointe basin. • Underground stormwater treatment system upstream of the pump station to remove trash, sediments, and debris • Underground utility conflict resolution
B	First Street PS Appurtenances located at the City Parking Lot at corner of First Street and Washington Ave.				• Design services (site/civil, electrical, I&C, architectural, landscaping, harmonization, and area restoration) for backup power generator with required emergency bi-fuel supply considering noise, and air quality emissions based on the CITY'S most current policy for emergency generators. • Potential to incorporate dual power supply from different Florida Power & Light (FP&L) electrical power substations – that is, dual electric feeders (optional) • Pump station control panel • Florida Power & Light electrical vault • Aesthetic integration to South Pointe Neighborhood (Integration will include decorative screening of facilities. This may include a screen, a building, or landscaping or a combination thereof and shall be defined during neighborhood meetings. Renderings of these aesthetics will be provided as part of the conceptual presentations.
C	First Street	Alton Road/First Street	Washington Avenue/First Street (First Street PS)	850	• Roadway Improvements including Road Raising to meet City Standards using approved Cross Section for 1st Street (see Figure 3) • Harmonization solutions to support road raising within the project limits (Approximately 8 Property Owners) • Streetscape and Landscape plans • Conflict resolution with underground utility.

Item	Scope Elements and Corridors	From	To	Approx. Distance (Linear Feet (LFT))[1]	Scope Description[2]
					• Blue-Green Stormwater Infrastructure (BGSI) Opportunities • Drainage improvements (inlets, manholes) • Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Road Raising of intersections of Alton Rd/First Street and Washington Ave./First Street • Road restoration, improvement and harmonization for a segment along Jefferson and Meridian Streets transitioning into existing ground.
D	Alton Rd.	Alton Road/5th Street	Alton Road/First Street	1,900	• Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Drainage improvements (inlets, manholes) • Conflict resolution with underground utilities • Road Restoration (No Road Raising, BGSI, landscaping, or harmonization included for this component as per CITY direction). • 820 LF of 54-inch Sanitary Sewer Force Main • Intersection of Alton Road and 5th Street is not included.
E	Washington Ave.	Washington Avenue/5th Street	Washington Avenue/First Street (New First Street PS)	1,700	• Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Drainage improvements (inlets, manholes) • Underground utility conflict resolution • Road Restoration (No Road Raising, BGSI, landscaping, or harmonization included for this component as per CITY direction). • Intersection of Washington Ave. and 5th Street is not included
G	Washington Ave.	Washington Avenue/South Pointe Drive	Washington Avenue/First Street (First Street PS)	625	• Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Drainage improvements (inlets, manholes) • Underground utility conflict resolution • Road Restoration (No Road Raising, BGSI, landscaping, or harmonization included for this component as per CITY direction).
H	Stormwater Force Main & Dissipator	Washington Avenue/First Street (First Street PS)	Government Cut	1,225	• Force main and discharge outfall into Biscayne Bay including an energy dissipation structure • Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Underground utility conflict resolution • Road Restoration (No Road Raising, BGSI, landscaping, or harmonization included for this component as per CITY direction). • Stormwater dissipator at end of Force Main near Biscayne Bay. • South Pointe Park in-kind restoration to existing conditions based on landscape, hardscape, and architectural features designed by others after installation of proposed force main.
I	Alton Road	End of Alton Road at Start of South Point Drive	Alton Road/First Street	600	• Replacement of existing Gravity Sanitary Sewer • Replacement of existing Water Main • Underground utility conflict resolution • Road Restoration (No Road Raising, BGSI, landscaping, or harmonization included for this component as per CITY direction).

Item	Scope Elements and Corridors	From	To	Approx. Distance (Linear Feet (LFT))[1]	Scope Description[2]
J	Water Quality Wells				• Water Quality modeling and coordination with DERM/RER for number of wells (systems) required to secure permit. • Design WQ wells systems for the project area. • Wells downstream from the PS may be required to meet WQ requirements and will be considered. • Satisfy DERM requirements and obtain Class II Permit

(1) Distances provided are approximate and are provided only to define the project boundary limits.

(2) Description of scope items will be validated after modeling is completed.



Parking Along 1st Street (Only)

	Commercial	Residential	Valet/Handicap	Total
Existing	18	39	7	64
Option 1	16	39	9	64
Option2	16	15	9	40

Typical Section Components

	Pavement Width (feet)	Sidewalk Width (feet)	Greenspace Width (feet)	Total Width (feet)
Existing	55	15	30	100
Option 1	66	16	18	100
Option2	44.5	20	35.5	100

Figure 3. Approved Cross Section (Option 2) for First Street

Project Scope of Services

The scope of services for Integrated Design of First Street Pump Station (Base Alternative) for the City of Miami Beach, includes the following tasks:

Task 1 – Project Management and Coordination

Task 2 – Technical Support to Stakeholder/Public Involvement, and Consensus Building Program

Task 3 – Pre-Design Phase

Task 4 – Basis of Design Report and 30% Design

Task 5 – 60% Design

Task 6 – 90% Design

Task 7 – 100% Design

Task 8 – Bid Phase Services

Task 9 – Field Studies

Task 1.0 Project Management and Coordination

1.1 Project Management

The CONSULTANT TEAM will provide project management and oversight for the duration of the project design and bid phases (engineering services during construction to be provided on a separate proposal). This task includes project overall coordination and oversight, development and review of project documents, maintenance of the project filing systems for the project, execution and oversight of sub-CONSULTANT agreements, update of project schedule and deliverables list, project management plan, and project safety plan. CONSULTANT TEAM will prepare project invoices and progress reports each month, as defined in the Master Agreement (RFQ 2018-312-KB), Article 7 – Compensation for Services.

Meetings/Workshops

- Monthly Progress Meetings (Virtual) with the CITY's PM to discuss progress and discuss open action items.

Deliverables

- Agenda and Meeting minutes of Monthly Progress Meetings
- Project Baseline Schedule (MS Project) (electronic)
- Monthly updates to project schedule (electronic)
- Progress reports and invoice (electronic)
- Project Risk Register (electronic)
- Open Action Item List (monthly updates) (electronic)

1.2 Project Kick-Off and Visioning Workshop

CONSULTANT TEAM will conduct a kick-off meeting with the CITY to review project scope, deliverables, schedule, for the project. This meeting will include the discussion of the overall project communication plan, success factors, project risk register, change management plan, and performance indicators. Project success factors and intended outcomes will be defined, will guide the project execution, and will provide metrics to measure and track project success for the CITY and for project stakeholders. The project goals will be revisited during public and stakeholder engagement to validate and refine success factors.

In addition to the kickoff meeting objectives delineated above the CONSULTANT will include the elements of the visioning workshop in the meeting. The purpose of the visioning workshop is to confirm CITY's objectives and success factors for the project. This workshop will include CITY's key personnel and other stakeholders and will include obtaining information on the project. The CONSULTANT TEAM will develop a draft agenda and presentation for the Workshop and submit it to the CITY Project Manager for review and comment prior to the meeting. Following the Workshop, the CONSULTANT TEAM will provide meeting minutes documenting the project objectives, verifying which CITY standards apply to this project, updating critical success factors, and other pertinent issues discussed during the workshop. The draft meeting minutes will be distributed to all meeting attendees. Attendees' comments will be incorporated into the meeting summary and a final summary will be issued.

During the meeting the following areas will be considered:

- Project objectives: Discussion of the overall plans for the project site to ensure that all participants have the same understanding.

- Communications procedures: Joint definition of the verbal and written communications practices and procedures.
- CITY design criteria standards and preferences: Affirm which CITY standards for design criteria or standard products will be used, as well as verify CITY preferred equipment types, suppliers, and vendors.

As part of the workshop, the CONSULTANT TEAM's subject matter experts in sustainability, and resilience, and will provide design recommendations towards greater alignments and efficiencies to the project timeline, development brand, as well potential opportunities in development investment return in the areas of:

1. Development and integration of resilience strategies
2. Sustainability opportunities in aligning park infrastructure with urban design to reduce infrastructure construction costs.

CONSULTANT TEAM will want to understand CITY'S goals around resilience, including the identification of operational and development risk associated with designing amenities for within the public realm, ownership and maintenance associated with a public versus private properties.

Meetings/Workshops

- In Person/Virtual Kickoff and Visioning Workshop (some members of CONSULTANT TEAM to attend virtually).

Deliverables

- Agenda and Meeting minutes, video recording of virtual meeting (electronic)
- Presentation for the City Kickoff Meeting
- Draft and final Project Communication Plan (electronic)
- Draft and final Project Success factors document (electronic)
- Draft and final Change Management Plan (electronic)

1.3 Field Site Visit/Assessment Review

CONSULTANT TEAM will conduct one Field Site Visit/Assessment review with CITY staff. CONSULTANT TEAM will submit a site visit report with the summary of the major findings and observations collected during the site visit within 10 working days following completion of the site visit.

Meetings/Workshops

- Field Site Visit

Deliverables

- Draft and final site visit report (electronic).

Task 2 Technical Support to Stakeholder/Public Involvement, and Consensus Building Program

2.1 Technical Support for the Development of the Project Outreach Plan

CONSULTANT TEAM will provide technical support to the CITY during the development of a public outreach plan and coordinate and facilitate project-specific communication plan. The CONSULTANT TEAM will collaborate with the CITY and its Public Information Team to identify primary and secondary stakeholders, identify communication touchpoints, tools, and methods, and define a draft schedule for outreach activities. This plan will be used by the CITY to implement the Public involvement and engagement.

Deliverables

- Review and provide comments to the Draft Public Outreach plan to be developed by the City

2.2 Technical Support the Implementation of the Public Outreach Plan

The CONSULTANT TEAM will provide technical support to the CITY during the implementation of the public outreach plan, which will include meetings with CITY's personnel, and key stakeholders, and development of informational materials for project website (hosted by the CITY), postcards, newsletter(s) and/or fact sheet(s), and development of Frequently Asked Questions (FAQ). The CONSULTANT TEAM will be responsible for printing and mailing content outside of web page and development of technical materials/presentations for public meetings. CONSULTANT TEAM shall participate in all stakeholder meetings (i.e., individual meetings for harmonization agreements, Toll Gates Public meetings, and meetings with CITY). Support will include logistics, presentation materials, renderings, display boards, meeting agenda, and meeting summaries.

Deliverables

- Presentation materials for the meetings with individual stakeholders during focused on discussion of harmonization. Development of Technical materials, including graphics and renderings is included in the design development tasks.
- Agenda, meeting minutes, renderings, and presentation materials for the public meetings with the community as part of the Toll Gates during project execution focused on project progress.
- Agenda, meeting minutes, renderings, and presentation materials for meetings with the CITY during project execution focused on project progress.

Task 3 **Pre-Design Phase**

During the Pre-Design Phase the CONSULTANT will acquire existing information, and complete modeling and validation of the project base scope. The modeling effort will include pre- and post-modeling to confirm the capacity of the First Street PS, and other components as defined in Table 1. The following tasks will be completed as part of the Pre-Design effort.

3.1 Modeling Validation of First Street Pump Station Capacity and Base Project

The CONSULTANT TEAM will develop a stormwater model of the defined stormwater basin. The stormwater model will include an existing conditions model (Pre-Development), and three (3) alternative models (Post-Development). The Pre-Development stormwater model will be created in Interconnected Channel and Pond Routing Version 4 (ICPR4) software utilizing a combination of resources, including existing as-built documents, the project survey, and staff field investigations. Once the Pre-Development model is prepared, it will be calibrated utilizing historical storm events. Once the Pre-Development model is completed and calibrated, three (3) Post-Development alternative models will be assembled. The Post-Development alternatives will follow the following design parameters.

1) The level of service for the system will be for a 10-year, 24-hour theoretical storm event with a Safety Factor of 1.25. The Pre-Development and the three (3) Post-Development alternatives will undergo a 10-year, 24-hour theoretical storm event.

2) The collection and conveyance system (Inlets, collection pipes, and discharge pipes) will be sized throughout the entire stormwater basin to meet the 10-year, 24-hour theoretical storm event, and maintain the hydraulic grade line one (1) foot below the finished floors of the properties within the stormwater basin. Please note that the model will define the pipe sizes for all streets, although not all streets will be improved under this contract. 3) The Pre-Development and the three (3) Post-Development alternatives will undergo a 25-year, 3-day theoretical storm event in order to satisfy the South Florida Water Management District (SFWMD) Environmental Resources Permit (ERP) requirements.

The Post-Development alternatives will be as follows.

- Post-Development Alternative #1 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The stormwater pump station will be located at the intersection of 1st Street and Washington Avenue, and it will be sized for six (6) pumps with a total discharge of 120,000 GPM.

- Proposed Scenario #2 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The stormwater pump station will be located at the intersection of 1st Street and Washington Avenue, and it will be sized for multiple pumps with a total discharge of 200,000 GPM. The number of pumps and horsepower (HP) of each pump to be determined prior to completing this scenario.

- Proposed Scenario #3 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical

storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The alternative will define two (2) stormwater pump stations with a total discharge capacity of 200,000 GPM. Stormwater Pump Station NO. 1 will be a six (6) pump system with a discharge capacity of 120,000 GPM. Stormwater Pump Station No. 2 will be a four (4) pump system with a discharge capacity of 80,000 GPM

Once all alternatives have been prepared, CONSULTANT TEAM will prepare a technical memorandum describing each alternative and provide CMB with a recommendation. CONSULTANT TEAM will present the results to CMB utilizing Powerpoint.

Meetings

- Status Meeting (Virtual) to discuss modeling results after Existing and development of scenarios

Deliverables

- Technical Memorandum defining alternatives and providing results (Pre-development and Post-development Model will be used to develop this memorandum)

3.2 Presentation for CMB staff to present final results of Technical Memorandum Blue-Green Stormwater Infrastructure Opportunities (First Street)

The project will entail identification and evaluation of proposed improvements that will consider opportunities to include BGSI to achieve stormwater pollution reduction requirements as part of the proposed design of the improvements to First Street. The project will entail identification and evaluation of potential BGSI opportunities to help achieve the CITY's stormwater pollution reduction goals for the proposed design. Viable BGSI opportunities will be considered, having been previously identified in the CITY'S BGSI Concept Plan, and will be further developed in the detailed design phase.

CONSULTANT TEAM will rely on Best Industry Practices and the BGSI Concept Plan (Jacobs, 2020) to develop BGSI opportunities specific to this project. The CONSULTANT TEAM will develop concepts based on field observations and desktop analyses and summarize the findings in a technical memorandum.

CONSULTANT TEAM will conduct a detailed evaluation to look for potentially feasible BGSI retrofit opportunities within First Street and the location of the pump station project. CONSULTANT TEAM will further evaluate these potential opportunities to determine which BGSI practices, such as permeable pavement, enhanced tree pits/trenches, stormwater planters, and/or subsurface infiltration/storage, will be the most beneficial, based on the land use, space availability/constraints, hydrologic considerations, water quality benefits, proximity to existing drainage infrastructure, and other relevant site criteria. CONSULTANT TEAM will then conceptually develop those BGSI practices in such configurations and combinations that are best suited to site conditions that can be seamlessly integrated to enhance land use, easily adapted and work both individually and as part of a larger connected network. The resulting BGSI concepts will be cost-effective, resilient, multi-purpose, cooler, able to withstand temporary submergence, safe, accessible, and community enriching.

CONSULTANT TEAM anticipates that a BGSI concept design will be developed using available information of the project area, such as digital aerial photos, topographic information, site photographs, field investigations/notes, and/or utility information obtained from the available GIS database or existing base plans, as well as CONSULTANT TEAM'S familiarity with the project location. The drainage areas or tributaries connecting each site with the BGSI interventions will be refined using a combination of GIS feature datasets (inlets, manholes,

catchments, contours, LiDAR, etc.), site observations, and review of existing documentation. The conceptual design will include an estimate of the anticipated pollutant removal efficiencies of the BGSI opportunities.

Assumptions

- BGSI opportunities will be identified and evaluated within the public right-of-way and publicly owned parcels on the following street within the study area:
  - 1st Street from Alton Road to Washington Ave
- It is assumed that the primary purpose of identifying potentially viable BGSI practices for this project is improved water quality, rather than runoff volume reduction or flood mitigation.

Deliverables

- Draft and final BGSI concept design and technical memorandum (electronic)

3.3 Cultural Resources

CONSULTANT TEAM will perform desktop literature review of the cultural / archeological resources based on existing information for the project site(s) contained in the Florida Master Site Files and available Miami-Dade County records (No Field Activity Required)

Deliverable

- Draft and Final Memorandum to summarize the literature review findings. (electronic)

Task 4 Basis of Design Report (BODR) and 30% Design

4.1 Development of Conceptual Design

Pump Station and Appurtenances Conceptual Design

The CONSULTANT TEAM will define the capacity and mechanical concepts for the design of the pump station and the appurtenances and include in the Conceptual design Technical Memorandum.

Pump Station and Appurtenances Architectural and Landscape Conceptual Design

The CONSULTANT TEAM will define concepts for the concealment of the above ground components and integration with surrounding environment leveraging CITY historic design guides provided. The proposed conceptual design may include the development of a rendering of the proposed concealment strategy.

First Street Corridor Urban Design, Landscape Architecture and Harmonization Evaluation

The CONSULTANT TEAM will define the urban design, landscaping and harmonization concepts for First Street based on the typical section included as Figure 3 Elements within area of First Street will include shoulder improvements, decorative surfaces, landscape features, benches, waste receptacles, signage, bike racks, and lighting,.

The CONSULTANT TEAM will be modifying the design (Harmonization), where necessary, to ensure no adverse conditions are created for the adjacent properties including vehicular access, Americans with Disabilities Act (ADA) access and drainage. This approach is critical to ensure project success and continued resident and stakeholder support for other CITY capital projects.

CONSULTANT TEAM will develop a project specific harmonization plan that will include the schedule and list of stakeholders, and specific harmonization plan for each stakeholder:

- Develop harmonization concepts and renderings for each of the individual stakeholder at First Street
- Provide concepts, and coordinate with City's artist to include visual arts (Jacobs will not include artist services, only to provides information to City, and coordinate the location of the public art within the project design)

Utility Coordination and Conflict Resolution

CONSULTANT TEAM will prepare an existing utility map. This map will help identify conflicts with franchise utilities. CONSULTANT TEAM will develop and maintain a conflict matrix spreadsheet. This spreadsheet will be provided to all franchise utilities, along with the 30% plans to develop solutions and relocations to potential conflicts. The schedule of construction will consider conflict resolutions by public/private utilities when done in conjunction with this project.

Conceptual Design TM

A Conceptional Design Technical Memorandum (TM) will be prepared to document the concept for the project Base components as described in table 1. This TM will be submitted to the City for comments and approval prior to starting the development of the BODR and 30 percent design. The TM will include modeling results, water quality modeling, design criteria, site layout sketches, hydraulic profile, roadway typical section, architectural and landscaping concepts. The following is a draft outline of a Conceptual Design TM.

