TASK ORDER FOR

FOGARTY AND 3RD STREETS STORMWATER IMPROVEMENTS

This TASK ORDER is issued under the terms and conditions of the _____ ("AGREEMENT") between the CITY of Key West ("CITY") and Jacobs Engineering Group Inc. ("CONSULTANT") dated _____, which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the attached statement entitled TASK ORDER ENGINEERING SERVICES FOR FOGARTY AND 3RD STREETS STORMWATER IMPROVEMENTS "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Task Order.

This Task Order, when executed, shall be incorporated in, and shall become an integral part of the Agreement.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the CITY of Key West staff. The duration of this TASK ORDER is estimated to be approximately 50 weeks.

C. COMPENSATION

Compensation for the labor portions of TASK ORDER, Tasks A through F will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for the labor of Task G will be on a time and materials basis as stipulated in Article 5, Paragraph 5.1.5 of the AGREEMENT. Compensation for subconsultants and direct expenses will be on a Cost Reimbursable basis as stipulated in Article 5, Paragraph 5.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than two (2) days after execution of this authorization.

For Jacobs Engineering Group Inc.

By: _____
Jill Rankin
Manager of Projects

_____
Erik Jorgensen, P.E.
Key West Project Manager

For CITY OF KEY WEST

By: _____
Albert P. Childress
CITY Manager

Dated the _____ day of _____, 2024

ATTEST: _____

RR

TASK ORDER

ENGINEERING SERVICES FOR

FOGARTY AND 3RD STREETS STORMWATER IMPROVEMENTS

SCOPE OF SERVICES

Project Description

This project will mitigate flooding in northwest New Town where repeated flood losses have occurred (**Figure 1**). The low-lying landscape of the area and the existing drainage infrastructure are insufficient to prevent flooding. Deeper runoff staging occurs at the intersections of 3rd Street and Fogarty Avenue, and along 4th Street at Patterson and Harris Avenues. The inlet elevations at 3rd and Fogarty range from 0.5 to 1.1 ft North American Vertical Datum of 1988 (NAVD88). The bowl-like terrain is low along Fogarty and extends from 1st Street to the west, 5th Street to the east, and to Seidenberg Avenue to the south. U.S. 1, N. Roosevelt Blvd, is the northern boundary acting as a sea barrier. While the existing 36-inch outfall into Garrison Bight at 4th Street serves U.S. 1 well, it is undersized to serve the neighborhood. Much of the existing pipe network in the neighborhood is undersized.

Jacobs has studied this area and defined potential long-term needs, including new stormwater pumps, larger diameter drainage pipes, and a new larger outfall discharging to Garrison Bight that will traverse under U.S. 1. Jacobs provided a project description for the study area in the 2024 Stormwater Master Plan. While the long-term concept works given the planning nature of a master plan, there are opportunities to refine the concept to reduce cost while addressing design details. One key assumption is the system must work in the future when sea level rise makes gravity drainage ineffective. During the kickoff meeting, the timing for delivering the new stormwater pump station will be discussed. No significant road raising is assumed to be needed or planned within this proposed scope of services. The modeling performed during the delivery of the project will evaluate be performed to assess if the assumption can be confirmed.

Project Purpose

The main project purpose is to design drainage system improvements for the neighborhood shown in Figure 1 that will remain viable under future climate changes. The ultimate project's scope of improvements includes the design of stormwater infrastructure that involves drainage pipes and inlets; Class V injection wells; a stormwater pump station with equipment platform; a standby generator with associated controls; an emergency ocean outfall force main; roadway restoration, including signing, striping; utility coordination; and cost estimating. However, due to funding constraints, an interim Phase 1 project will be designed that is gravity-based but will consider future phasing to incorporate the ultimate scope.

Figure 1. The study area is a residential area of approximately 30 acres (red outline).