- Summary of data collection and site condition
- Stormwater Modeling
- Water Quality Modeling
- Location of Geotechnical investigations and soils report
- Location for subsurface investigations and utility impact assessments
- Summary of Public outreach
- Design criteria
- Description of facilities and variances from Base project
- Draft and final project harmonization criteria and challenges (electronic)
- Landscape, irrigation, and hardscape plans for replacement of damaged elements in South Pointe Park.
- Conceptual design for the corridor of 1st Street from Alton Avenue to Washington Avenue
- Landscape Architecture and Harmonization Evaluation for PS, Appurtenances and Corridors
- Opinion of Probable Cost (Level 5)
- Conceptual Constructability/Sequence of Construction Analysis

Meetings/Workshops

- No Meetings

Deliverables

- Draft and Final Conceptual Design TM
- Existing utility map and conflict matrix spreadsheet (This will continue throughout the life of the design)

4.2 Conceptual Design Workshop

Following the submission of the Conceptual design TM, the CONSULTANT TEAM will conduct a workshop with CITY staff to present and review the TM. Workshop minutes will be prepared by the CONSULTANT TEAM and be delivered to the CITY for final review. CONSULTANT TEAM will not issue a Revised TM after the workshop. Public involvement will be conducted as noted in the "Toll Gates" guidance and Task 2 of this Scope of Work.

Meetings/Workshops

- Technical Workshop with City's personnel

Deliverables

- Workshop Draft and Final Agenda (Electronic)

4.3 Development of BODR and 30% Design

The purpose of this Task is to advance the Conceptual Design to a 30% design progress. Before starting this phase, the CITY will approve the Conceptual Design TM and confirm that the there are no modifications/changes to the project base as defined in Table 1. The deliverables from this task will include a Basis of Design Report

(BODR) and 30% documents. At the end of this phase, the CONSULTANT TEAM will conduct one workshop with the CITY's personnel. Public involvement at this stage is included in the Toll Gates Task for this design phase.

Deliverables (electronic only)

- Responses to comments received during the Conceptual design review comments
- BODR and 30% drawings.
- Draft outline of technical specifications
- Engineer Opinion of Probable Cost (Class 4)
- Draft and Final Regulatory First Pre-Application Meeting Minutes (Electronic)
- Pre vs Post Model Report (revised if necessary)

4.4 Tree Management Plan

CONSULTANT TEAM will develop a Tree Management plan focused on tree removal and relocation plan. On this plan the trees that can be preserved or relocated in the CITY will be identified. The CONSULTANT TEAM shall coordinate with the CITY arborist to find suitable spots to relocate trees or to save them during construction (temporary relocation). A separate stand-alone Tree Management Plan will be produced and used with the Urban Forestry tree permit. The tree permit and plan will become part of the Bid Set.

Deliverables (electronic only)

- Draft Tree Management Plan
- Final Tree Management Plan

4.5 Design Workshop – 30% Design

Following the submission of the BODR and after, the CONSULTANT TEAM will conduct a workshop with CITY staff to present and review the 30% design submittal and BODR. Workshop minutes will be prepared by the CONSULTANT TEAM and be delivered to the CITY for final review. CONSULTANT TEAM will not issue a Revised BODR. The CONSULTANT TEAM will arrange and attend three Regulatory First Pre-Application meetings.

Public involvement will be conducted as noted in the "Toll Gates" guidance and Task 2 of this Scope of Work.

Meetings/Workshops

- Technical Workshop with City's personnel

Deliverables

- Workshop Draft and Final Agenda (Electronic)

Task 5 **60% Design**

During the execution of this task the CONSULTANT TEAM will advance the project to a 60% design progress. The tasks included within this section will include the development of 60% design documents.

5.1 Develop 60% Design Documents

The intent of this phase is to advance the design to a 60% design phase so that the CITY can provide feedback on the progress. It is expected that review at later phases will not change the overall design intent established in the 30% Design stage.

This design phase will include some of the following aspects:

- Design drawings, details, and preliminary technical specifications will be developed to approximately 60 percent completion level as a design package, including responses to review comments provided during the in the conceptual design workshop.
- Develop draft technical specifications developed using the CONSULTANT TEAM standard specification sections for each project component.

Deliverables (electronic only)

- Responses to comments received during the 30% design review comments
- 60% drawings
- Draft technical specifications
- Engineer Opinion of Probable Cost (Class 3)
- Pre vs Post Model Report (revised if necessary)

5.2 Design Workshop – 60% Design

Following the submission of the 60% Design, the CONSULTANT TEAM will conduct a workshop with CITY staff to present and review the 60% design submittal. Workshop minutes will be prepared by the CONSULTANT TEAM and be delivered to the CITY for final review. Public involvement will be conducted as noted in the "Toll Gates" guidance and Task 2 of this Scope of Work.

Meetings/Workshops

- Technical Workshop with City's personnel

Deliverables

- Workshop Draft and Final Agenda (Electronic)
- One meeting with CITY's Design Review Board

Task 6 **90% Design**

During the execution of this task the CONSULTANT TEAM will advance the project to a 90% design. This level of design will be used to secure the project permits. Once permits are secured, changes to design will have a substantial impact on project schedule and budget. Any changes at this stage are anticipated to require a change to this work order.

6.1 Develop 90% Design (Permit Set)

The 90% design drawings and technical specifications will be developed. The Final design will include the following:

- Development of 90% Drawings, Technical Specifications, computations,
- Responses and resolutions to comments received during 60% design review.

Deliverables (electronic only)

- Responses to comments received during the 60% design review comments (electronic)
- 90% drawings including plans, sections, plan and profiles, details, and notes. (electronic)
- Technical specifications
- Engineer Opinion of Probable Cost (Class 2)
- Pre vs Post Model Report (revised if necessary)

6.2 Design Workshop – 90% Design

Following the submission of the 90% Design, the CONSULTANT TEAM will conduct a workshop with CITY staff to present and review the 90% design submittal. Workshop minutes will be prepared by the CONSULTANT TEAM and be delivered to the CITY for final review. Public involvement will be conducted as noted in the "Toll Gates" guidance and Task 2 of this Scope of Work.

Meetings/Workshops

- Technical Workshop with City's personnel
- One meeting with CITY's Design Review Board

Deliverables

- Workshop Draft and Final Agenda (Electronic)

6.3 Permitting Services

CONSULTANT will receive and incorporate comments from the CITY during the 90% workshop and develop the Permit Set for the project. Drawings and specifications will be re-issued as Permit Set and submitted to the Permit Agencies with corresponding applications (submittal fees are not included in the scope). Consultant will include level of effort necessary to secure required permits for project, including submittals, response to RFI's and resubmitting as needed. This effort will include the following Agencies or Entities:

- City of Miami Beach corresponding Departments and Boards (Historic Preservation Board, Design Review Board)
- ERP and Dewatering Permits
- MDC RER Class II stormwater discharge Permit

- MDC RER Class I Permit
- CITY Tree Removal and Relocation Permit
- Miami-Dade Water and Sewer Department (WASD)
- Miami-Dade County Transportation
- Water and Sewer Extension - Miami Dade RER (any other RER permits needed.)
- Miami-Dade Department of Health (DOH)
- Army Corps of Engineers and FDEP for outfall (if required)
- US Coast Guard (for outfall, if required)
- City of Miami Beach Right of Way Permit
- City of Miami Beach Building Permit
- Any other County, State and/or Federal permit for the construction of the outfall within South Pointe Park (if required)

The state will also require a Sea Level Impact Projection (SLIP) using their online tool, which is currently under development, to obtain state financing after July 1, 2022. The tool should be available by the end of July 2021 based on workshop information. If the SLIP tool is not available, its application will be deferred. This SLIP report is required by law and its primary purpose is to inform the owner of potential sea level rise impacts. Based on public workshop information, this tool is standardized, and the project location and design life are the primary input. The project information and automated report is retained by the Florida Department of Environmental Protection, but no other requirements are expected from the state based on the SLIP results.

Deliverables

- Permit applications and drawings as noted above (Submittal Fees are not Included)
- Florida Department of Environmental Protection SLIP report (electronic)
- Written responses and resolutions to the 90% design review comments.
- Permit Set drawings, computations, and technical specifications
- Responses to RFIs, and resubmittals from Permitting Agencies

Meetings

- One submittal meeting with corresponding permitting Agencies.

Task 7 100% Design (Bid Set)

7.1 Develop Final 100% Design Documents

The CONSULTANT TEAM will incorporate comments received from Agencies during the permitting process and develop 100% Design (Bid Set). The CONSULTANT TEAM's project certification will be based on the final 100% Design.

Deliverables

- Front End Documents (Client provided)
- Signed and Sealed Drawings
- Signed and Sealed Technical Specifications
- Table with comments received from Permit Agencies and Responses.
- List and copy of each secured permit
- Class 1 Opinion of probable Cost
- Final Pre vs Post Model Report (revised if necessary)
- AutoCAD, Civil 3D, and ICPR files for the entire project and models performed.
- Photoshop and any other files used for the development of all exhibits and renderings.

7.2 Baseline Water Quality Analysis

The CONSULTANT TEAM will develop a sampling plan, collect and analyze water quality of the water near the location of the outfall to define a baseline before construction.

Deliverables

- Sampling Plan
- Collection, sampling, and reporting (10 samples to be included)

Task 8 **Bid Phase Services**

The task included within this section are to provide during the bid phase of the project.

8.1 Bid Services

CONSULTANT TEAM will provide the following bid services during advertisement and bidding for this project:

- Assist the CITY with the preparation of a Request for Bid for the project.
- Respond to Request for Information (RFIs) submitted by bidders and assist with the preparation of addenda during the advertisement period.
- Prepare for and attend a Pre-Bid Conference with prospective bidders and present project.
- Assist City during bid evaluation and certify bids
- Attend Pre-Bid Site Visit
- Attend Industry Meetings
- Provide a recommendation of award. Jacobs will attend 1 meeting with CITY staff to discuss to collectively develop a recommendation of award.

Deliverables

- Responses to RFIs submitted by bidders
- Recommendation of Award letter

Task 9 **Field Studies**

This task will include the execution of the field studies required to complete the design of the Base project as defined in Table 1.

9.1 Development of Subsurface Utility Engineering (SUE)

CONSULTANT TEAM will prepare a description of the services and coordinate with private utility owners the location of existing underground facilities (SUE) for each of the project components (refer to Table 1) within the project area. Location services will include field work for location utilities (field potholing) required to verify location, size, and materials, of existing utilities that may create conflict with proposed components. It is assumed that the CONSULTANT TEAM will complete and develop report for the completion of **100 field potholes**.

SUE information is expected to be completed between the conceptual and the 30% design for the project. Note that the conceptual design report will be developed with the information available and not with actual SUE information.

Meetings

- Field site visit with SUE firm to discuss project limits and requirements.
- Meetings all private utilities.

Deliverable

- Draft and final SUE field investigation report (electronic)
- Summary of meetings with private utility owners.

9.2 Development of Topographical, Location, and Bathymetric Survey

The CONSULTANT TEAM's Surveyor will complete the field work required to develop a site and topographic survey of the project (base project as defined in Table 1). This survey will include definition of project controls and benchmarks (vertical and horizontal), location and elevation of above ground elements (roads, sidewalks, trees, fences, poles, manholes, vault and valve covers, on and above the ground (electrical lines), and underground elements including integration of information obtained during the SUE investigations. The trees identified in the right-of-way will be surveyed (location and chest-height diameter) and identified in a table. All trees greater than 3-inch diameter (at chest height) or palms over 15-feet tall will be included in the survey. The survey will be submitted in a georeferenced Civil 3D CADD drawing files. The survey will be signed and sealed by a Florida Professional Land Surveyor, and will include:

- Above ground features, and structures
- Right of Way and limits of existing structures (no legal boundary will be provided)
- Baseline control points and bench marks.
- Bathymetric survey along about 500 feet of coastline centered on the stormwater outfall
- Finished floor elevation (FFE) of properties adjacent to the project area (specifically at First Street)
- Elevations and entrances to residences and garages (First Street)
- Trees (ID by number, then provide an electronic table with data)
- Existing gravity sanitary and storm inverts
- Integration of SUE information

- Location of Geotechnical Borings

Deliverable

- Draft and Final survey (electronic)
- Tree survey (electronic)
- Bathymetric Survey

9.3 Development of Geotechnical Engineering Evaluation

CONSULTANT TEAM's Geotechnical Sub-Consultant will complete the geotechnical field investigation and laboratory analysis required for the design of the project components defined in Table 1. It is assumed that **18 SPT borings** and 3 Percolation tests will be performed at the site. CONSULTANT TEAM geotechnical engineers will use Geotechnical information to develop sub-surface structural design recommendations and pavement design recommendations. A signed and sealed geotechnical report will be required.

Deliverable

- Boring Plan for coordination with City
- Draft and final Geotechnical Report (electronic)

9.4 Benthic and Sea Grass Survey

CONSULTANT TEAM's subconsultant will complete field work and develop report for a benthic and sea grass survey at the outfall location near Biscayne Bay (South Point Park).

Deliverable

- Draft and final Benthic and Sea Grass Survey (electronic)

9.5 Tree Condition Report

Task will include the assessment of the tree survey provided by the surveyor (correct identifications and add descriptions, as needed) and then add a narrative and assessment on the health of the surveyed trees. The deliverable would be a stand-alone report that is typically required for the CITY. The goal is to understand the existing tree canopy including species, health and size of individual trees, establish this baseline at the outset of the project.

Deliverables

- Tree Condition Report
- Coordination with the CITY Urban Forester regarding tree type and condition is anticipated.

Assumptions

A. This scope of work of Tasks 1 to 9 includes only the elements defined in Table 1 for the Base project. Change or modifications to the elements included will require a Change Order to the Work Order.

B. Once the conceptual design phase is completed the concept will be considered "frozen" and any significant changes in the concept, as defined by the toll gates document attached herein, that requires the redevelopment of the conceptual phase will require a change to the work order, to be agreed to by the CITY and CONSULTANT TEAM

C. CONSULTANT TEAM will deliver four sets of 11X17 and one set of 22X34 of the construction drawings that includes the base project as described in Table 1.

D. Project will be designed based on standards, laws, and codes in effect at the time of notice to proceed (NTP)

E. In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect total construction cost or schedule. These changes are not the responsibility of CONSULTANT TEAM.

F. It is assumed that there will be no wetland impacts requiring wetland ERP consideration and a Class I permit from RER may be required. It is further assumed that the contractor will obtain the needed NPDES construction general permit.

G. It is assumed CONSULTANT TEAM will receive one round of consolidated review comments from the CITY on all deliverables within 3 weeks after submittal. If the CITY needs additional review time, the schedule will need to be updated.

H. Each respective masterplan component (water, sewer, etc.) included adequate modeling to size proposed system components; additional modeling, sizing, verification, validation and/or design is excluded from this Scope of Work.

I. Jacobs shall at no time take title, risk of loss or ownership of the hazardous materials or wastes. Client recognizes that Jacobs assumes no risk and/or liability for hazardous materials encountered while performing any services associated with such hazardous waste.

J. CITY will provide an existing conditions and proposed project model (2 models, ICPR version 3), as developed by AECOM for the South Pointe neighborhood.

K. The City will be responsible for the payment of all Permit Fees for all Agencies associated with the Permitting process of this project. CONSULTANT TEAM will define permit fee and transmit to the City for payment by the City prior to submittal.

L. No field archeology evaluations are included.

M. All deliverables will be submitted in electronic format.

N. RER will not require a tree permit or tree mitigation.

O. The project will be bid as one project with all plans and specifications incorporated into one set of contract documents.

Exclusions

A. Evaluations associated with noise and odor related to construction activities.

B. Virtual meeting space or virtual town hall framework is not included in this Work Order.

C. The project limits included herein is based on information provided by the CITY. Thus, any additional site(s) evaluations, design and construction implications and comparisons are not included in this Work Order.

D. It is assumed that there will be a single update of the FAQ document. Additional updates are not included in this level of effort.

Project Schedule

A delivery schedule is included below showing durations for the top tasks. A total duration of 118 weeks after Notice to Proceed. A schedule in MS Project format will be delivered to the City within 2 weeks after receiving Notice to Proceed.

Task #	Description	Task Start (Week)	Task End (Week)	Task Duration (Weeks)
1	Project Management and Coordination	1	118	118
2	Technical Support to Stakeholder/Public Involvement, and Consensus Building Program	1	118	118
3	Pre-Design Phase	2	14	12
4	Basis of Design Report and 30% Design	15	31	16
5	60% Design	32	48	16
6	90% Design	47	63	16
6	Permitting Phase	64	88	24
7	100% Design (Bid Set)	89	97	8
8	Bid Phase Services	98	118	20

Jacobs

COMPENSATION AND PAYMENT

The Consultant agrees to provide the scope of services in Task 1 to 9 above for a **Lump Sum** amount of **$5,981,000**. Invoices will be submitted monthly based on the Consultant's percent complete of the Lump Sum values in the table below, including subconsultants. See attachments for the detailed compensation breakdown.