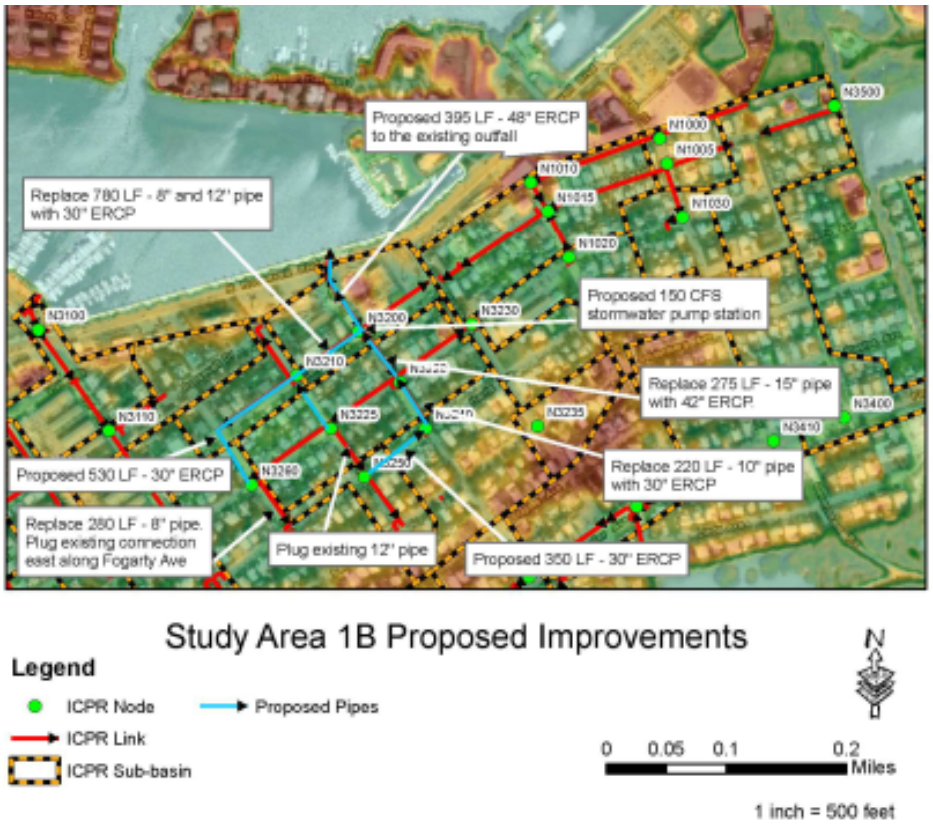


Figure 2. The Stormwater Master Plan (Jacobs 2024) provides a baseline to start the design.

Scope of Work Tasks

What follows is a detailed scope description on how the CONSULTANT will accomplish the project's design as described in the CITY's Stormwater Master Plan. The scope was refined to deliver only the detailed design for the first phase along with identification of the additional ultimate project components needed over a 30-year period of service.

The CONSULTANT will work to obtain state and federal permits, including the required environmental assessment in accordance with 24 CFR Part 58 (Environmental Review Procedures for Entities Assuming the U.S. Department of Housing and Urban Development [HUD] Environmental Responsibilities). Design responsibilities include survey, subsurface utility investigations, and geotechnical boring(s) that will be completed by subcontractors. The CONSULTANT will assist the CITY with public outreach and participate in public meetings during the design as defined herein. Beyond the design documents for bidding, additional authorization will be required to include bid services (development and response to requests for information, review of bid proposals to acquire a qualified contractor); conformed documents for contracting; owner representation during construction such as clarification of plans and specifications and periodic progress inspections; and completion certifications.

A. Kickoff and Startup

Based on our experience working with the CITY and the need to match project delivery with available funding, we have identified 5 key initial activities to assure successful project delivery that will commence at the outset of the project:

- Define ultimate stormwater improvements providing level-of-service (LOS) for 30-years with sea level rise (lift station, pipelines) to elevation 2.7 NAVD88. The modeling effort will also confirm whether raising of road elevations are warranted.
- Identify interim project advancing the ultimate stormwater water improvements that maximizes the use of currently available grant funding. Identify the LOS expected of the interim project.
- Develop the justification for additional grant applications for future stormwater improvements.
- Identify a monitoring program for assessing when future improvements should be implemented.
- Incorporate consideration of community interests/use.

1) Defining the ultimate project needs for providing a 30-year level of service will include identifying and sizing all components of the ultimate project. This includes identifying the future location of a new stormwater pump station as well as locating and sizing drainage infrastructure.
    - The Stormwater Master Plan is a good start for identifying drainage infrastructure needs, but the recommendations need to be verified with the CITY and data collection will be needed to confirm the recommendations.
    - The location of a future stormwater pump station is an important part of defining the plan. While a central neighborhood location is desirable, there may be room near 3rd and Roosevelt Drive or 4th and Patterson. Obvious utility conflicts will need to be identified with a site visit.
    - Since this project requires work under U.S. 1 and on FDOT's sea wall, The CONSULTANT and CITY should schedule a meeting with FDOT representatives as soon as possible to inform them of project needs.

2) Identifying an interim project matching the CITY's available funding will be an important conversation. The interim project must improve the immediate study area flooding issues. Increasing the size of drainage infrastructure will likely be the interim first phase. Current funding limits, however, will fall short of supporting construction of the stormwater pump station during the initial phase of implementation. Defining the level of service of the interim project will also be a key component of the conversation.

3) Developing the scope of later phases and justification for each subsequent phase will be performed to assist the CITY with future grant funding applications. It will be important to demonstrate that the first interim phase of the project is coordinated well with later phases and that the interim project components retain their value upon completion of the ultimate project.

4) A monitoring program will be proposed to help the CITY illustrate changing conditions and support the need for additional funding. A monitoring program will allow the CITY to identify when the next project phase should be implemented and be able to communicate this urgency to funding agencies.

5) Incorporate community and agency considerations into the scope and design of the project:
   - Because of the high-value ecosystem around the island, the CITY as well as other public stakeholders will expect efforts to minimize pollution from stormwater runoff entering coastal waterways. Diverting runoff into pressurized injection wells will reduce the volume of stormwater discharge to Garrison Bight.
   - A lesson learned from other similar Key West projects with stormwater pump stations is that an emergency backup outfall and generator will be needed. When the new stormwater pump station is constructed, it will come with a new force main and outfall.

Task A Deliverables

- Kickoff meeting in Key West with key individuals, including Jacobs Project Manager, stormwater expert, and a representative from Delta who will participate in a future public outreach meeting. Some Consultant members will be attending on a conference call (like MS Teams). The meeting will include a site walk of selected areas.
- A conference call with FDOT representatives to discuss their infrastructure and how to coordinate the two projects.
- Meeting agendas, presentation materials, and notes. All documents will be delivered electronically.
- A Technical Memorandum (TM) documenting the level of service (LOS) to be provided by the interim project and the long-term LOS to be provided once the CITY fully implements on the long-term needed stormwater improvements for the community.

B. Data Collection

The CONSULTANT will used the stormwater master plan hydrologic and hydraulic (H&H) computer simulation model to evaluate refinements and to develop the computations. This model may be modified to incorporate new survey or to better define areas of interest for this project design. Model runs are included in the scope to identify the level of services and set design parameters for sizing stormwater infrastructure improvements. Up to three model runs have been included within the scope of services.

The CONSULTANT will retain a professional surveyor (Avirom) and mapper to obtain detailed survey of the project area. Even if the CITY has some existing survey in the area, additional elevations will be needed to

support the flood plain analysis. A subsurface utility investigation is needed to identify potential utility conflicts that must be avoided or mitigated to install the new work. The subsurface investigation will be performed by GPRS and will be limited to ground penetrating radar and electronic field locating techniques. The data model in the deliverable shall be georeferenced to NAD83 and elevations expressed according to NAVD88 datums. The drawings shall be formatted to be legible at 1-inch to 30-foot scale on 11-inch by 17-inch page size. The scope and location of the survey will be developed during Task A.

Some project structures will be deep. The soils work will identify the geology around some key locations for design purposes. CONSULTANT will use GeoSol to conduct investigations at several locations around the neighborhood where new boxes will be required. Additional pavement coring will be conducted to evaluate the pavement condition and to prepare road restoration plans. It is assumed that the limited site data will be extrapolated to other right-of-way at nearby locations. Prior to beginning of the geotechnical engineering investigation, the CONSULTANT and CITY will develop a boring plan (map) that shows where testing will occur. The geotechnical work will include:

- Perform site reconnaissance, locate and coordinate for existing utilities that may interfere with the drilling operations. A CITY representative will attend this walk-through to verify boring sites. All test sites will be located using a GPS unit with coordinates provided in the final report.
- Provide traffic control in accordance with the Index 600 series of the FDOT Roadway and Traffic Design Standards.
- Perform a total of eight (8) standard penetration test (SPT) borings to depths of 15 feet below grades for proposed drainage infrastructure. Two (2) additional sites will have SPT borings up to 25-ft deep (proposed pump station location). Generally, as approved by the CITY, these borings will be conducted near intersections in the project area.
- Conduct twelve (12) pavement corings approximately 3-ft deep to determine the depth of pavement and base materials across the site. Generally, as approved by the CITY, these corings will be mid-block on several roads where work will occur.
- Visually examine all recovered soil/rock samples and asphalt pavement specimen in the laboratory. A geotechnical engineer will examine all recovered soil and rock samples.
- Backfill the boreholes using cement grout mix.
- Prepare a report of the findings and recommendations about the groundwater table, subsurface conditions for pipes, inlet boxes, load bearing ratios, and pavement replacement.

Task B Deliverables

- Soil investigation report from Geosol to CITY.
- ACAD and Adobe Survey files from CITY. Subsurface investigation data shall be incorporated into the drawings.

C. Conceptual Design Report

A Conceptual Design Report (CDR) will be prepared and submitted in draft for review with the CITY. The CDR will outline the CONSULTANT's understanding obtained from conversations with the CITY regarding available funding and the potential need for project phasing. The scope and associated effort that follows assumes that only Phase 1 of the ultimate project will advance through design. The CONSULTANT will prepare a schematic design and a Class 5 cost opinion to discuss with the CITY the design scope that will move forward to Preliminary Design.

Under this task the CONSULTANT will use the new maps and data to develop refinements to create a draft CDR that will guide the designers of various disciplines. The survey, utility information, and borings will be assembled into an existing conditions sheet set to use later in the detailed design. This report will present the schematic layout of the Phase 1 project scope.

A conceptual design memorandum for sizing a large stormwater pump station will be developed for reference to inform the CITY and design. The location of the pump station will affect the placement and size of pipes. No road raising is expected but some intersections should be reviewed to see if there are low inlets by the sides that could be altered. Pipes, inlets, pumps station, and outfall will be placed on CDR figures. A preliminary cost opinion will be included, but not based on a detailed design.

Task C Deliverables

- A draft CDR, a virtual review meeting, meeting minutes, and final report.
- All reports and documents will be transmitted electronically. Meetings held virtually so staff from various locations can attend.

D. Preliminary Design 30% Submittal

Preliminary documents will include the new facilities on a 30 percent complete drawing set. The primary goal of the 30 percent set is to establish the project elements, footprints and dimensions on a set of design drawings. A list of specifications will be developed to accompany the deliverable. The preliminary cost opinion will be updated, if warranted.

Task D Deliverables

- Preliminary (30%) drawings
- Technical Specification outline
- Preliminary Construction cost opinion update
- 30 percent review meeting and meeting minutes

E. 90% Design Submittal

After approval of the preliminary drawing set, the CONSULTANT will develop the design drawings in greater detail, incorporating CITY comments. The details associated with the facilities will have more information, to about 90 percent complete. The permitting will utilize the 90 percent civil set unless the agency requires more detailed drawings. Depending on comments and timing, updates to these drawings will be available prior to final permits.

Task E Deliverables

- Preliminary (90%) drawings
- Technical Specifications
- 90 percent review meeting and meeting minutes

F. Final Documents

The drawings and specifications will be available for the final documents (100 percent). It is likely that most of the permit applications will have progressed to completion. If the final drawings vary too much

from the permit sets, then modifications would be required. Normally, the ~90-percent drawings are appropriate since any differences between the two sets are minor. The final documents are intended for the CITY to use to solicit bids for construction.

Task F Deliverables

- Final drawings and technical specifications (signed and sealed)
- Bid table (form) in Excel or Word
- Final cost opinion

G. Permitting

There will be four types of permits required before bidding:

- Stormwater Environmental Resource Permit (ERP) from the South Florida Water Management District (SFWMD) for the outfall and new drainage system
- Water Use Permit for Dewatering from the SFWMD
- FDOT Ingress and Egress Permit to work on FDOT pipes or go under U.S. 1.
    - A management of traffic (MOT) plan is also anticipated for FDOT.
- U.S. Army Corps of Engineers (USACE) Section 404 for the new outfall to the Bight

Preapplication meetings will be scheduled soon after the pre-design is completed. The lead-time to schedule a meeting with these agencies is variable. The USACE may not want a pre-application meeting. It is assumed that the CITY will help with their internal reviews and approvals for the entire project. A MOT plan will be prepared by CONSULTANT and used with the FDOT to complete the work by U.S. 1. The contractor shall use the Dewatering and MOT plans by CONSULTANT as a basis for their workplan but must adopt their own compatible means and method.