Task	Description	LOE
1.0	Project Management & Coordination	$ 478,847
2.0	Technical Support to Stakeholder/Public Involvement, and Consensus Building Program	$ 310,763
3.0	Pre-Design Phase	$ 236,242
4.0	Basis of Design Report and 30% Design	$ 1,367,298
5.0	60% Design	$ 1,308,257
6.0	90% Design & Permitting	$ 1,070,164
7.0	100% Design (Bid Set)	$ 718,959
8.0	Bid Phase Services	$ 61,263
9.0	Field Studies	$ 404,207
	Sub-Total	$ 5,956,000
	Reimbursable Expenses	$ 25,000
	Sub-Total	$ 5,981,000
	General Owners Allowance	$ -
	Total WO 3 (Lump Sum)	$ 5,981,000

Jacobs

Attachment A: Detailed Level of Effort

Work Order 3 - First Street Stormwater PS - Fee Breakdown	Labor Category	Delivery Manager	Project Manager Senior	Admin	Senior Associate (QA/QC)	Senior Associate (QA/QC)	Project Engineer Senior	Project Engineer Senior	Project Engineer	Project Engineer	Engineer	Engineer	Engineer	Engineer	Scientist	CAD Manager	Principal Designer	Designer	Designer	CAD Oper	Total Hours	Sub-Consultant Cost	Reimbursable Expenses	Allowance	TOTAL COST
		$290.00	$258.53	$90.18	$252.49	$252.49	$196.80	$196.80	$175.58	$175.58	$142.96	$142.96	$142.96	$142.96	$93.36	$161.26	$149.59	$114.58	$114.58	$122.00					
Task 1 - Project Management & Coordination																									
Project Management and Coordination	1.1	670	744	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1558	$ 44,524			$444,156
General PM & Coordination	1.1.1	670	744	144																	1558				$399,632
Coordination Meetings - Up to 10	1.1.2																					$ 44,524			$44,524
Project Kick-Off and Goal Setting Meeting & Visioning Workshop	1.2	28	52	0	0	0	16	16	0	0	0	0	0	0	0	0	0	0	19	0	131				$30,038
Development of Preliminary Feasibility for Kickoff	1.2.1	16	40				16	16											19		107				$23,456
Plan and Attend Kickoff Meeting	1.2.2	12	12				0	0													24				$6,582
Field Site Visit/Assessment Review	1.3	4	4					0	14												22				$4,652
Subtotal		***702***	***800***	***144***	***0***	***0***	***16***	***16***	***14***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***19***	***0***	***1711***	***$ 44,524***			***$478,847***
Task 2 - Technical Support to Stakeholder/Public Involvement, and Consensus Building Program																									
Technical Support for the Development of the Project Outreach Plan	2.1		16												16						32				$5,630
Technical Support the Implementation of the Public Outreach Plan	2.2	328	64	112	0	0	179	0	63	0	0	84	102	0	204	0	0	0	127	0	1263	$ 76,890			$305,132
General Support the Implentation of the Public Oureach Plan	2.2.1			40											80						120				$11,076
Development of Graphical Materials (Renderings) for Asoc Meetings (24) (Up to 8 Stakeholders and up to three meetings each)	2.2.2						117					84	102		124				127		554				$75,744
Attend and Support Neighborhood Assoc Meetings and Presentations - Up to 24	2.2.3	112	24	24			62		63				0								285				$64,112
Attend and Support Neighborhood Assoc Meetings and Presentations - Up to 10	2.2.4																				0	$ 76,890			$76,890
Toll Gate Meetings (Conceptual, 30%, 60%, 90%, 100% and Bid) (6 Meetings)	2.2.5	112	24	24			0	0													160				$40,849
Meetings with City Comissions and Design Review Board (5 Meetings)	2.2.6	104	16	24			0	0													144				$36,461
Subtotal		***328***	***80***	***112***	***0***	***0***	***179***	***0***	***63***	***0***	***0***	***84***	***102***	***0***	***220***	***0***	***0***	***0***	***127***	***0***	***1295***	***$ 76,890***			***$310,763***
Task 3 - Pre-Design Phase																									
Stormwater Modeling	3.1	0	0	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	53	$ 198,764			$208,070
Data Collection, Review, Field Verification	3.1.1																				0	$ 39,036			$39,036
Existing Model Setup	3.1.2																				0	$ 41,630			$41,630
Existing Stormwater Drainage Analysis	3.1.3																				0	$ 35,125			$35,125
Proposed Stormwater Drainage Design, Modeling and Analysis	3.1.4																				0	$ 82,973			$82,973
Modeling QA	3.1.5								53												53				$9,306
Blue-Green Stormwater Infrastructure Opportunities (1st Street from Alton Avenue to Washington Avenue)	3.2				24		6		16			40	32								118				$20,343
Cultural Resources	3.3			4											80						84				$7,830
Subtotal		***0***	***0***	***4***	***24***	***0***	***6***	***0***	***69***	***0***	***0***	***40***	***32***	***0***	***80***	***0***	***0***	***0***	***0***	***0***	***255***	***$ 198,764***			***$236,242***
Task 4 - Basis of Design Report and 30% Design																									
Development of Conceptual Design (10%)	4.1	0	20	20	12	41	83	86	208	43	96	71	219	40	60	4	64	56	104	80	1307				$202,500
Pump Station and Appurtenances Conceptual Design	4.1.1		4		8	12		45	77	19		27	39			4	64				299				$51,450
Pump Station and Appurtenances Architectural and Landscape Conceptual Design	4.1.2					3	44		33				160		16			56			312				$45,995
First Street Corridor Urban Design, Landscape Architecture and Harmonization Evaluation	4.1.3						33		37			44	20		44				80		258				$35,415
Conceptual Roadway Design	4.1.4			12		12			53		96			40					24	80	317				$45,370
Conceptual Design TM	4.1.5		16	8	4	14	6	41	8	24											121				$24,271
Conceptual Design Workshop	4.2	8	12				8	12	24		4										68				$14,144
Development of BODR and 30% Design	4.3	0	79	53	56	123	134	285	354	226	444	296	268	377	336	80	176	103	349	544	4283	$ 470,931			$1,112,381
Development of 30% Design - Pump Station	4.3.1		44	12	33	87		285	172	226		75	34			80	176	87	24		1335				$236,255
Development of BODR and 30% Design - Architectural, Harmonization and Landscaping	4.3.2		23		23		134		45			221	234		336			16	80		1112				$153,441
Utility Coordination and Conflict Resolution	4.3.3																				0	$ 64,355			$64,355
Preliminary Evaluation and Development of Well Concept (30% Design)	4.3.4																				0	$ 170,965			$170,965
Potable Water Main (30% Design)	4.3.5																				0	$ 51,281			$51,281
Sanitary Sewer Gravity Collection System (30% Design)	4.3.6																				0	$ 51,281			$51,281
54-inch Sanitary Sewer Line - (30% Design)	4.3.7																				0	$ 21,502			$21,502
Stormwater Collection System - (30% Design)	4.3.8																				0	$ 66,358			$66,358
Pump Station Electrical (30% Design)	4.3.9																				0	$ 16,181			$16,181
Pump Station Discharge (30% Design)	4.3.10																				0	$ 15,459			$15,459
Submittal Review and Workshops (30% Design)	4.3.11																				0	$ 13,549			$13,549
30% Roadway Design	4.3.12		12	41		36			137		444			377					245	544	1836				$251,754
Tree Management Plan	4.4					4	16					40	88								148				$22,458
Design Workshop - 30% Design	4.5	8	12		4	8	8	8	24												72				$15,815
Subtotal		***16***	***123***	***73***	***72***	***176***	***249***	***391***	***610***	***269***	***544***	***407***	***575***	***417***	***396***	***84***	***240***	***159***	***453***	***624***	***5878***	***$ 470,931***			***$1,367,298***
Task 5 - 60% Design																									
Develop 60% Design Documents	5.1	0	74	43	92	98	134	195	246	410	477	289	270	247	224	116	294	195	443	449	4296	$ 648,844			$1,294,650
Utility Coordination and Conflict Resolution	5.1.1																				0	$ 64,355			$64,355
Develop 60% Design Documents - Pump Station	5.1.2		50	12	66	57		195	116	410		143	75			116	294	134	90		1758				$295,313
Develop 60% Design Documents - Architectural, Harmonization and Landscaping	5.1.3		16		26	8	134		34			146	195		224			61	88		932				$131,796
Water Quality Wells - 11 Systems (60% Design)	5.1.4																				0	$ 338,767			$338,767
Potable Water Main (60% Design)	5.1.5																				0	$ 51,281			$51,281
Sanitary Sewer Gravity Collection System (60% Design)	5.1.6																				0	$ 51,281			$51,281
54-inch Sanitary Sewer Line - (30% Design)	5.1.7																				0	$ 31,935			$31,935
Stormwater Collection System - (60% Design)	5.1.8																				0	$ 61,599			$61,599
Pump Station Electrical (60% Design)	5.1.9																				0	$ 20,915			$20,915
Pump Station Dicharge (60% Design)	5.1.10																				0	$ 15,162			$15,162
Submittal Review and Workshops (60% Design)	5.1.12																				0	$ 13,549			$13,549
60% Roadway Design	5.1.13		8	31		33			96		477			247					265	449	1606				$218,696
Design Workshop - 60% Design	5.2	4	12		4	8	4	8	8	8	4		4								64				$13,607
Subtotal		***4***	***86***	***43***	***96***	***106***	***138***	***203***	***254***	***418***	***481***	***289***	***274***	***247***	***224***	***116***	***294***	***195***	***443***	***449***	***4360***	***$ 648,844***			***$1,308,257***

Appendix A - Level of Effort Estimate

Work Order 3 - First Street Stormwater PS - Fee Breakdown	Labor Category	Delivery Manager	Project Manager Senior	Admin	Senior Associate (QA/QC)	Senior Associate (QA/QC)	Project Engineer Senior	Project Engineer Senior	Project Engineer	Project Engineer	Engineer	Engineer	Engineer	Engineer	Scientist	CAD Manager	Principal Designer	Designer	Designer	CAD Oper	Total Hours	Sub-Consultant Cost	Reimbursable Expenses	Allowance	TOTAL COST
Task 6 - 90% Design & Permitting																									
Develop 90% Design	6.1	0	38	75	51	84	35	85	183	190	205	152	128	184	267	88	184	119	333	279	2680	$ 543,899			$931,791
Utility Coordination and Conflict Resolution	6.1.1																				0	$ 64,355			$64,355
Develop 90% Design (Permit Set)	6.1.2	0	22	54	33	56		85	77	190		97	44			88	184	97	88		1115				$179,707
Develop 90% Design - Architectural, Harmonization and Landscaping	6.1.3		12		18		35		33			55	84		267			22	80		606				$76,815
Water Quality Wells - 11 Systems (90% Design)	6.1.4																				0	$ 285,632			$285,632
Potable Water Main (90% Design)	6.1.5																				0	$ 38,955			$38,955
Sanitary Sewer Gravity Collection System (90% Design)	6.1.6																				0	$ 38,955			$38,955
54-inch Sanitary Sewer Line - (30% Design)	6.1.7																				0	$ 13,473			$13,473
Stormwater Collection System - (90% Design)	6.1.8																				0	$ 49,725			$49,725
Pump Station Electrical (90% Design)	6.1.9																				0	$ 24,093			$24,093
Pump Station Discharge (90% Design)	6.1.10																				0	$ 15,162			$15,162
Submittal Review and Workshops (90% Design)	6.1.11																				0	$ 13,549			$13,549
90% Roadway Design	6.1.12		4	21		28			73		205			184					165	279	959				$131,370
Design Workshop - 90% Design	6.2	4	12		4	8	4	8	8	8	4		4								64				$13,607
Permitting Services	6.3	40	94	40	0	0	0	26	25	0	0	0	0	80	0	0	0	0	0	0	305	$ 64,314			$124,766
Permitting Services	6.3.1	40	94	40				26	25					80							305	$ -			$60,452
Permit Preparation and Submittal for Water Quality Wells	6.3.2																				0	$ 64,314			$64,314
Subtotal		***44***	***144***	***115***	***55***	***92***	***39***	***119***	***216***	***198***	***209***	***152***	***132***	***264***	***267***	***88***	***184***	***119***	***333***	***279***	***3049***	***$ 608,213***			***$1,070,164***
Task 7 - 100% Design (Bid Set)																									
Develop Final 100% Design Documents	7.1	0	24	22	27	52	44	74	162	162	144	141	165	122	115	84	152	143	269	167	2069	$ 396,687			$701,307
Utility Coordination and Conflict Resolution	7.1.1																				0	$ 22,252			$22,252
Develop Final 100% Design Documents	7.1.2	0	16	12	24	40		74	73	162		97	45			84	152	79	86		944				$152,692
Develop Final 100% Design Documents - Architectural, Harmonization and Landscaping	7.1.3		4		3		44		23			44	120		115			64	102		519				$67,691
Water Quality Wells - 11 Systems (100% Design)	7.1.4																				0	$ 225,540			$225,540
Potable Water Main (100% Design)	7.1.5																				0	$ 38,681			$38,681
Sanitary Sewer Gravity Collection System (100% Design)	7.1.6																				0	$ 38,681			$38,681
54-inch Sanitary Sewer Line - (30% Design)	7.1.7																				0	$ 13,473			$13,473
Stormwater Collection System - (100% Design)	7.1.8																				0	$ 36,854			$36,854
Pump Station Electrical (100% Design)	7.1.9																				0	$ 11,182			$11,182
Pump Station Discharge (100% Design)	7.1.10																				0	$ 5,508			$5,508
100% Roadway Design	7.1.11		4	10		12			66		144			122					81	167	606				$84,236
Submittal Review and Workshops (100% Design)	7.1.12																				0	$ 4,516			$4,516
Baseline Water Quality Analysis	7.2	4	20						8												32	$ 9,917			$17,652
Subtotal		***4***	***44***	***22***	***27***	***52***	***44***	***74***	***170***	***162***	***144***	***141***	***165***	***122***	***115***	***84***	***152***	***143***	***269***	***167***	***2101***	***$ 406,604***			***$718,959***
Task 8 - Bid Phase Services																									
Bid Services	8.1	24	60	0	0	0	16	36	31	0	0	0	0	0	0	0	0	0	0	0	167	$ 23,115			$61,263
Bid Services	8.1.1	24	60				16	36	31												167				$38,148
Bid Services	8.1.2																				0	$ 23,115			$23,115
Subtotal		***24***	***60***	***0***	***0***	***0***	***16***	***36***	***31***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***167***	***$ 23,115***			***$61,263***
Task 9 - Field Studies																									
Development of Subsurface Utility Engineering (SUE)	9.1	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	$ 118,723			$122,594
SUE Field Work and Report	9.1.1																				0	$ 118,723			$118,723
Coordination and Oversight of Subsurface Utility Engineering (SUE)	9.1.2	8	6																		14				$3,871
Development of Topographical, Location and Bathymetric Survey	9.2	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	$ 101,589			$105,460
Oversight and Coordinaiton of Topographical and Location Survey	9.2.1	8	6																		14				$3,871
Development of Topographic Survey	9.2.2																				0	$ 78,687			$78,687
Development of Bathymetric Survey	9.2.3																				0	$ 22,902			$22,902
Development of Geotechnical Engineering Evaluation	9.3	8	6	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	$ 137,222			$147,153
Geotechnical Study and Report	9.3.1																				0	$ 137,222			$137,222
Oversight of Geotechnical Engineering Evaluation	9.3.2	8	6			24															38				$9,931
Development of Benthic and Sea Grass Survey	9.4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	$ 8,400			$9,434
Benthic and Sea Grass Survey	9.4.1																				0	$ 8,400			$8,400
Oversight and Coordinaiton of Benthic and Sea Grass Survey	9.4.2		4																		4				$1,034
Development of Tree Condition Report	9.5	4	8	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	8	0	48	$ 12,808			$19,566
Tree Condition Report	9.5.1																				0	$ 12,808			$12,808
Oversight of Tree Survey	9.5.2	4	8											0	28		0	0	8		48	$ -			$6,759
Subtotal		***28***	***30***	***0***	***0***	***24***	***0***	**0**	***0***	***0***	***0***	***0***	**0**	***0***	***28***	***0***	***0***	***0***	***8***	***0***	***118***	***$ 378,741***			***$404,207***
subtotal hours (Task 1 to 9)		1,150	1,367	513	274	450	687	839	1,427	1,047	1,378	1,113	1,280	1,050	1,330	372	870	616	1,652	1,519	18,934				15,180
Subtotal Cost (Task 1 to 9		$333,500	$353,411	$46,262	$69,182	$113,621	$135,202	$165,115	$250,553	$183,832	$196,999	$159,114	$182,989	$150,108	$124,169	$59,989	$130,143	$70,581	$189,286	$185,318	$3,099,374	$2,856,626			***$5,956,000***
Task 10 - Owner Allowance*																									
General Owners Allowance																								$ -	
Subtotal		***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***			$ -	***$0***
Reimbursable Expenses																							***$ 25,000***		***$25,000***
																								GRAND TOTAL - WO 3	**$5,981,000**

Jacobs

Attachment B: Proposals from Sub-Consultants

City of Miami Beach

First Street Neighborhood Improvement Project

Design Services

Scope of Services

Master Design Consultant for Integrated Water Management

RFQ No. 2018-312-KB; Resolution No. 2018-30613

August 31, 2021

Prepared By:

CES CONSULTANTS

880 SW 145th Avenue, Suite 106
Pembroke Pines, Florida 33027

INTRODUCTION

The City of Miami Beach (CMB) requests that the Jacobs Engineering Group Inc. Team (JACOBS) provide technical support and integrated engineering design services for a new stormwater pump station and stormwater treatment facility to serve the South of Fifth/South Pointe neighborhoods. The proposed First Street Stormwater Pump Station (First Street PS) will include a new stormwater pump station, treatment system, stormwater gravity collection system, and stormwater outfall force main.

This project is the first capital project to be implemented after the City of Miami Beach Urban Land Institute "Red Team Review" and creation of the READY Team. This will be the first project to incorporate the Commission-approved City of Miami Beach Blue-Green Stormwater Infrastructure (BGSI) Concept Plan and Urban Forestry Master Plan with the expectation that as CMB adapts to climate change to resolve flooding issues, and it will seek to scale-up the implementation of blue-green practices across the City.

CMB conducted a comprehensive alternative analysis and selected a **Base Alternative (Base**) for the project. The base alternative (Option 5-B) defined the location of the First Street PS (intersection of First Street and Washington Avenue), above ground electrical components (CMB parking lot located at the Northeast corner of intersection) and delimited the scope of the project. Figures 1, 2 and Table 1 provide a description of the base alternative and its main components. JACOBS has requested that CES Consultants, Inc. (CES) provide services in underground utility design, electrical engineering design, and technical reviews for the base alternative. The following is the scope of work for items that CES will provide for this project.

SCOPE OF WORK

JACOBS has requested that CES Consultants, Inc. (CES) develop a fee based on a base scope of services. The base scope is to provide an improved stormwater level of service to the neighborhood and replace the aging sanitary sewer and potable water pipes in the project area. The sizing of the sanitary sewer and potable water pipes will follow the recently adopted Water / Wastewater Master Plan.

The Base scope project limits are as follows:

1) Project Route:
    a. Alton Road from 5th Street to Jefferson Avenue (The intersection of Alton Road and 5th Street is not included in this project.)
    b. Jefferson Avenue from Alton Road to South Pointe Drive
    c. Washington Avenue from 5th Street to the street end south of South Pointe Drive (The intersection of Alton Road and 5th Street is not included in this project.)
    d. 1st Street from Alton Road to Washington Avenue.

2) Project Basin:
    a. Basin boundaries are 5th Street at the North boundary, Government Cut at the South boundary, Alton Road at the West boundary, and Ocean Drive at the East boundary.

CES will provide the following services by Discipline.

1) Project Management and Coordination (Up to 12 progress meetings throughout the life of the project)
2) Public Involvement (Up to 10 association meetings throughout the life of the project)

3) Stormwater Model (Entire Project Basin)
    a. Develop a pre-development and three (3) post-development models
4) Existing Utilities and Conflict Resolution (Entire Project Route)
    a. Prepare an existing utility map utilizing as-built and survey data. Utilize soft digs to verify utility locations. Soft digs are not part of the CES task or responsibility.
5) Water main design (Entire Project Route)
    a. Design includes replacing existing water main in kind throughout the entire project route.
    b. Design a fire flow line along Alton Road as per the five year priority plan.
6) Sanitary sewer design (Entire Project Route)
    a. Design includes replacing the sanitary sewer gravity collection system in kind.
7) 54-inch Force Main (Approximately 860 LF along Alton Road)
    a. Design includes replacing a portion of the existing 54-inch force main along Alton Road in kind.
8) Stormwater collection system design (Entire Project Route)
    a. Design the stormwater collection system for the project route as prescribed in the CMB selected stormwater model alternative. This design does not include all aspects of the selected stormwater model alternative, only the structures and pipes along the project route.
9) Water Quality Wells Systems (Entire Project Basin)
    a. Design sufficient water quality wells required for a DERM Class II permit. We will integrate the existing CMB drainage wells throughout the project basin and the vortex type filters at the pump station into the water quality calculations.
10) Pump station (Electrical)
    a. Design includes only electrical panels and stand-by generator. CES will prepare the electrical panel platform layout. CES will coordinate with FPL to acquire power to the pump station. CES will not design the electrical panel platform, the stand-by generator platform, nor the FPL electrical vault.
11) Pump station discharge force main (From Intersection of Washington Avenue and 1st Street to South Pointe Park)
    a. Design will include the route layout between the pump station, the dissipator box, and any required junction boxes to join the force main to either the pump station or the dissipator. The design doe not include the design of the pump station, dissipator, or any junction boxes.