Each regulator has its own requirements. For example, if work is limited to a pipe outlet stopping at the sea wall, then a general nationwide Section 404 permit may be all that is necessary. Since federal funds will be used to construct this project, HUD requires a National Environmental Policy Act of 1969, as amended (NEPA) assessment. USACE and SFWMD would want this kind of assessment too. The NEPA work will require desktop and field investigations to develop documentation of the benthic conditions near the proposed outfall. The Florida Keys National Marine Sanctuary will also comment on any USACE and SFWMD application.

It is anticipated that there are mangroves, corals, and possibly seagrass present in the outfall zone that would require mitigation. The CONSULTANT will subcontract with an underwater dive team to locate and quantify the benthic community. These surveys must be done during the growing period in the summer. If sensitive species cannot be avoided and must be mitigated, then the CITY must pay associated fees and for effort to complete the mitigation for the permits.

SFWMD will need the stormwater modeling to demonstrate improved conditions for the stormwater portion of the ERP. They will also require pretreatment that will be included in the pump station design. The injection wells are part of the pollutant abatement system so stormwater runoff volume from the CITY's MS4 permit area can be reduced.

CONSULTANT has included a specialty subconsultant, Cummins Cederberg, to perform field investigation and permitting services for a applications for a Statewide Environmental Resource Permit (SWERP) and USACE 404 permit. CONSULTANT will perform coordinate with Cummins Cederberg for upland

stormwater treatment for the SWERP permit as well as stormwater permit requirements component of the SWERP permit. CONSULTANT handle permitting through FDOT including preparation of a MOT plan. CONSULTANT will also prepare a brief memo with information relative to NEPA requirements in support of permit processing efforts.

Task G Deliverables

- Three pre-application meetings, one each with SFWMD, USACE, and FDOT.
- Application forms for CITY to review and sign.
- Design drawings signed and sealed (labeled for permitting use).
- Supporting environmental review, computations, maps, and similar documentation needed to obtain the permits.
- Response to requests for information from regulators.

Anticipated List of Drawings

The anticipated list of drawings for the 3rd Street and Fogarty Avenue Stormwater Improvements is based on similar completed designs. The level-of-effort is based on preparation of the following sheets:

General

1. Cover and Drawing Index
2. General Notes, Legend, and Abbreviations
3. Sedimentation and Erosion Control (SWPPP)
4. Erosion Control Plans (5 Sheets)
9. Erosion Control Details

Civil

10. Overall Site Plan, Key Map
11. Existing Conditions and Survey (10 Sheets)
21. Demolition Plans (10 Sheets)
30. 2nd Street Plan and Profile
31. W. Roosevelt Ln Plan and Profile
32. C. Roosevelt Ln Plan and Profile
33. Harris Ave Plan and Profile
34. 3rd Street Plan and Profile
35. 4th Street Plan and Profile S.
36. 4th Street Plan and Profile N.
37. 4th Street and Patterson Plan and Profile (PS)
38. U.S. 1 Outfall Plan and Profile (2 Sheets)
40. Restoration Plans (10 Sheets, follow existing conditions)
49. Standard Details (4 sheets)
52. Piping Details

Assumptions

The following assumptions were used in the development of this Task Order:

- CONSULTANT will reasonably rely upon the accuracy, timeliness, and completeness of the information/data provided by the CITY or other third parties without independent verification.

Additional effort by CONSULTANT due to invalid data or information provided by the CITY or others, may entitle CONSULTANT to additional compensation.