The following is a detailed description of each scope of service to be provided by CES by task.

Detailed Project Scope of Services

The scope of services for Integrated Design of First Street Pump Station (Base Alternative) for the City of Miami Beach, includes the following tasks:

Task 1 – Project Management and Coordination

Task 2 – Support Stakeholder/Public Involvement (Neighborhood Association Meeting)

Task 3 – Stormwater Model and Conceptual Design

Task 4 – Basis of Design Report and 30% Design

Task 5 – 60% Design

Task 6 – 90% Design

Task 7 – 100% Design

Task 8 – Bid Phase Services

Task 1.0 Project Management and Coordination

1.1 Attend Project Coordination Meetings

CES will attend the project coordination and progress meetings with the Team and with CMB. These meetings will provide updates on the project progress, address potential project issues, and assure that the project team is meeting the expected goals. CES will participate in up to 12 monthly progress meetings with JACOBS and CMB (in person or virtual meetings).

Meetings/Workshops

- Monthly Progress Meetings (Virtual) with the CMB PM to discuss progress and discuss open action items.

Deliverables

- CES task specific Baseline Schedule delivered to JACOBS (MS Project) (electronic)
- Monthly Updates to CES task specific project schedule delivered to JACOBS (electronic)
- Progress Reports and Invoices delivered to JACOBS (electronic)

Task 2.0 Stakeholder Support

2.1 Neighborhood Association Meetings and Presentations

CES will participate in neighborhood association meetings and presentations. CES staff will provide technical support to JACOBS and CMB for the preparation of presentations and participation in neighborhood association meetings. Additionally, CES will provide technical support in the preparation of informational material that may be needed for postcards, newsletter(s) and/or fact sheet(s). CES will not be responsible for printing and mailing content. CES will not develop informational content for the presentations. CES will assist by providing updates on project progress, and CES will provide items developed during the design that can be used to develop presentation content. CES will participate in up to 10 stakeholder and neighborhood association meetings (in person or virtual meetings).

Deliverables

- Draft and final meeting materials as it pertains to the areas of responsibility for CES.

Task 3.0 Stormwater Model and Conceptual Design

CES will develop a stormwater model of the defined stormwater basin. The stormwater model will include an existing conditions model (Pre-Development), and three (3) alternative models (Post-Development).

The Pre-Development stormwater model will be created in Interconnected Channel and Pond Routing Version 4 (ICPR4) software utilizing a combination of resources, including existing as-built documents, the project survey, and staff field investigations. Once the Pre-Development model is prepared, it will be calibrated utilizing historical storm events. Once the Pre-Development model is completed and calibrated, three (3) Post-Development alternative models will be assembled. The Post-Development alternatives will follow the following design parameters.

1) The level of service for the system will be for a 10-year, 24-hour theoretical storm event. The Pre-Development and the three (3) Post-Development alternatives will undergo a 10-year, 24-hour theoretical storm event.

2) The collection and conveyance system (Inlets, collection pipes, and discharge pipes) will be sized throughout the entire stormwater basin to meet the 10-year, 24-hour theoretical storm event, and maintain the hydraulic grade line one (1) foot below the finished floors of the properties within the stormwater basin. Please note that the model will define the pipe sizes for all streets, although not all streets will be improved under this contract.

3) The Pre-Development and the three (3) Post-Development alternatives will undergo a 25-year, 3-day theoretical storm event in order to satisfy the South Florida Water Management District (SFWMD) Environmental Resources Permit (ERP) requirements.

The Post-Development alternatives will be as follows.

- Post-Development Alternative #1 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The stormwater pump station will be located at the intersection of 1st Street and Washington Avenue, and it will be sized for six (6) pumps with a total discharge of 120,000 GPM.
- Proposed Scenario #2 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The stormwater pump station will be located at the intersection of 1st Street and Washington Avenue, and it will be sized for multiple pumps with a total discharge of 200,000 GPM. The number of pumps and horsepower (HP) of each pump to be determined prior to completing this scenario.
- Proposed Scenario #3 – This alternative includes the stormwater collection system upgrade for the entire stormwater basin. The piping will be sized to provide a level of service for a 10-year, 24-hour theoretical storm event. The discharge pipe from the pump station to the outfall will be designed to convey the volume of water generated during a 10-year, 24-hour theoretical storm event. The alternative will define two (2) stormwater pump stations with a total discharge capacity of 200,000 GPM. Stormwater Pump Station NO. 1 will be a six (6) pump system with a discharge capacity of 120,000 GPM. Stormwater Pump Station No. 2 will be a four (4) pump system with a discharge capacity of 80,000 GPM.

Once all alternatives have been prepared, CES will prepare a technical memorandum describing each alternative, and provide CMB with a recommendation. CES will present the results to CMB utilizing Powerpoint.

Meetings

- Status Meeting (Virtual) to discuss modeling results after Existing and development of scenarios.

Deliverables

- Technical Memorandum defining alternatives and providing results (Pre-development and Post-development Model will be used to develop this memorandum)
- Presentation for CMB staff to present final results of Technical Memorandum

Task 4.0 Basis of Design Report and 30% Design

The activities included within this task include establishing the basis of design for each component to be designed by CES. The basis of design will include code and standards that will be followed, a permitting matrix with identification of regulatory agencies, CAD standards, table of contents of the technical specifications, and a 30% set of design plans. The 30% design will establish a plan view route for each of the disciplines. The electrical component will define the necessary equipment, development of a line diagram, and equipment layout.

Additionally, CES will prepare an existing utility map. This map will help identify conflicts with franchise utilities. CES will develop and maintain a conflict matrix spreadsheet. This spreadsheet will be provided to all franchise utilities, along with the 30% plans to develop solutions and relocations to potential conflicts. CES is not responsible for any subsurface utility exploration or soft digs.

Deliverables

- Basis of Design Report for the components under the direct responsibility of CES (Electronic)
- 30% design plans for the following sections
  - 4.1.1 Existing utility map and conflict matrix spreadsheet (Development of Existing utility map and conflict matrix spreadsheet. This will continue throughout the life of the design)
  - 4.1.2 Water main design
  - 4.1.3 Sanitary sewer design
  - 4.1.4 54-inch force main design
  - 4.1.5 Stormwater collection system design
  - 4.1.6 Water Quality Wells Systems
  - 4.1.7 Pump station (Electrical)
  - 4.1.8 Pump station discharge force main
  - 4.1.9 Submittal Reviews and Workshop

Task 5.0 60% Design

The activities included within this task include responding to comments provided by CMB, and progressing design to 60%. The 60% design will include plan and profile view of the utilities and establish all slopes and elevations for proposed utilities. The electrical components will include section drawings and conduit runs.

Deliverables

- Written response to 30% comments (This will be presented in an excel spreadsheet)
- 60% design plans for the following sections
  - 5.1.1 Existing utility map and conflict matrix spreadsheet (Verification of Existing utility map and conflict matrix spreadsheet. This will continue throughout the life of the design)
  - 5.1.2 Water main design
  - 5.1.3 Sanitary sewer design

- 5.1.4 54-inch force main design
- 5.1.5 Stormwater collection system design
- 5.1.6 Water Quality Wells Systems
- 5.1.7 Pump station (Electrical)
- 5.1.8 Pump station discharge force main
- 5.1.9 Submittal Reviews and Workshop

Task 6.0 90% Design

The activities included within this task include responding to comments provided by CMB, and progressing design to 90%. The 90% design will include a structure table, quantity take off, and technical specifications. The electrical components will include wiring diagrams and technical specifications.

Deliverables

- Written response to 60% comments (This will be presented in an excel spreadsheet)
- 90% design plans for the following sections
  - 6.1.1 Existing utility map and conflict matrix spreadsheet (Verification of Existing utility map and conflict matrix spreadsheet. This will continue throughout the life of the design)
  - 6.1.2 Water main design
  - 6.1.3 Sanitary sewer design
  - 6.1.4 54-inch force main design
  - 6.1.5 Stormwater collection system design
  - 6.1.6 Water Quality Wells Systems
  - 6.1.7 Pump station (Electrical)
  - 6.1.8 Pump station discharge force main
  - 6.1.9 Submittal Reviews and Workshop
  - 6.1.10 Preparation of permit applications for the water quality well systems (DERM Class II and SFWMD ERP)

Task 7.0 100% Design

The activities included within this task include responding to comments provided by CMB, and progressing design to 100%. The 100% design will include a complete permittable set of design drawings, preparation of all permit applications, quantity take off, and technical specifications.

Deliverables

- Written response to 90% comments (This will be presented in an excel spreadsheet)
- 100% design plans for the following sections

- 7.1.1 Existing utility map and conflict matrix spreadsheet (Verification of Existing utility map and conflict matrix spreadsheet. This will continue throughout the life of the design)
- 7.1.2 Water main design
- 7.1.3 Sanitary sewer design
- 7.1.4 54-inch force main design
- 7.1.5 Stormwater collection system design
- 7.1.6 Water Quality Wells Systems
- 7.1.7 Pump station (Electrical)
- 7.1.8 Pump station discharge force main
- 7.1.9 Submittal Reviews and Workshop

Task 8.0 Bid Services

The activities included within this task include assisting CMB with preparation of bid documents related to our specific services, participation in pre-bid meeting and one (1) site visit with potential bidders, responding to RFIs during the bidding process (up to 3 RFIs), assist CMB in evaluating the submitted bids for responsiveness, and provide CMB with a recommendation of the submitted bids. All aspects of this effort are related to our specific scope items.

Deliverables

- Prepare of bid documents related to our specific scope of services,
- Participation in pre-bid meeting and one (1) site visit with potential bidders,
- Responding to RFIs during the bidding process (up to 3 RFIs),
- Assist CMB in evaluating the submitted bids for responsiveness,
- Provide CMB with a recommendation of the submitted bids (Effort is related to our specific scope items)

Assumptions

The following are a list of assumptions utilized to prepare our fee and scope of work. The CES responsibility is limited to designing the following items.

- Project Management and Coordination is limited to 12 progress meetings throughout the life of the project
- Public Involvement is limited to 10 neighborhood association meetings throughout the life of the project)
- Stormwater Model (Entire Project Basin)
  - CES will prepare a pre-development and three (3) post-development models.
  - CES will calibrate the pre-development model to assure accuracy.
- Existing Utilities and Conflict Resolution (Entire Project Route)
  - CES will identify conflicts with proposed underground utilities. CES will work with the appropriate design group to identify solutions to the conflicts. The appropriate design team will provide final solution to their particular conflict.

  - Under this task, CES will identify conflicts and assist in coordination of resolution until the conflict is addressed.
- Water main design (Entire Project Route)
  - CES will design a new water main to replace the existing water main in kind.
  - CES will design a fire flow line along Alton Road as per the five year priority plan.
  - CES will not analyze nor model the water mains to confirm adequate flows.
- Sanitary sewer design (Entire Project Route)
  - The design includes replacing the sanitary sewer gravity collection system in kind.
  - CES will evaluate the slopes and adjust accordingly for permitting. If CES needs to adjust sanitary sewer gravity lines outside of the defined project route to achieve the minimum slopes, a change of scope and fee will be required.
- 54-inch Force Main (Approximately 860 LF along Alton Road)
  - CES responsibility is limited to the design of an existing 54-inch force main located along Alton Road that needs replacing in kind.
  - The length of 54-inch force main design is approximately 860 LF.
- Stormwater collection system design (Entire Project Route)
  - The design of the stormwater collection system will be only for structures and pipes along the project route.
  - The stormwater collection system design will follow the route and pipe sizes prescribed in the CMB selected stormwater model alternative.
- Water Quality Wells Systems (Entire Project Basin)
  - Water Quality Wells Systems will consider the entire project basin needs. The design will be sufficient to satisfy the regulatory agencies (DERM Water Control and SFWMD), and to acquire a DERM Class II permit and a SFWMD ERP.
  - Our water quality calculations will include existing CMB drainage wells within the project basin and the vortex filters that will be part of the pump station.
  - CES is not designing the vortex filters nor any structure required for the vortex filter system to be located at the pump station.
- Pump station (Electrical)
  - The pump station electrical design is limited to the design of the electrical panels and stand-by generator.
  - CES will not design the electrical panel platform, the stand-by generator platform, nor the FPL electrical vault.
  - The CES design does not include civil site to locate the facilities, nor any structural design. It is strictly limited to the electrical design.
- Pump station discharge force main
  - The pump station discharge force main is to be designed from the pump station to the dissipator. The pump station will be at the intersection of 1st Street and Washington Avenue and the dissipator will be at Southe Pointe Park to outfall into Government Cut.
  - The pump station discharge force main design does not include the pump station design, the dissipator design nor any necessary junction boxes to join the force main to the system.
- Construction Phase Services
  - Construction phase services are not considered for this proposal. This includes field visits during construction, review of shop drawings, certification of any component of the system, and permit close-out assistance.
- Permit Fees are not included in this fee proposal

Work Order 3 - First Street Stormwater PS Fee Breakdown	Principal	Senior Associate	Associate	Project Manager	Project Engineer Senior	Senior Engineer	Project Engineer	Engineer	CADD Operator	Draftsman	Administrator			**TOTAL**
	$292.54	$252.49	$199.45	$205.81	$196.80	$185.66	$175.58	$142.96	$122.00	$76.38	$90.18			
Task 1 - Project Management & Coordination														
1.1 - Attend Project Coordination Meetings - up to 12		96		96			32							$44,524
subtotal hours	***0***	***96***	***0***	***96***	***0***	***0***	***32***	***0***	***0***	***0***	***0***	***0***	***0***	**224**
Subtotal Cost														***$44,524***
Task 2 - Stakeholder Support														
2.1 - Neighborhood Association Meeting and Presentations - up to 10		88		88	80		80	80						$76,890
subtotal hours	***0***	***88***	***0***	***88***	***80***	***0***	***80***	***80***	***0***	***0***	***0***	***0***	***0***	**416**
Subtotal Cost														***$76,890***
Task 3 - Stormwater Model and Conceptual Design														
3.1 - Data Collection, Review, Field Verification, and Database Inventory		8	6	4	40		24	100	24	80				$39,036
3.2 - Existing Stormwater Model Setup		16	16	8	80		4	120						$41,630
3.3 - Existing Stormwater Drainage Analysis		16	12	8	72			96						$35,125
3.4 Proposed Stormwater Drainage Design, Modeling, and Analysis		40	40	8	180		24	180						$82,973
subtotal hours	***0***	***80***	***74***	***28***	***372***	***0***	***52***	***496***	***24***	***80***	***0***	***0***	***0***	**1206**
Subtotal Cost														***$198,764***
Task 4 - Basis of Design Report and 30% Design														
4.1.1 - Utility Coordination and Conflict Resolution		18	18	12	30	80	96		80	96				$64,355
4.1.2 - Preliminary Evaluation and Development of Well Concepts (30% Design)		60	80	120	160	160	160	120	60	60				$170,965
4.1.3 - Potable Water Main (30% Design)		16	16	4	40	60	40	60	40	60				$51,281
4.1.4 - Sanitary Sewer Gravity Collection System (30% Design)		16	16	4	40	60	40	60	40	60				$51,281
4.1.5 - 54-inch Force Main (30% Design)		2	4	4	32		24	32	16	32				$21,502
4.1.6 - Stormwater Collection System (30% Design)		40	24	8	80	60	40	60	40	60				$66,358
4.1.7 - Pump Station Electrical (30% Design)		8			40		16		32					$16,181
4.1.8 - Pump Station Discharge (30% Design)		8	4	4	16		24		40					$15,459
4.1.9. - Submittal Reviews and Workshops		24		24			12	12						$13,549
subtotal hours	***0***	***192***	***162***	***180***	***438***	***420***	***452***	***344***	***348***	***368***	***0***	***0***	***0***	**2904**
Subtotal Cost														***$470,931***
Task 5 - 60% Design														
5.1.1 - Utility Coordination and Conflict Resolution		18	18	12	30	80	96		80	96				$64,355
5.1.2 - Water Quality Wells (60% Design, Assuming 11 Systems)		60	80	180	680	136	184	392	96	192				$338,767
5.1.3 - Potable Water Main (60% Design)		16	16	4	40	60	40	60	40	60				$51,281
5.1.4 - Sanitary Sewer Gravity Collection System (60% Design)		16	16	4	40	60	40	60	40	60				$51,281
5.1.5 - Stormwater Collection System (60% Design)		40	24	4	60	60	40	60	40	60				$61,599
5.1.6 - 54-inch Force Main (60% Design)		8	8	8	32		32	40	40	60				$31,935
5.1.7 - Pump Station Electrical (60% Design)		12			60		16		32					$20,915
5.1.8 - Pump Station Discharge (60% Design)		8	4	4	16		24			60				$15,162
5.1.9 - Submittal Reviews and Workshops		24		24			12	12						$13,549
subtotal hours	***0***	***184***	***148***	***228***	***928***	***316***	***388***	***624***	***288***	***492***	***0***	***0***	***0***	**3596**
Subtotal Cost														***$648,843***
Task 6 - 90% Design														

Work Order 3 - First Street Stormwater PS Fee Breakdown	Principal	Senior Associate	Associate	Project Manager	Project Engineer Senior	Senior Engineer	Project Engineer	Engineer	CADD Operator	Draftsman	Administrator			**TOTAL**
6.1.1 - Utility Coordination and Conflict Resolution		18	18	12	30	80	96		80	96				$64,355
6.1.2 - Water Quality Wells (90% Design, Assuming 11 Systems)		60	80	180	538	116	144	308	96	160				$285,632
6.1.3 - Potable Water Main (90% Design)		16	16	2	40	48	40	20	20	40				$38,955
6.1.4 - Sanitary Sewer Gravity Collection System (90% Design)		16	16	2	40	48	40	20	20	40				$38,955
6.1.5 - Stormwater Collection System (90% Design)		40	24	2	40	48	40	40	20	60				$49,725
6.1.6 - 54-inch Force Main (90% Design)		4	4	4	16		16	16	8	24				$13,473
6.1.7 - Pump Station Electrical (90% Design)		16			60		24		40					$24,093
6.1.8 - Pump Station Discharge (90% Design)		8	4	4	16		24			60				$15,162
6.1.9 - Submittal Reviews and Workshops		24		24			12	12						$13,549
6.1.10 Permit Preparation and Submittal for Water Quality Wells		64	16	12	48	52	120	40						$64,314
subtotal hours	***0***	***248***	***160***	***230***	***798***	***312***	***460***	***456***	***204***	***384***	***0***	***0***	***0***	**3252**
Subtotal Cost														***$608,214***
Task 7 - 100% Design														
7.1.1 - Utility Coordination and Conflict Resolution		8	8	8	10	24	32		24	32				$22,252
7.1.2 - Water Quality Wells (100% Design, Assuming 11 Systems)		60	80	180	408	80	104	224	64	96				$225,540
7.1.3 - Potable Water Main (100% Design)		16	16	4	40	40	32	32	24	40				$38,681
7.1.4 - Sanitary Sewer Gravity Collection System (100% Design)		16	16	4	40	40	32	32	24	40				$38,681
7.1.5 - Stormwater Collection System (100% Design)		24	16	4	40	20	24	40	16	60				$36,854
7.1.6 - 54-inch Force Main (100% Design)		2	4	2	12		16	16	16	24				$12,852
7.1.7 - Pump Station Electrical (100% Design)		12				24	8		24					$11,182
7.1.8 - Pump Station Discharge (100% Design)		8	2	2	8					20				$5,508
7.1.9 - Submittal Reviews and Workshops		8		8			4	4						$4,516
subtotal hours	***0***	***146***	***134***	***204***	***548***	***204***	***220***	***348***	***168***	***280***	***0***	***0***	***0***	**2252**
Subtotal Cost														***$396,065***
Task 8 - Bid Phase Services														
8.1 - Pre-Bid Meeting		8		8	16		16							$9,200
8.2 - Response to RFIs		2			16									$3,548
8.3 - Review of Bid s and Award Assistance		2		16	24				16					$10,367
														$0
subtotal hours	***0***	***12***	***0***	***24***	***56***	***0***	***16***	***0***	***16***	***0***	***0***	***0***	***0***	**124**
Subtotal Cost														***$23,115***

SUBTOTAL ALL TASKS - LABOR	***$2,467,345***
Other Direct Costs Expenses (mileage, incidentals, etc)	**$10,000**
SUBTOTAL ALL TASKS - LABOR + ODC EXPENSES	**$2,477,345**
TOTAL - WO 3	**$2,477,345**

T 305.591.8777 E MARKETING@FR-ALEMAN.COM
W FR-ALEMAN.COM

August 27, 2021 Rev_2
~~July 20, 2021 Rev_1~~
~~June 23, 2021~~

Jacobs
Juan F. Aceituno, PE
Senior Project Manager
3150 SW 38th Avenue - Suite 700,
Miami, Florida 33146
Juan.aceituno@jacobs.com

Re: Contract Name: City of Miami Beach Master Design Consultant for Integrated Water Management
Work Order 3: First Street Neighborhood Improvement Project
RFQ No.: 2018-312-KB
Resolution No.: 2018-30613
FRA Project No: 19.3190.00

Dear Mr. Aceituno:

Pursuant to your request, the following proposal for surveying services in connection with the above referenced project is hereby offered for your consideration:

Description of Services & Deliverables

Proposed Scope Services

FR Aleman & Associates, Inc. (FRA) proposes to perform the following tasks: surveying and mapping, subsurface utility engineering, and tree condition report related services for the above referenced project. Project limits are defined below and shown in Exhibit 'A'

Washington Avenue

- (Total of 3,500 LF including 25-feet on either side of the right-of-way at intersections and 500 LF bathymetric survey).
- Washington Avenue from Inlet Blvd. to 5th Street (south right-of-way line).
- Extension of Washington Avenue from Inlet Blvd. to the north coastal line of government cut (Norris cut).
- 500 LF of coastline centered on the stormwater outfall on Government Cut (Norris Cut).

1ST Street

- (Total of 850 LF including 25-feet on either side of the right-of-way at intersections).
- 1st Street from Alton Road to Washington Avenue.

Alton Road

- (Total of 2,700 LF including 25-feet on either side of the right-of-way at intersections).
- Alton Road from Biscayne Street to 5th Street (south right-of-way line).

Task 1: Surveying and mapping services

Topographic survey

The topographic survey will be performed in compliance with the City of Miami Beach Survey & Mapping Standards and Submittal requirements. The survey shall be performed and prepared under the supervision and direction of a Professional Surveyor and Mapper licensed in the State of Florida pursuant to Chapter 5J-17 and shall meet the Standards of Practice for Professional Surveying and Mapping as identified in Rule 5J-17.050 through 5J-17.053 and submittal procedures as defined in 5J-17.062 of the Florida Administrative Code and the additional requirements as follows.

1. Calculate a centerline Survey Baseline with 100-foot stations along the baseline. The baseline of the survey shall be tied to right-of-way and monuments. Each surveyor will be responsible for obtaining right-of-way information from the most recent records.
2. The Surveyor will set Benchmarks at convenient locations along the corridor to be used during the design, construction, and completion of the project. Permanent Benchmarks shall have a maximum of 1,100 feet between existent or established Benchmarks along the alignment. The Surveyor shall tie-in at least two existing Government published Benchmarks to the vertical circuit and take cross sections at 50-foot intervals along the entire project corridor. Site benchmarks and elevations shall be derived from existing government Benchmarks and carried into the proposed site using Second Order, Class II procedures. A full listing of Benchmark locations shall accompany the survey data.
3. Cross section elevations shall define all grade breaks such as intersections, swale, edge of pavement, pavement centerline, curb and gutter, edges of sidewalk, driveway connections, right-of-way line, edge of the 25-foot right-of-way offset, Encroachments (both natural and built-in), etc.
4. The Surveyor shall obtain elevations of the lowest finished floor of all buildings immediately adjacent to project corridor.
5. The Surveyor shall locate and identify all visible surface improvements and Topographic features that exist along the width of the corridor, such as the following:
    - Existing valve boxes, water / electrical meter boxes, electrical pull boxes, telephone / cable risers, fences, hydrants, etc.
    - Above ground and underground utilities, invert elevations of accessible underground utilities, wood / concrete utility poles, culverts, guardrails, pavement limits, headwalls, end-walls, manholes, vaults, mailboxes, driveways, side streets, trees, landscaping, traffic signage and any other noted improvements. Note that Survey will identify fence material / height, landscaping plant material limits and driveway construction materials; as well as private property Encroachments (i.e., landscaping, overhangs, improvements, etc.)
6. Jacobs shall coordinate with each utility agency and/or by other means to identify the location of all existing underground utilities and the interconnectivity of the underground utilities. This will be provided to FRA by Jacobs.
7. Survey limits shall include the entire right-of-way and an additional 25-feet on either side of the right-of-way.
8. Survey data will indicate geometry of perimeter private property plats (inclusive of fences, landscaping and driveways).
9. All Horizontal control and locations shall be tied to the Florida State Plane Coordinate System, East Zone (NAD 83/2011).

10. All Vertical control and elevations shall be referenced to North American Vertical Datum of 1988 (NAVD1988).
11. The Surveyor shall be responsible for the location, mapping and acquiring the position (X, Y, Z coordinates NAD 83/2011) of existing Vertical and Horizontal Survey Control Points.
12. Digital submittal of Surveys shall be prepared in compliance with the City of Miami Beach, Public Works Manual SECTION F (See Exhibit 'B'). Electronic Media Standards and Requirements relative to previous described Horizontal and Vertical Datum.
13. Hard Copy (paper) submittal of (1) 22"x34" or (1) 11"x17" Hard Copy at a suitable scale with original Signature and Seal, and PDF copy of signed originals.

In addition, the survey will depict the following,

1. Water, Drainage & Sanitary Sewer Survey.
   - Sanitary and storm sewer structures will be located, rim elevation or top of the structure elevation, pipeline inverts and orientation, material, and diameters shall be measured.
   - Elevation at center of clean out within Right of Way & up to 20' outside of Right of Way, where possible and granted with access.
   - Valves will be depicted and labeled with the type of utility valve, elevation at the center of the cover and on the top of the operating nut.
   - Meters will be depicted and labeled.
2. Above ground evidence (paint marks and asphalt patches) of underground utilities will be shown.
3. Alignment, boundary lines, easements, and right-of-way lines will be based on the records research based on Miami-Dade County Property Appraiser, Miami-Dade Clerk of the Courts, FEMA Firm maps, FDOT maintenance and right-of-way maps, and City of Miami Beach records. The survey will not be considered a Boundary Survey.
4. Reference Points will be set along the survey base line to perpetuate the alignment. It will be stablished with nails and washer (where possible) and referenced to physical features (manhole lids, valve boxes, utility poles, secondary points etc.) such that the Baseline can be easily re-stablished in the field by construction contractor.
5. SUE information will be integrated on the topographical survey.
6. Twenty-five (25) geotechnical borings will be located.

FRA estimated fee to perform this service, and subject to the qualifications as stated herein shall be a lump sum amount, not to exceed: ***$78,687.22.***

Bathymetric survey.

Bathymetric survey along about 500 feet of coastline centered on the stormwater outfall will be performed to establish sea floor elevation. The outfall pipe will be 84-inch in diam and that there will be a dissipation structure.

FRA will perform a bathymetric survey using a fully intergraded surveying system. Since the system is capable of collecting a swath of data (2.5x the water depth) FRA proposes collecting a corridor of data 50-feet either side of the outfall alignment for a total width of 100-feet, with additional width coverage at the eastern end of the outfall to capture the diffuser chimney vents and 50-foot buffer (100-foot total). Vessel positioning and measurements of tides shall be accomplished using a permanent land-based GPS base station. The base station shall be established and tied to existing second order or better published survey control in the area.

The vertical datum for the survey shall be the North American Vertical Datum, 1988 (NAVD, 88) or other datum that may be requested. The horizontal datum shall be in feet referenced to NAD 83, Florida State Plane, East Zone (0901), 2011.

All survey operations will be conducted under the direct responsible charge of a Florida Licensed Professional Surveyor and Mapper and will be in accordance with the "Standards of Practice" set forth in Florida Statute 472, and Chapter 5J-17, F.A.C. Survey methods shall be consistent with that stated in the USACE Survey Manual EM-1110-2-1003, updated Nov. 2018. Positional accuracies for Multibeam survey vary with each sonar system and hardware configuration. The system we provide is capable of detecting objects with a dimensional size of 3' x 3'. The horizontal positioning of the vessel is obtained from a GPS unit providing RTK positions using differential base station and has a manufactures positional accuracy of 0.04 feet horizontal and 0.06 feet vertical. This combined with the motion sensor movement accuracy, tolerances would achieve a final horizontal positional error of approximately 0.5 feet +/_ and a vertical error of approximately 0.5 feet +/-. These are of course estimates and based on ideal environmental conditions and are subject to change based local or current environmental conditions. All efforts will be made to conduct survey operation during the best possible sea conditions.

FRA estimated fee to perform this service, and subject to the qualifications as stated herein shall be a lump sum amount, not to exceed: ***$22,901.71***

Task 2: Subsurface Utility Engineering (SUE) – 100 Test Holes

FRA will coordinate the execution for the location of underground facilities (SUE) for each of the project components within the project area shown in Exhibit A. Utility location will include field work for location utilities (field pot-holing) required to verify location, size, and materials, of existing utilities with potential conflict of proposed work. SUE services will be completed after the conceptual design of the project. The conceptual design report will be developed with the information available and not with actual SUE information. The scope of work is limited to Quality Level A and does not include Quality Level B Designation.

- Test holes will be used to locate utilities and minimize the likelihood of damage during construction or other forms of excavation.
- The techniques listed above are not guaranteed to identify all utilities. Therefore, FRA by no means guarantees or warrants these markings to be exact for any utility and accepts no responsibility or liability for any utility damages, down-time, delays, etc.
- Obtain Sunshine 811 Dig Ticket and coordinate with utility agency owners to perform the required work.
- Cut and remove existing pavement or ground surface (not to exceed 225-sq. in. per cut).
- Excavate the cut in a manner as to prevent any damage to wrappings, coatings, or other protective coverings (i.e., vacuum/pressure excavations and hand digging).
- Furnish and install color-coded permanent, above ground markers (i.e., pk, nails, and steel rods) directly above the centerline of the utility structure and record the elevation of the marker.
- Provide restoration of the test hole area by backfilling to its prior condition using pavement or other materials that were removed.
- Provide a complete clean-up of the work site to equal or better condition than before restoration.

FRA estimated fee to perform this service, and subject to the qualifications as stated herein shall be a lump sum amount, not to exceed: ***$118,722.54***

Task 3: Tree Condition Report

True Tree Service LLC, a local professional tree arborist, will be subcontracted to review the project area. True Tree Service LLC will assess the tree survey provided by FRA (correct identifications and add descriptions, as needed) and then add a narrative and assessment on the health of the surveyed trees. The deliverable would be a stand-alone tree condition report that is typically required for the CITY. The goal is to understand the existing tree and canopy including the health and establish this from the start to determine which tree species and size and health. Coordination with the CITY Urban Forester regarding tree type and condition is anticipated. Photometric quality visualizations and/or renderings of the proposed facilities to support messaging activities, public involvement and/or the web presence, as necessary (electronic).

True Tree Service LLC estimated fee to perform this service, and subject to the qualifications as stated herein and as described in the True Tree Service LLC quote, shall be a lump sum amount, not to exceed: ***$12,807.50***

Deliverables

- Topographic Survey will be provided including the information collected under this task.
- Bathymetric Survey Deliverables shall be provided in both digital CAD files (*.dwg), PDF and data files in ascii formatted text files X, Y, Z. CAD (dwg and dwf) files shall be contour charts and plan-view.
- SUE report 3D – survey123
- Tree condition report.
- One (1) Digitally-Signed and Sealed PDF copy of the final drawing and (1) Signed and Sealed Map of Topographic Survey on 24” x 34”, scale 1’=20” or smaller.
- AutoCAD drawing file (Version 2019).
- One (1) Electronic copy in Portable Document Format (PDF) of the final drawing. (Unlocked)

Technical Guidelines & Specifications

- The survey will be governed by the Standards of Practice in accordance with Florida Statutes, Chapter 472.027, and Rule 5J-17, Florida Administrative Code.
- City of Miami Beach Part l – Section 1 – Standard Design and plan production criteria –‘ Survey & Mapping standards and submittal requirements’.
- Field work will be certified by a Florida Registered Land Surveyor supervising this project.
- The project units will be in US Survey foot.

Conditions & Understanding

- Additional fees may be applicable, depending on unforeseen site conditions.
- This proposal assumes access to the project site is available and work can be performed between the hours of 8:00 am to 5:00 pm, Monday through Friday. No overtime is included.
- For survey crews, a minimum of four (4) hours shall be paid in cases of cancellation due to inclement weather or other reasons, after the crew has reported to the site.
- This proposal does not include fees for any security/police escort. If needed, it will be reimbursed as additional expense.
- This estimate does not include permits.
- Requests outside the scope of this proposal will be discussed and agreed upon prior to starting additional work.

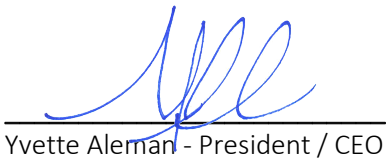
- This proposal is valid for acceptance for 30 days, after which time it shall be subject to review and adjustment by FRA.
- This proposal does not include Title Search.
- Legal instruments to determine Right of Way or easements to be provided by client.

Schedule

The schedule will be subject to CDC directives and conditions that are beyond our control.

FRA appreciates the opportunity to submit this proposal and looks forward to collaborating with you on this project.

Sincerely,



Yvette Aleman - President / CEO

Approved by: _____.

Print Name: _____.

Exhibit 'A' – Project Limits

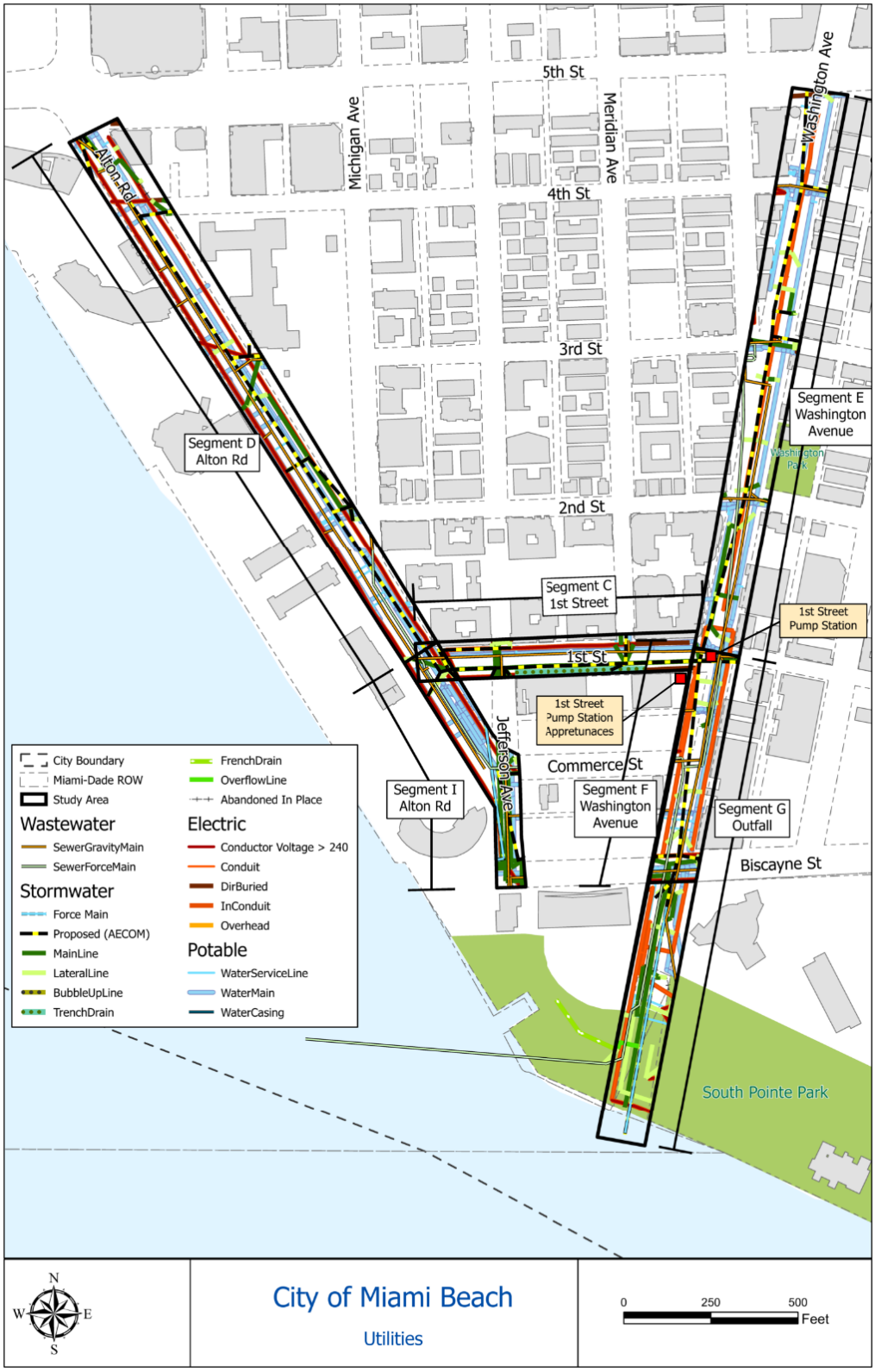


Exhibit 'B' – City of Miami Beach, Public Works Manual SECTION F - Digital submittal

F. Electronic Media Standards and Requirements

It is the City's intent that all electronic drawing files, regardless of what firm produces them, be similar in style and content. To this end, all consultants must conform to the following guidelines.

The following shall be the minimum requirements for all CADD deliverables. In addition to the required hardcopy document, digital files shall be provided in the latest version of AUTOCAD in the .dwg file format. All drawings files in a project shall be saved in the same version of AUTOCAD. All CAD files will be setup by inserting the Title Block in "Paper Space" and the drawing in "Model Space". All drawing files will be saved in AUTOCAD.dwg format.

1. Drawing within the AutoCAD file shall be drawing at 1:1 scale in MODEL SPACE. The Plotting scale unless otherwise noted, shall be:
   Plan View 1"=20'
   Horizontal Profile 1"=20'
   Vertical Profile 1"=2'
2. Entities shall be set into layers as per the approved Layer Properties Guide shown in Table 1.
3. Base Line station numbers shall be 1/8 inch minimum high in paper space.
4. Street names shall be 1/4 inch minimum high in paper space. All other texts shall be as per approved Scale-Lettering Guide shown in Table 6.
5. To maintain uniformity in notes, labels, dimensioning, etc.., each plotted scale will have 3 different text styles (small, medium, and large). There will also be an additional text style for dimensioning (dim). All text styles will use the simplex font type as noted in Table 4, (Dimensioning Guide) and Table 6, (Lettering Guide).
6. Base Line stationing shall increase from west to east and from south to north. Beginning stations at project site should be labeled and referenced to the nearest intersection.
7. Topography shall be plotted in one single and complete file using The Florida Coordinate Systems 1983/90, East Zone for horizontal control and NAVD 88 for vertical control.
8. Labels for topography items shall be outside of the right-of-way and shall be oriented to read from the right side of the plan.
9. General notes, abbreviations, arrows, and other standard symbols shall be as per the approved Symbol Guide shown in Table 3, Part III Section 14.
10. Tick marks and station values shall be placed at every 100' stations. Tick marks shall be 1/8-inch minimum length in paper space. Intermediate tick marks shall be placed every 20' between tick marks.
11. All entities shall be created in such a form that they may be edited. No protection of text or symbols will be allowed.
12. Right-of way lines, baselines, lot lines and other geometry related entities shall be Set at Z=0.00 elevations
13. Line weight and shade shall be as per the approved Layer and Line Weight Guide show in Table 1.
14. Dimension variables shall be similarly as per the approved Dimensions Guide shown in Table 4.

15. All final drawings shall be produced to plot a full-size equivalent ANSI D (landscape) - 22 inches by 34 inches as per the approved Frame / Limits Guide in Table 5.
16. All drawings must show at a minimum the following: Right-of-Way lines, center lines, base lines, monument lines if any, easements if any, tied to permanent reference points, lot lines, parcel lines, monuments, street names, Right-of-Way dimensions, plat subdivision information and property addressees, utility easements, north arrow and graphic scale.
17. Utility drawings must show as a minimum, the following: Separate profile for each segment and utility type (Water, Sewer, Storm Sewer, etc.); plan showing size, material, and offset of main, deflections (if any), station, services, hydrant, lateral, manholes and fittings.
18. External References (X-Refs): All drawing files will be composed of two file types; model files or sheet files. Each file type will have its own directory named either "/MODEL/" or "/SHEET/". All entities that represent existing and/or natural improvements will be drawn in "Model" space. These entities will always be drawn to real world size using the foot unit of measure. All entities will be drawn with the appropriate color, line type, and weight and set by layer as noted in Table 1. Note that consultants will submit a Certification of Adherence with CAD Standards form with their 60, 90 percent completion submittals and the final contract document set, as provided at the end of this section. Please note that the PM will randomly select two (2) drawings which the consultant shall provide in electronic format as part of the submittal to be checked for conformance with the Public Works Manual. This includes the following:
    - Model Files will contain the base drawing illustrating the over-all plan of the project, which will be used to provide the graphic for plan, elevations, sections, profiles, etc.… in the sheet files.
    - Sheet files will show border graphics, text and symbology, for plan elevations, sections, profiles, details, etc.
    - In addition, the consultant will refrain from "nesting" reference files (i.e., placing a reference file within a reference file).
    - The consultant will ensure that all reference files are properly located in the "/MODEL/" directory.
    - The consultant will use only elements that are standard to AutoCAD (i.e., no third-party software elements). Elements are vector, text, dimensions, hatches, shape files, blocks, etc.
    - Raster images may be used only to present digital photographic images of filled logos. Be sure to include the raster images in the "/MODEL/" directory.
    - To simplify production of full and half sheets, all elements in the sheet file will be created to fit on D-size sheets, 34 inches wide (x) and 22 inches high (y).
    - The consultant will refrain from the use of nested blocks, making sure that all blocks are transportable in their host file, without loss of information.
    - All patterns used in the AutoCAD file must be produced by the core AutoCAD software, and not specific to any third-party software.

    All information will be complete and accurate enough for the City of Miami Beach Public Works Department to be able to reproduce the final hard copy plot on their AutoCAD system. As a minimum this includes the following:
    - Plotter name and model;
    - Graphic output language (HPGL, EPS, etc.);

- List of reference files visible in the plot, including sheet borders and title blocks;
- List of visible blocks;
- List of visible layers;
- Pen assignments;
- Other setting which control output (lock);
- Plot date, date of last modification to file, archive date;
- and, any other consideration needed to produce the plot.

All contract drawing deliverables to the City of Miami Beach will be in digital CD-ROM format, containing the two major directories: "/MODEL/" and "/SHEET/".

19. The "Revision Box" shall be completed for each phase of the project, i.e., Design Phase, Bidding Phase, and Construction Phase. For the Design Phase the "Revision Box" shall be completed for each of the Design Progress submittals, i.e., 60%, 90%, 100%, permitting submittals, etc.. Once the design is complete the "Revision Box" shall be cleared to track the bidding phase of the project, i.e., Issued for Bidding, Addendum No. 1, Addendum No. 2, etc. At the completion of the bidding phase once again the "Revision Box" shall be cleared to track the construction phase of the project, i.e., Conformed Drawing, Contract Document Clarification No. 1, Request for Proposal No. 1, Record Drawing, etc.
20. Each Base Drawing shall have a Drawing Key Map on the bottom right corner of the sheet. The drawing Key Map will be "keyed" to the Site Key Map for the project. The Drawing Key Map will clearly identify the limits of proposed improvements depicted on the Base Drawing in relation to the overall Site Key Map.
21. Where required, miscellaneous plans and details will be prepared. These drawing will be prepared at a minimum 1" = 20' scale, although partial plans may be at greater scales if deemed necessary by the consultant to illustrate the requisite level of detail. References to external resources without illustrating the actual detail in the documents will not be permitted.
22. Please note the following conventions to be used when establishing drawing names:
    - G: General
    - EC: Existing Conditions
    - DM: Demolition
    - PG&D: Paving, Grading and Drainage
    - HS: Hardscape – Pavers
        - Specialty Concrete / Finishes
        - Sidewalks
        - Bollards
        - Fencing
    - WM: Water Main
    - SS: Sanitary Sewer
    - SW: Storm water
    - E: Electrical
    - LA: Landscape (Streetscape) – Plantings
        - Groundcovers
        - Sod / Seed
        - Grating

    - Street Furnishings & Accessories
- IR: Irrigation
- PM: Pavement Marking and Signage

Date: *8/27/2021*
Revision 2

Price Proposal for Subsurface Utility Engineering (SUE) Services

City of Miami Beach

Contract Number: RFW-2019-312-KB

Design Consultant for Integrated Water Management

Activities	Time	Increment	Rate	Total
Task 1: Surveying and Mapping Services				
Topographic Survey				
Survey Crew Party of 3(*)	32	Days	$1,509.44	$48,302.08
Surveyor and Mapper	85	Hours	$120.73	$10,262.05
Draftperson	169	Hours	$107.32	$18,137.08
Senior Surveyor (*)	13	Hours	$152.77	$1,986.01
			Total (Lump Sum)	**$78,687.22**

Notes:

(*) The above rates are based on Contract 20-096-31 between City of Miami Beach and F.R. Aleman & Associates, Inc.

(**) The above rates are based on E19-DTPW-04 approved rates. These rates are not included in the City of Miami Beach contract rates.

The above rates are based on working 8:00 to 5:00pm, Monday through Friday. No overtime is included

This estimate does not include permits, although they are not anticipated.

For survey crews, a minimum of four (4) hours shall be paid in cases of cancellation due to inclement weather or other reasons, after the crew has reported to the site.

The schedule will be subject to CDC directives and conditions that are beyond our control.

MOT is not inlcuded in this proposal. If needed, it will be provided by the Designer

FRALEMAN

Date: *8/27/2021*
Revision 2

Price Proposal for Subsurface Utility Engineering (SUE) Services

City of Miami Beach

Contract Number: RFW-2019-312-KB

Design Consultant for Integrated Water Management

Attachment D: Summary of Staff Level-of-Effort				
Task 1: Surveying and Mapping Services				
Bathymetric survey				
Position	**Hourly Rate (2)**	**Task 01 Bathymetric Survey**		**Total Costs**
	Hourly Rate	**Hrs**	**$**	**$**
Senior Surveyor (*)	152.77	3.50	$ 534.70	$534.70
Surveyor and Mapper	120.73	10.00	$ 1207.30	$1,207.30
Hydrographic Technician	147.00	22.00	$ 3234.00	$3,234.00
Draftperson	107.32	22.00	$ 2361.04	$2,361.04
	Daily Rate	**DAYS**		
Boat Operator (**)	148.51	2.00	$ 297.02	$297.02
Hydrographic Survey Crew- 3 person (*)	2488.00	2.00	$ 4976.00	$4976.00
			Subtotal Sfatt Level-of-Effort	**$12,610.06**

Summary of Direct Expenses (PART OF LUMP SUM)			
Units	**No. of Units**	**$/Unit**	**Total**
Sounding Equipment (**)	5	$ 742.56	$3,712.80
Survey Boat 17' and up (Open Water V hull) (**)	2	$ 1,827.00	$3,654.00
Heave Compenstor (**)	5	$ 164.20	$821.00
Navigation system (Hypack or equivalent) (**)	5	$ 266.95	$1,334.75
Sounding Velocity Meter (**)	5	$ 153.82	$769.10
		Subtotal Direct Expenses	**$10,291.65**
		Total Labor and Direct Expenses (Lump Sum)	**$22,901.71**

(*) The above rates are based on Contract 20-096-31 between City of Miami Beach and F.R. Aleman & Associates, Inc.

(**) The above rates are based on E19-DTPW-04 approved rates. These rates are not included in the City of Miami Beach contract rates.

The above rates are based on working 8:00 to 5:00pm, Monday through Friday. No overtime is included

Permit for Bathymetric not included. It needs to be reimbursed as direct expense
For survey crews, a minimum of four (4) hours shall be paid in cases of cancellation due to inclement weather or other reasons, after the crew has reported to the site.

The schedule will be subject to CDC directives and conditions that are beyond our control.

MOT is not inlcuded in this proposal. If needed, it will be provided by the Designer

Date: 8/27/2021
Revision 2

Price Proposal for Subsurface Utility Engineering (SUE) Services

City of Miami Beach

Contract Number: RFW-2019-312-KB

Design Consultant for Integrated Water Management

Activities	Time	Increment	Rate	Total
Task 2: Subsurface Utility Engineering (SUE) – 100 Test Holes				
Survey				
Survey Crew Party of 3(*)	23.4	Days	$1,509.44	$35,320.90
Surveyor and Mapper	87	Hours	$120.73	$10,503.51
Draftperson	209.25	Hours	$107.32	$22,456.71
Senior Surveyor (*)	31.2	Hours	$152.77	$4,766.42
Location				
Vac Truck (Test Holes)(**)	100	Test Holes	$456.75	$45,675.00
Total (Lump Sum)				**$118,722.54**

Notes:

(*) The above rates are based on Contract 20-096-31 between City of Miami Beach and F.R. Aleman & Associates, Inc.

(**) The above rates are based E19-DTPW-04 approved rates. These rates are not included in the City of Miami Beach contract rate.

If additional test holes are needed, they will be added at a cost of $1,187.23 per each.

The above rates are based on 8:00 to 5:00pm, Monday through Friday. No overtime is included.

A minimum of four (4) test holes per day are required to mobilize.

The schedule will be subject to CDC directives and conditions that are beyond our control.

MOT is not inlcuded in this proposal. If needed, it will be provided by the Designer

True Tree Service LLC
1910 NW 17th Ave
Miami, FL 33125
(305) 842-3581
info@truetreeservice.com

Estimate

ADDRESS

Yvette A. Aleman, PE
FR Aleman
10305 NW 41st Street,
Suite 200
Miami, FL 33178

ESTIMATE # 5273
DATE 06/22/2021
EXPIRATION DATE 07/22/2021

ACTIVITY	RATE	QTY	AMOUNT
Consulting First Street Neighborhood Improvement Project, City Of Miami Beach Tree Resource Evaluation (T.R.E.) with approximately 545 trees on ROW & Median as depicted in Figure 2. Project Limits and Existing Utilities. - T.R.E. includes - initial site visit for data collection on tree locations, inventory, size, condition, and critical root zones of all trees onsite all compiled into a report format. - Additionally, this proposal includes approximately 10 hours of consultation work focused on the assessment and mitigation of project impacts to tree resources onsite. Consultation work may include the coordination of meetings with associated trades (architect, structural engineer, contractor, etc), owner/owners rep, municipal agency with the objective of establishing compliance and reducing permitting process time. - Estimated processing time 10 - 20 Business Days for initial Report, once a signed estimate and a 50% non refundable deposit is received.	12,807.50	1	12,807.50

Please note:
Any scope outside of this proposal to be billed at $205/hr. Additional work will be confirmed with client beforehand.

Upon approval:

-Any confirmed work that is cancelled by client within 48 hours of service date will result in a cancellation fee of 15% of total invoice.

- Liability for any permit violation(s) are the responsibility of the client and/or property owner.

As per Miami-Dade County, no tree should be pruned of more than 25% of its canopy, removed, or relocated without a permit.

True Tree looks forward to providing you with best service while reflecting our core values in arboriculture, sustainability, and resiliency.

True Tree is licensed and insured with Workman's Comp, General Liability, and Commercial Auto.

TOTAL **$12,807.50**

Accepted By

Accepted Date

Upon approval:

-Any confirmed work that is cancelled by client within 48 hours of service date will result in a cancellation fee of 15% of total invoice.

- Liability for any permit violation(s) are the responsibility of the client and/or property owner.

Professional Service Industries, Inc.
7950 N.W. 64th Street
Miami Beach, FL 33166
Office: (305) 593-1915

Revised August 30, 2021

Jacobs Engineering
643 SW 4th Avenue, Suite 400
Gainesville, Florida 32601

Attn: Mr. Juan F. Aceituno, P.E.

Re: Proposal for Geotechnical Engineering Services
First Street Neighborhood Improvement Project
Alton Road, Washington Avenue, 1st Street and S Pointe Drive
City of Miami Beach, Florida
PSI Proposal No. 0397-062121

Dear Mr. Aceituno:

Professional Service Industries, Inc. (PSI), an Intertek company, is pleased to submit a proposal to conduct a geotechnical exploration and corresponding data report for the above reference project in South Miami Beach, Florida. PSI thanks you for the opportunity to propose provide Geotechnical Engineering Services to Jacobs Engineering and looks forward to being part of the design team. A review of project information, along with a proposed scope of services, schedule and fee are provided below.

Aerial photos of the general location of the site and project area, marked in red, are shown below from Google Earth (2021):

FIGURE-1: SITE VICINITY

FIGURE-2: PROJECT AREA

PROJECT UNDERSTANDING

Based on information provided by Jacobs Engineering, PSI's review of the Preliminary Soil Boring Plan and boring characteristics, a summary of our understanding of the proposed project is provided below in the following Project Description table.

TABLE 1: PROJECT DESCRIPTION AND PROPOSAL BASIS

Project Items	Installation of a new stormwater pump station and stormwater treatment facility to serve the South of Fifth/South Pointe Neighborhoods. The proposed First Street Storm Water Pump Station (First Street PS) will include a new stormwater pump station, treatment system, stormwater gravity collection system, and stormwater outfall force main with an energy discharge dissipation structure.
Existing Grade Change within Project Site	± Seven feet estimate (Google Earth Pro)

The following table provides a generalized description of the existing site conditions based on available information.

TABLE 2: SITE DESCRIPTION

Site Location	Latitude: 25.771313°; Longitude: -80.136457°
Site History	Based on our review of Google Earth Pro Aerial Photographs from 1995 through 2021, the site appears to have been developed with the existing roads for the past 25 years.
Existing Site Ground Cover	Paved road.
Site Boundaries/Neighboring Development	The site is located between 5th Street and the inlet and between Collins Ct and Intracoastal.
Site Access	Site appears to be accessible to truck-mounted drilling equipment and may require MOT

Should the above information be inconsistent with planned construction, Mr. Aceituno should contact the PSI office and allow necessary modifications to be made to the proposal.

SCOPE OF SERVICES

The geotechnical engineering scope of services will include the following items that will be covered in more detail further.

- Desktop review of generally available public information, i.e., NRCS, USGS databases.
- Field exploration consisting of drilling 18 SPT borings and sampling of the subsurface materials including rock core samples, and observation of current groundwater levels at the site.
- Laboratory testing of the subsurface materials including sieve analyses, Atterberg Limits (clayey soils if present), moisture content, organic content, rock core unconfined compressive strength testing, and Split Tensile Strength Testing if cores are recovered.

Private Utility Locator – Ground Penetrating Radar (GPR):

City of Miami Beach requires a GPR scan and report on each one of the boring locations before issuing a road closure permit; therefore, the GPR scans are mandatory. Per Mr. Aceituno's email, dated August 27, 2021, we understand that this service will be performed by another party and will not be within PSI's responsibility.

If GPR services are requested from PSI, it will be performed at an additional cost.

Maintenance of Traffic (MOT):

Due to the locations of the borings along Alton Road, Washington Road, 1st Street and S Pointe Drive, MOT will be needed to control traffic along those streets.

Based on the City of Miami Beach noise ordinance, it is not possible to work during the night due to the area being a residential one. We are required to work during the day between 9:30 AM to 3:00 PM. As a result, the workday is shortened to six-hours; therefore, actual field activity will take approximately 40 days to be completed. Also, as a requirement of the City of Miami Beach, we are required to hire an off-Duty officer to be present during all field activities.

Field Exploration:

PSI proposes that the subsurface conditions be explored by 18 SPT soil borings, including three rock core borings with four rock core runs in each, and three percolation tests. The table below summarizes the exploratory boring program based on the Boring Location Plan provided by Jacobs Engineering; **Figure 3** follows with the preliminary boring location plan determined by Jacobs to be confirmed during design phase.

TABLE 3: SUMMARY OF SPT BORINGS

Design Element	Boring ID	Soil Drilling SPT (ft-bgs)	Rock Coring (ft-bgs)
Discharge Dissipator (1)	DD-1	100	20
Percolation Tests at 25 feet bgs	*Perc-1*	-	-
	Perc-2	-	-
	Perc-3	-	-
Pump Station (2)	B-1-PS	100	20
	B-2-PS	100	20
Road and Utility (7)	P-1	25	-
	P-2	25	-
	P-3	25	-
	P-4	25	-
	P-5	25	-
	P-6	25	-
	P-7	25	-
Water Quality Well (8)	WQ-1	100	-
	WQ-2	100	-
	WQ-3	100	-
	WQ-4	100	-
	WQ-5	100	-
	WQ-6	100	-
	WQ-7	100	-
	WQ-8	100	-
	TOTAL (18 borings):	**1275**	**60**

Notes:
bgs – below ground surface

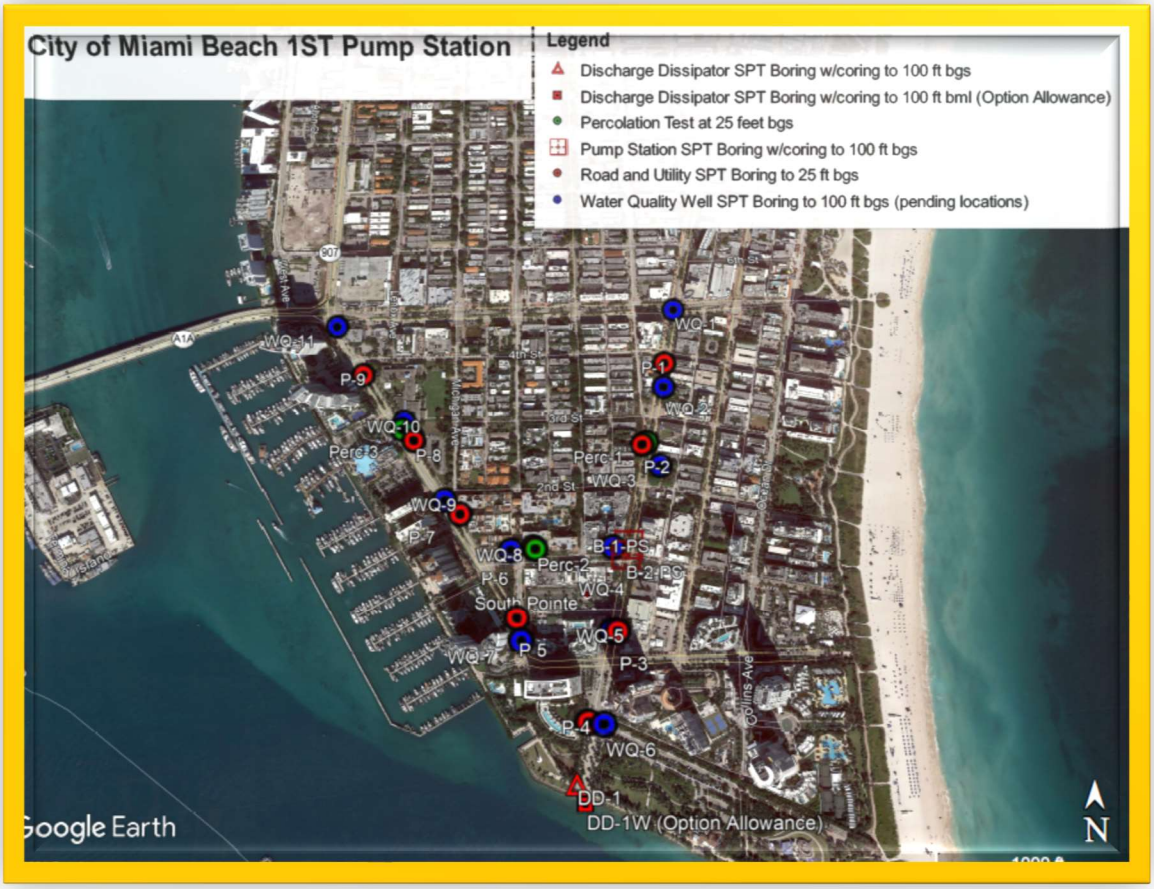


Figure 3: Preliminary Boring Location Plan as Provided by Jacobs Engineering to be Confirmed During Design Phase

PSI will locate the boring locations, provided by Jacobs engineering, in the field in order to reduce MOT requirements; once borings relocation in the field is completed, PSI will send the resulting borings location plan for Jacobs Engineering approval. The final locations will be shown in our data report. The borings locations will be identified in the field using available natural landmarks or GPS coordinates. Surveying of the boring locations to obtain surface coordinates and elevations is beyond the scope of work. However, PSI will coordinate with Jacobs Engineering regarding the completed boring locations for the final surveyed locations completed by others. References to depths of various subsurface strata will be based on depths below existing grade at the time of drilling. Below are general considerations about the drilling activities and follows exploration description in **Table 4**.

- During the field activities, the subsurface conditions will be observed, logged, and visually classified. Field notes will be maintained to summarize soil types and descriptions, water levels, changes in subsurface conditions, and drilling conditions.
- Final depths of the borings may be extended (because of weak/soft soils) or reduced (because of refusal) depending on the subsurface materials identified during field activities.
- PSI will contact Local Utility Clearance Entity, i.e., Sunshine 811 prior to the start of drilling activities. It is our experience that these companies do not mark the locations of privately-owned utilities. This proposal is based on private utility lines and other subsurface appurtenances are located in the field by others prior to field activities.
- PSI will also provide GPR scans at each of the boring locations, as required by City of Miami Beach in order to obtain road closure permit and to further mitigate the risk of drilling through underground utilities.
- PSI will exercise reasonable caution to avoid damages to underground utilities by contacting local utility companies prior to the field activities. However, private utility locations are often unknown by public utility companies and by the utility owners. Therefore, PSI will not be responsible for damage to the site or any buried utilities that are not made known to us.
- Some damage to the ground surface may result from the drilling operations near the work areas and along ingress/egress pathways. The field crew will attempt to limit such damage, but no restoration other than grouting the entire borehole with cement-bentonite and applying asphalt patches at the borings located within pavement areas is included in this proposal. Excess auger cuttings and drilling spoils will be hand-swept and removed from all surface soils.
- Maintenance of traffic will be provided for the duration of the field activities.

TABLE 4: ANTICIPATED FIELD EXPLORATION DESCRIPTION

Drilling Equipment	Truck-mounted drilling equipment
Drilling Method	Mud Rotary
Field Testing	Standard Penetration Testing (ASTM D1586) and Rock Core (ASTM D2113)
Sampling Procedure	Soils: ASTM D1587/1586
Sampling Frequency	Continuously to a depth of 10 feet and at 5-foot intervals thereafter for SPT borings. Rock cores will be sampled continuously for 20 feet wherever competent rock material is encountered within the SPT borings.
Frequency of Groundwater Level Measurements	During drilling
Boring Backfill Procedures	Soil cuttings and grouting
Sample Preservation and Transportation Procedure	General accordance with ASTM D4220

The field exploration program will be performed in general accordance with the designated ASTM procedures considering local and regional standard of care practices.

Laboratory Testing

Representative soil samples obtained during the field exploration program will be transported to the PSI laboratory for testing. The nature and extent of this laboratory testing program will be dependent upon the subsurface conditions identified during the field exploration program. The laboratory program will be performed in general accordance with the applicable ASTM procedures considering local and regional standard of care practices. The laboratory program may include the following tests shown in **Table 5** for general procedures and **Table 6** below for bulk soil samples.

TABLE 5: LABORATORY TESTING GENERAL PROCEDURES

Laboratory Test	Applicable ASTM Procedures	Quantity
Visual Classification	ASTM D2488	18
Moisture Content	ASTM D2216	14
Organic Content	ASTM D2974	10
Sieve Analysis	AASHTO T-27	10
Material Finer than 200 Sieve	ASTM C-117	10
Unconfined Compressive Strength	ASTM D7012	12
Split Tensile Strength	ASTM D3967	12

TABLE 6: ADDITIONAL BULK SOIL SAMPLE LABORATORY TESTING PROCEDURES

Laboratory Test	Applicable ASTM Procedures	Quantity
Soil Resistivity	ASTM G57	4
Soil pH	ASTM G51 or ASTM D4972, or EPA SW-846 Test Method 9045D	4
Sulfate Content	EPA Sulfate E375.4 or EPA SW-846 Test Method 9056A	4
Chloride Content	EPA Chloride E-325 or EPA SW-846 Test Method 9056A	4

Portions of any samples that are not altered or consumed by laboratory testing will be retained for 30 days after the issuance of the geotechnical report and will then be discarded.

Data Report

The results of the field exploration, percolation testing and laboratory testing will be included in a data report and summarized on convenient tables; no geotechnical engineering analyses nor recommendations are needed at this time.

A pdf version of the geotechnical data report will be prepared and submitted by email to Jacobs Engineering and design team. If requested by Jacobs Engineering, additional hard copies can be provided. The data geotechnical report will be reviewed, signed, and sealed by a registered Professional Engineer in the State of Florida.

Schedule based on the site accessibility, drilling can commence approximately three weeks after the right of way permit is granted and we are authorized to proceed, weather permitting. Please note that the permit process duration is out of PSI's control and can take anywhere from a week to four months. The final data report will be provided within two weeks of completion of our subsurface exploration. If desired, preliminary

geotechnical data information can be provided to the design team once the exploration advance and laboratory testing are complete.

Delays sometime occur due to adverse weather, utility clearance requirements, site clearing requirements for drill rig access, obtaining drilling permits, obtaining Right of Entries and other factors outside of PSI's control. In this event, PSI will communicate the nature of the delay and provide a schedule as soon as possible.

FEE

PSI proposes that the fee for performance of the scope of services be charged as a lump sum. Based on the scope of our **geotechnical services** (SPT borings, percolation tests, laboratory testing and engineering data report) provided in this proposal, the cost of services will be **$137,222.00** including, additional soil bulk samples laboratory testing, as detailed in our base services cost break down **Table 7** below.

TABLE 7: GEOTECHNICAL SERVICES COST BREAKDOWN

ENGINEERS ESTIMATE FOR GEOTECH SERVICES			
First Street Neighborhood Improvement Project			
Revised 8/30/2021			
Line	**Description**	**Est. Qty.**	**Unit**
	Field Investigation (WQ-1 to WQ-8, B-1-PS, B-2-PS, P-1 to P-7, Perc 1 to 3, DD-1)		
1.A	Mobilization/Demobilization (Up to 100 ft of Borings; 1275'/100'=13)	13	Ea
1.B	SPT Borings (0-50 feet) (23 Borings: 14 borings to 50' & 9 to 25' = 925')	725	LF
1.B	SPT Borings (50 -75 feet) (14 borings to 25' = 350')	275	LF
1.B	SPT Borings (75-100 feet) (14 borings to 25' = 350')	275	LF
1.C	Auger Boring per ASTM D-1452 (Wash Drilling for Rock Coring at Separate Location) (3 borings to 80' = 240')	240	LF
1.D	Rock Coring (75-100 feet) (Assumed coring to be performed from 75'-100' interval) (20' of rock coring at 3 locations = 60')	60	LF
1.E	6-inch Diameter Casing for Rock Coring (0-50 feet)	150	LF
1.E	6-inch Diameter Casing for Rock Coring (51-75 feet)	75	LF
1.E.	6-inch Diameter Casing for Rock Coring (76-100 feet)	75	LF
1.H	Percolation Tests Open Hole Method @ 25 feet (3 tests)	3	Ea
1.I	Closing Holes with Grout (SPT Borings + Auger Borings + Rock Coring + Percolation Tests)	1,300	LF
23	Maintenance of Traffic (MOT) and Off-Duty Patrol as required by the City of Miami Beach	32	Days
NC	City of Miami Beach Permit Fees	1	Ea
	Laboratory Testing		
3.G	Moisture Content	14	Ea
3.H	Organic Content	10	Ea
3.I	Grain Size per (AASHTO T-27)	10	Ea
3.O	Material Finer than 200 Sieve per ASTM C-117	10	Ea
3.K	Soil Classification per ATSM D-2487	18	Ea
3.U	Resistivity Test in Accordance with California Method 643-7 (pH, sulfates, resistivity and chlorides)	4	Ea
NC	Unconfined Compressive Strength Testing of Rock Specimen (ASTM D7012)	12	Ea
NC	Split Tensile Strength Testing of Rock Specimen (ASTM D3967)	12	Ea
	Engineering Management and Geotech Report		
24.D	Support Staff	30	Hr
24.C	Non Registered Technical Staff	45	Hr
24.G	Special Engineering Technician	18	Hr
24.A	Senior Technical Engineer Scientists	10	Hr
24.B	Senior Project Manager/Registered Technical Staff	15	Hr
24.E	Clerical/Administrative	10	Hr
24.F	Engineering Technician	35	Hr
Notes: Unit rates in accordance with Miami-Dade County Water and Sewer Contract No. E15-WASD-13			
NC: Rate not in contract			

Depending on the size of the project and project schedule, partial billing may be performed monthly based on Project Item progress to date prior to the completion of the final report.

The estimated fee is based on the boring locations being accessible to truck mounted drilling equipment and the client obtaining and providing permission for PSI to enter and access the site.

It should be noted that fees associated with locating private underground utilities, reviewing construction drawings, executing traffic control services, preparing construction specifications, attending special conferences, providing environmental consulting, and any other work requested after submittal of the report is not included in the proposed fee.

AUTHORIZATION

PSI will proceed with the work based on written authorization. The work will be performed pursuant to the attached General Conditions enclosed and incorporated into this proposal.

Please sign and return one copy of this proposal. When returning the proposal, please complete the attached Project Data Sheet, and provide a scaled site plan so that PSI may best serve the project. By executing this authorization, permission is being provided for PSI to access the project site.

CLOSING

We at PSI appreciate the opportunity to offer professional services for this project and look forward to being part of the design team. If there are any questions, please feel free to contact us at your convenience.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Lucrèce E. Regisme
Staff Engineer – Geotechnical Services
lucrece.regisme@intertek.com

Jose N. Gómez, PE, D.GE
Chief Engineer – Geotechnical Services
Jose.N.gomez@intertek.com

Appendix A: Proposal Authorization and Payment Instructions
Project Data Sheet
General Conditions

LER/JNG/ler

Proposal Authorization & Payment Instructions

Authorization

To execute this proposal, please sign and complete the authorization information below, along with applicable payment instructions, and return one copy of the authorized proposal to the PSI office.

Authorized By (please print) _____ Signature _____

Title _____ Firm _____

Address _____

City _____ State _____ Zip Code _____ Telephone _____

Email Address _____ Date _____ Purchase Order No. / Project Tracking No. (if applicable) _____

Payment Instructions

If invoice payment is to be made by a party other than the authorizing party above, please provide the following information for whom the invoices are to be billed:

Firm _____ Attention _____

Address _____ Title _____

City _____ State _____ Zip Code _____ Telephone _____

Authorizing Party's Relationship to Invoice Payment Party _____

If invoices are to be approved other than by the payment party above, please provide the following information for whom the invoices are to be mailed for approval:

Firm _____ Attention _____

Address _____ Title _____

City _____ State _____ Zip Code _____ Telephone _____

Authorizing Party's Relationship to Invoice Approval Party _____

Project Data Sheet

Please complete the following Project Data Sheet so that PSI may best serve your project.

Project Name

Architect | Project Manager | Phone Number

Structural Engineer | Project Manager | Phone Number

Civil Engineer | Project Manager | Phone Number

Construction Type | Plan Area | Number of Floors

Interior Column Spacing | Exterior Column Spacing

Exterior Column Load | Live | Dead

Interior Column Load | Live | Dead

Floor Slab Load | Slab-on-Grade | Basement/Depth

Will Elevation of site be raised by filling | How much?

Septic Tank | Storm Water Drainage

Pavement Type | Traffic Load | Traffic Type

Other pertinent Information/Subsurface Information

GENERAL CONDITIONS

1. **PARTIES AND SCOPE OF WORK**: Professional Service Industries Inc. ("PSI") shall include said company or its particular division, subsidiary or affiliate performing the work. "Work" means the specific service to be performed by PSI as set forth in PSl's proposal, Client's acceptance thereof and these General Conditions. Additional work ordered by Client shall also be subject to these General Conditions. "Client" refers to the person or business entity ordering the work to be done by PSI. If Client is ordering the work on behalf of another, Client represents and warrants that it is the duly authorized agent of said party for the purpose of ordering and directing said work. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the work ordered by the client is adequate and sufficient for Client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom Client transmits any part of PSI's work. PSI shall have no duty or obligation to any third party greater than that set forth in PSI's proposal, Client's acceptance thereof and these General Conditions. The ordering of work from PSI, or the reliance on any of PSI's work, shall constitute acceptance of the terms of PSI's proposal and these General Conditions, regardless of the terms of any subsequently issued document.

2. **TESTS AND INSPECTIONS**: Client shall cause all tests and inspections of the site, materials and work performed by PSI or others to be timely and properly performed in accordance with the plans, specifications and contract documents and PSI's recommendations. No claims for loss, damage or injury shall be brought against PSI by Client or any third party unless all tests and inspections have been so performed and unless PSI's recommendations have been followed. Client agrees to indemnify, defend and hold PSI, its officers, employees and agents harmless from any and all claims, suits, losses, costs and expenses, including, but not limited to, court costs and reasonable attorney's fees in the event that all such tests and inspections are not so performed or PSI's recommendations are not so followed.

3. **PREVAILING WAGES**: This proposal specifically excludes compliance with any project labor agreement, labor agreement, or other union or apprenticeship requirements. In addition, unless explicitly agreed to in the body of this proposal, this proposal specifically excludes compliance with any state or federal prevailing wage law or associated requirements, including the Davis Bacon Act. It is agreed that no applicable prevailing wage classification or wage rate has been provided to PSI, and that all wages and cost estimates contained herein are based solely upon standard, non-prevailing wage rates. Should it later be determined by the Owner or any applicable agency that in fact prevailing wage applies, then it is agreed that the contract value of this agreement shall be equitably adjusted to account for such changed circumstance. Client will reimburse, defend, indemnify and hold harmless PSI from and against any liability resulting from a subsequent determination that prevailing wage regulations cover the Project, including all costs, fines and attorney's fees.

4. **SCHEDULING OF WORK**: The services set forth in PSI's proposal and Client's acceptance will be accomplished by PSI personnel at the prices quoted. If PSI is required to delay commencement of the work or if, upon embarking upon its work, PSI is required to stop or interrupt the progress of its work as a result of changes in the scope of the work requested by Client, to fulfill the requirements of third parties, interruptions in the progress of construction, or other causes beyond the direct reasonable control of PSI, additional charges will be applicable and payable by Client.

5. **ACCESS TO SITE**: Client will arrange and provide such access to the site and work as is necessary for PSI to perform the work. PSI shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as the result of its work or the use of its equipment.

6. **CLIENT'S DUTY TO NOTIFY ENGINEER**: Client warrants that it has advised PSI of any known or suspected hazardous materials, utility lines and pollutants at any site at which PSI is to do work, and unless PSI has assumed in writing the responsibility of locating subsurface objects, structures, lines or conduits, Client agrees to defend, indemnify and save PSI harmless from all claims, suits, losses, costs and expenses, including reasonable attorney's fees as a result of personal injury, death or property damage occurring with respect to PSI's performance of its work and resulting to or caused by contact with subsurface or latent objects, structures, lines or conduits where the actual or potential presence and location thereof were not revealed to PSI by Client.

7. **RESPONSIBILITY**: PSI's work shall not include determining, supervising or implementing the means, methods, techniques, sequences or procedures of construction. PSI shall not be responsible for evaluating, reporting or affecting job conditions concerning health, safety or welfare. PSI's work or failure to perform same shall not in any way excuse any contractor, subcontractor or supplier from performance of its work in accordance with the contract documents. Client agrees that it shall require subrogation to be waived against PSI and for PSI to be added as an Additional Insured on all policies of insurance, including any policies required of Client's contractors or subcontractors, covering any construction or development activities to be performed on the project site. PSI has no right or duty to stop the contractor's work.

8. **SAMPLE DISPOSAL**: Test specimens will be disposed immediately upon completion of the test. All drilling samples will be disposed sixty (60) days after submission of PSI's report.

9. **PAYMENT**: The quantities and fees provided in this proposal are PSI's estimate based on information provided by Client and PSI's experience on similar projects. The actual total amount due to PSI shall be based on the actual final quantities provided by PSI at the unit rates provided herein. Where Client directs or requests additional work beyond the contract price it will be deemed a change order and PSI will be paid according to the fee schedule. Client shall be invoiced once each month for work performed during the preceding period. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause in writing within said thirty (30) day period at the rate of eighteen (18) percent per annum (or the maximum interest rate permitted under applicable law), until paid. Client agrees to pay PSI's cost of collection of all amounts due and unpaid after thirty (30) days, including court costs and reasonable attorney's fees. PSI shall not be bound by any provision or agreement requiring or providing for arbitration of disputes or controversies arising out of this agreement, any provision wherein PSI waives any rights to a mechanics' lien, or any provision conditioning PSI's right to receive payment for its work upon payment to Client by any third party. These General Conditions are notice, where required, that PSI shall file a lien whenever necessary to collect past due amounts. Failure to make payment within 30 days of invoice shall constitute a release of PSI from any and all claims which Client may have, whether in tort, contract or otherwise, and whether known or unknown at the time.

GENERAL CONDITIONS

10. **ALLOCATION OF RISK**: CLIENT AGREES THAT PSI'S SERVICES WILL NOT SUBJECT PSI'S INDIVIDUAL EMPLOYEES, OFFICERS OR DIRECTORS TO ANY PERSONAL LIABILITY, AND THAT NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, CLIENT AGREES THAT ITS SOLE AND EXCLUSIVE REMEDY SHALL BE TO DIRECT OR ASSERT ANY CLAIM, DEMAND, OR SUIT ONLY AGAINST PSI.

    SHOULD PSI OR ANY OF ITS EMPLOYEES BE FOUND TO HAVE BEEN NEGLIGENT IN THE PERFORMANCE OF ITS WORK, OR TO HAVE MADE AND BREACHED ANY EXPRESS OR IMPLIED WARRANTY, REPRESENTATION OR CONTRACT, CLIENT, ALL PARTIES CLAIMING THROUGH CLIENT AND ALL PARTIES CLAIMING TO HAVE IN ANY WAY RELIED UPON PSI'S WORK AGREE THAT THE MAXIMUM AGGREGATE AMOUNT OF THE LIABILITY OF PSI, ITS OFFICERS, EMPLOYEES AND AGENTS SHALL BE LIMITED TO $25,000.00 OR THE TOTAL AMOUNT OF THE FEE PAID TO PSI FOR ITS WORK PERFORMED ON THE PROJECT, WHICHEVER AMOUNT IS GREATER. IN THE EVENT CLIENT IS UNWILLING OR UNABLE TO LIMIT PSI'S LIABILITY IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THIS PARAGRAPH, CLIENT MAY, UPON WRITTEN REQUEST OF CLIENT RECEIVED WITHIN FIVE DAYS OF CLIENT'S ACCEPTANCE HEREOF, INCREASE THE LIMIT OF PSI'S LIABILITY TO $250,000.00 OR THE AMOUNT OF PSI'S FEE PAID TO PSI FOR ITS WORK ON THE PROJECT, WHICHEVER IS THE GREATER, BY AGREEING TO PAY PSI A SUM EQUIVALENT TO AN ADDITIONAL AMOUNT OF 5% OF THE TOTAL FEE TO BE CHARGED FOR PSI'S SERVICES. THIS CHARGE IS NOT TO BE CONSTRUED AS BEING A CHARGE FOR INSURANCE OF ANY TYPE, BUT IS INCREASED CONSIDERATION FOR THE GREATER LIABILITY INVOLVED. IN ANY EVENT, ATTORNEY'S FEES EXPENDED BY PSI IN CONNECTION WITH ANY CLAIM SHALL REDUCE THE AMOUNT AVAILABLE, AND ONLY ONE SUCH AMOUNT WILL APPLY TO ANY PROJECT.

    NEITHER PARTY SHALL BE LIABLE TO THE OTHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE AND BREACH OF STATUTORY DUTY) OR OTHERWISE FOR LOSS OF PROFIT (WHETHER DIRECT OR INDIRECT) OR FOR ANY INDIRECT, CONSEQUENTIAL, PUNITIVE, OR SPECIAL LOSS OR DAMAGE, INCLUDING WITHOUT LIMITATION LOSS OF PROFITS, REVENUE, BUSINESS, OR ANTICIPATED SAVINGS (EVEN WHEN ADVISED OF THEIR POSSIBILITY).

    NO ACTION OR CLAIM, WHETHER IN TORT, CONTRACT, OR OTHERWISE, MAY BE BROUGHT AGAINST PSI, ARISING FROM OR RELATED TO PSI'S WORK, MORE THAN TWO YEARS AFTER THE CESSATION OF PSI'S WORK HEREUNDER, REGARDLESS OF THE DATE OF DISCOVERY OF SUCH CLAIM.

11. **INDEMNITY**: Subject to the above limitations, PSI agrees not to defend but to indemnify and hold Client harmless from and against any and all claims, suits, costs and expenses including reasonable attorney's fees and court costs to the extent arising out of PSI's negligence as finally determined by a court of law. Client shall provide the same protection to the extent of its negligence. In the event that Client or Client's principal shall bring any suit, cause of action, claim or counterclaim against PSI, the Client and the party initiating such action shall pay to PSI the costs and expenses incurred by PSI to investigate, answer and defend it, including reasonable attorney's and witness fees and court costs to the extent that PSI shall prevail in such suit.

12. **TERMINATION**: This Agreement may be terminated by either party upon seven days' prior written notice. In the event of termination, PSI shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses.

13. **EMPLOYEES/WITNESS FEES**: PSI's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay PSI's legal expenses, administrative costs and fees pursuant to PSI's then current fee schedule for PSI to respond to any subpoenF. For a period of one year after the completion of any work performed under this agreement, Client agrees not to solicit, recruit, or hire any PSI employee or person who has been employed by PSI within the previous twelve months. In the event Client desires to hire such an individual, Client agrees that it shall seek the written consent of PSI, and shall pay PSI an amount equal to one-half of the employee's annualized salary, without PSI waiving other remedies it may have.

14. **FIDUCIARY**: PSI is not a financial advisor, does not provide financial advice or analysis of any kind, and nothing in our reports can create a fiduciary relationship between PSI and any other party.

15. **RECORDING:** Photographs or video recordings of the Client's own project may be taken by and used for the Client's own internal purposes. Photographs or video recordings may not be used for marketing or publicity, or distributed to a third party or otherwise published without PSI's prior review and consent in writing. Taking photographs of other Clients' samples, test setups, or facilities, or recording in any manner any test specimen other than the test specimen related to the Client's project is prohibited; and the Client agrees to hold in strict confidence and not use any proprietary information disclosed either advertently or inadvertently. The Client shall defend, hold harmless, and indemnify PSI for any breach of this clause.

16. **CHOICE OF LAW AND EXCLUSIVE VENUE**: All claims or disputes arising or relating to this agreement shall be governed by, construed, and enforced in accordance with the laws of Illinois. The exclusive venue for all actions or proceedings arising in connection with this agreement shall be either the Circuit Court in Cook County, Illinois, or the Federal Court for the Northern District of Illinois.

17. **PROVISIONS SEVERABLE**: The parties have entered into this agreement in good faith, and it is the specific intent of the parties that the terms of these General Conditions be enforced as written. In the event any of the provisions of these General Conditions should be found to be unenforceable, it shall be stricken and the remaining provisions shall be enforceable.

18. **ENTIRE AGREEMENT**: This agreement constitutes the entire understanding of the parties, and there are no representations, warranties or undertakings made other than as set forth herein. This agreement may be amended, modified or terminated only in writing, signed by each of the parties hereto.

CUMMINS | CEDERBERG
Coastal & Marine Engineering

June 17, 2021

Jacobs Engineering Group, Inc.
Attn: Sirpa H Hall, P.E., Manager of Projects

Sent via email: Sirpa.Hall@jacobs.com

RE: Proposal for Marine Environmental Consulting – Benthic Survey Services for the City of Miami Beach Proposed First Street Pump Station and Ocean Outfall

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Dear Ms. Hall:

Pursuant to our recent discussion, Cummins Cederberg, Inc. (Cummins Cederberg) is pleased to present this proposal for our marine environmental consulting services for the proposed ***Technical Support and Integrated Design Services for First Street Pump Station including Stormwater Conveyance and Treatment System off Miami Beach, Florida.***

Project Introduction

It is our understanding that Jacobs Engineering Group, Inc. (Jacobs) is pursing a project to provide technical support and engineering design services for a new stormwater pump station and treatment facility, including a stormwater discharge outfall into Biscayne Bay. To support Jacobs during the design and permitting phases, Cummins Cederberg will provide environmental consulting services to include a benthic resource survey within the general project area of the outfall off the southern shoreline of Miami Beach. A benthic survey is required to support the permitting process and obtain an Environmental Resources Permit (ERP) from the SFWMD and/or a US Army Corps of Engineers (USACE), if applicable. If corals are identified within the project area and coral colonies need to be relocated, a Florida Fish and Wildlife Conservation Commission (FWC) permit will also be required.

Scope of Services

Task 1 – Benthic Resource Survey

Our team of experienced marine biologists will conduct a benthic survey for sensitive marine resources including seagrass, hard corals, and octocorals (soft corals) along approximately 300 ft of shoreline centered on the stormwater outfall location and extending out to 130 to 200 ft from shore (**Figure 1**). Cummins Cederberg will coordinate with Jacobs to refine the survey area to ensure data is collected within the desired locations.

A team of three scientific divers and a vessel captain will conduct the survey during slack tide (preferably high tide) to minimize safety risks from tidal currents, increase the efficiency of data

collection, and maximize the quality of the photographic and video-graphic data. Data collection will include a field investigation of the entire survey area to identify, quantify, document, and map flora and fauna within the survey area, and create a species list of protected and sensitive species that may be impacted as a result of the outfall construction.

Deliverables: Benthic survey report and resource map (PDF)

Fees for Task 1 are lump sum (including expenses):..... **$8,400**

Figure 1. Approximate location of outfall pipeline and benthic survey area

Conditions/Assumptions

- Client shall notify Cummins Cederberg of any known conditions related to the Project that may affect the scope of services.
- Client shall provide safe access to the Project site as needed by Cummins Cederberg to complete the scope of services.
- Client shall provide any available background information, such as preliminary drawings, permits or other documentation.

Fees

Fees for services are noted above. Cummins Cederberg shall invoice the Client on a percent complete basis each month and/or completion of tasks.

General

We appreciate the opportunity to prepare a proposal for our environmental consulting services and look forward to working together. This proposal is valid for 60 days and was prepared based on the information provided by the Client to date. If you wish us to provide the services detailed above, please sign this agreement, which includes the Cummins Cederberg's General Terms & Conditions attached herein and return a signed copy to us which will serve as our Authorization to Proceed. Should you have any questions or require additional information, please do not hesitate to contact me at 772-486-8530 or alaird@cumminscederberg.com

Sincerely,
CUMMINS CEDERBERG, Inc.

Anne E. Laird
Sr. Project Manager

Read and Accepted by **Client:**

By:_____

Name:_____

Title:_____

Date:_____

General Terms & Conditions

1 – Definitions:

"Cummins Cederberg, Inc." (hereinafter referred to as "CC") shall include said company, and its individual professional or professionals, performing the "Work."

"Work" means the specific engineering or other service to be performed by CC as set forth in CC's proposal.

"Client" refers to the person or business entity ordering the Work to be done by CC.

"Agreement" refers to CC's proposal, the client's acceptance, and CC's Terms and Conditions. The Client's acceptance of the proposal includes acceptance of these general conditions. The proposal and acceptance are hereby incorporated by reference herein.

2 – Authorization of Work: If the Client is ordering the Work on behalf of another, the Client represents and warrants that the Client is the duly authorized agent of said party for the purpose ordering and directing said Work. Client agrees that CC's professional duties are specifically limited to the Work set forth in CC's proposal. CC's Work is for the exclusive use of the Client. In no event shall CC have any duty or obligation to any third party.

3 – Payment: Invoices shall be submitted either upon completion of tasks or on a monthly basis. Invoices are to be paid in full within thirty (30) days of receipt of the invoice by the Client. Invoices not paid in full within thirty (30) days shall incur interest at a rate of 1.5 percent per month (or the maximum rate of interest permitted by law, if less). If an invoice is not paid within sixty (60) days, CC may, without waiving any claim or right against the Client and without any liability whatsoever to the Client, terminate the performance of Work. The written notice requirement of Section 9 below does not apply to a termination of work under this paragraph.

4 – Indemnification and Mutual Waiver: To the fullest extent permitted by Laws and Regulations, CC shall indemnify and hold harmless Client, and Client's officers, directors, members, partners, agents, consultants, and employees, from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising from third-party claims or actions relating to the Project, provided that any such claim, action, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of CC or CC's officers, directors, members, partners, agents, employees, or Consultants. This indemnification provision is subject to and limited by the provisions in Section 5 below. Further, this indemnification does not apply if the Client, and Client's officers, directors, members, partners, agents, consultants, and employees cause or contribute to the loss.

Client shall indemnify and hold harmless CC and its officers, directors, members, partners, agents, employees, and Consultants as required by Laws and Regulations. To the fullest extent permitted by Laws and Regulations, Client and CC waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, from any cause or causes.

5 – Warranty and Limit of Liability: CC shall perform services for Client in a professional manner, using the degree of care and skill ordinarily exercised by and consistent with the standards of competent consultants practicing at the same time and in the same or a similar locality as the project. CC makes no warranties, express or implied, under this Agreement or otherwise, in connection with the services provided.

To the fullest extent permitted by Laws and Regulations, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of CC and CC's officers, directors, members, partners, agents, employees, and Consultants, to Client and anyone claiming by, through, or under Client for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or

omissions, strict liability, breach of contract, indemnity obligations, or warranty express or implied of CC or CC's officers, directors, members, partners, agents, employees, or Consultants shall not exceed the total compensation received by CC under this Agreement.

To the fullest extent permitted by Laws and Regulations, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Client, CC, and all other negligent entities and individuals.

6 – Use of Documents: All Documents are instruments of service, and CC shall retain an ownership and property interest therein (including the copyright and the right of reuse at the discretion of the CC) whether or not the Project is completed. Any reuse by the Client or others of documents and plans that result from CC's services under this Agreement shall be at Clients or others sole risk without liability to CC.

7 - Cost Estimates: Client hereby acknowledges that CC cannot warrant that estimates of probable construction or operating costs provided by CC will not vary from actual cost incurred by the Client.

8 – Construction Services: CC shall not be responsible for or have control over means, methods, techniques, sequences, procedures, or for safety precautions and programs in connection with the construction of the Project; nor shall CC be responsible for the Contractor's failure to carry out the work in accordance with the contract documents or for Contractor's failure to comply with applicable laws, ordinances, rules or regulations.

9 – Termination of Services: The obligation to provide further services under this Agreement may be terminated by either party upon seven (7) days written notice to the other party. The written notice requirement of this paragraph does not apply to CC's termination of work under section 3 above. In the event of termination, the Client shall pay CC for all services rendered and costs incurred through the effective date of termination. Neither party may assign, sublet or transfer any rights under or interest (including, but not without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law.

10 – Legal Jurisdiction: This Agreement is to be governed by and interpreted according to the laws of the State of Florida. The parties agree that any actions brought to enforce any provision of this Agreement shall only be brought in a State court of competent jurisdiction located in Miami-Dade County, Florida.

11 – PURSUANT TO SECTION 558.0035. FLORIDA STATUTES, AN INDIVIDUAL EMPLOYEE OR AGENT OF CUMMINS CEDERBERG, INC. MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

Certificate of Insurance

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/31/2021

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).

PRODUCER	CONTACT NAME: Wendy Tyree
Lassiter-Ware Insurance 1300 N. Westshore Blvd. Suite 110 Tampa FL 33607	PHONE (A/C, No, Ext): (800) 845-8437 FAX (A/C, No): (888) 883-8680 E-MAIL ADDRESS: wendyt@lassiterware.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: The Phoenix Insurance Company	25623
INSURER B: Travelers Casualty & Surety Co	19038
INSURER C: Berkley Insurance Company	32603
INSURER D:	
INSURER E:	
INSURER F:	

INSURED: Cummins Cederberg, Inc.
7550 Red Road, Suite 217
South Miami FL 33143

COVERAGES CERTIFICATE NUMBER: 20-21 Cert 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 CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:			6604H492215PHX20	07/23/2020	07/23/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS X NON-OWNED AUTOS ONLY			BA6P69168720GRP	07/23/2020	07/23/2021	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) PIP-Basic	$ 1,000,000 $ $ $ $ 10,000
	UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		UB005J81862A2047G	09/26/2020	09/26/2021	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Professional Liability / Contractor Pollution Liability (Claims-Made)			AEC904504200	03/30/2021	03/30/2022	Each Claim Aggregate	$2,000,000 $2,000,000

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

CERTIFICATE HOLDER

~Evidence of Insurance
c/o Cummins Cederberg, Inc.
7550 Red Road, Suite 217
South Miami FL 33143

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03)