- The CITY evaluated and developed a draft Sea Level Rise Policy. The changes in policy may affect the nature of the projects to be developed or the criteria to use. The SWMP, Phase 2, incorporated the policy considerations. The draft policy allows for flexibility. The CITY will assist in setting LOS goals to match the physical constraints.
- All deliverables will be electronic utilizing Adobe format (pdf), or another common Microsoft Office software format.
- Meetings will normally be held utilizing online resources (Microsoft Teams, or similar) for all or some of the attendees, unless otherwise specified in scope.
- The geographic extent of the project will be limited to the main island of Key West in the area described in the scope, and not include Navy facilities, or Fleming Key.
- A combination of elevation data sources will be utilized. Existing data from the CITY inventory or as-built drawings will be used for updating facility information. The accuracy of the GPS or LiDAR elevations may vary but will be accurate to about 0.5-foot or less. New surveying is included in the scope of work. Detailed surveys are normally accurate to approximately 0.05 foot, but coverage may be limited.
- In soils, foundation, groundwater, utilities, 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 project cost and/or execution. These conditions and cost/execution effects are not the responsibility of CONSULTANT.
- The LOS for projects will be estimated on a relative basis using standard engineering convention and professional judgement. It is assumed that there will be wide-spread flooding for storms that exceed a few inches in a day.
- Recommendations for project design elements are to be based on the CONSULTANT's recent CITY experience and details of past work.
- Only existing land use shall be used in the hydrologic/hydraulic evaluation of the study area because of the CITY's mature development.
- Assumptions about ponding into lots/parcels will be made on each block included in the model.
- The evaluations will be based on the federal, state and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- Cost opinions are based on Association for the Advancement of Cost Engineering guidelines for Class 4 (none to little detailed design) to Class 1 (design), depending on project status. No land costs shall be included in cost estimating for the project.
- In providing opinions of cost, financial analyses, economic feasibility projections, for the project, CONSULTANT has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs;

competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, CONSULTANT makes no warranty that CITY's actual project costs, financial aspects, economic feasibility, will not vary from CONSULTANT's opinions, analyses, projections, or estimates and CONSULTANT shall have no liability for such variances.

- It will be assumed that all linear drainage projects can be in CITY rights-of-way. The Survey and CITY GIS data will be utilized to set boundaries.
- If additional easements are necessary, the CITY will pursue obtaining them. Legal, easement, or plat survey or acquisitions will be the responsibility of CITY.
- Permitting or other agency actions are beyond the control of the CONSULTANT. Permitting will proceed under normal conditions based on CONSULTANT's experience. Permitting services will be billed on a time and materials basis. A cost reserve of $5,000 for permit fees has been included within the task order. The CITY will be invoiced the actual amount of permit fees.
- Field investigations performed by Consultant to support the permitting effort will not encounter special circumstances beyond the need for conventional SCUBA gear (ie. endangered species of coral or other underwater conditions dictate special procedures, activities, and/or equipment). Field investigations performed in support of permitting are included within the task for permitting services and will be billed on a time and materials basis.
- Task G for permitting will be compensated on a time and materials basis. CONSULTANT has proposed a Level of Effort based on reasonable expectation for permit processing. As a time and materials task, effort not required will not be invoiced.
- CONSULTANT has not included public outreach services within this proposal. Public outreach services can be provided by CONSULTANT if requested under a separate authorization.

Obligations of the CITY

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- Available drawings and files.
- Prompt review and comment on all deliverables.
- Facilitate access to any required facilities.
- Attendance of key personnel at meeting as requested.
- CITY will assist in obtaining reports or drawings from past designs.
- CITY will provide proof of ownership and/or easements needed to satisfy the requirements of permit applications.
- CITY will separately perform public outreach activities.

Additional Services

The CONSULTANT will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY.

Additional services may include, but is not limited to:

- Public outreach services.
- Additional field data collection.
- Attend a pre-bid meeting by at least one staff person virtually. Help the CITY to address questions.
- Evaluate bids and provide CITY comments, as appropriate.
- Conform documents for contractual use by the CITY. This set will include any changes after Final Document set and accepted bid.
- Construction services, including shop drawing review, certifications of completion (interim or final), as-built survey, in-field inspections, and construction related meetings.

Compensation

Compensation for the labor portions of TASK ORDER Tasks A through F, in the amount of $411,581.00, will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for the labor of Task G, in the amount of $48,637.00, will be on a time and materials basis as stipulated in Article 5, Paragraph 5.1.5 of the AGREEMENT. Compensation for subconsultants and direct expenses, in the amount of $238,123.70, will be on a Cost Reimbursable basis as stipulated in Article 5, Paragraph 5.2 of the AGREEMENT. The estimated compensation for this Task Order is **$698,341.70**. Compensation listed by task with estimated hours and rates is included as Attachment A.

Schedule

An anticipated schedule for TASK ORDER is provided in Attachment B.

Sub Consultant Proposals

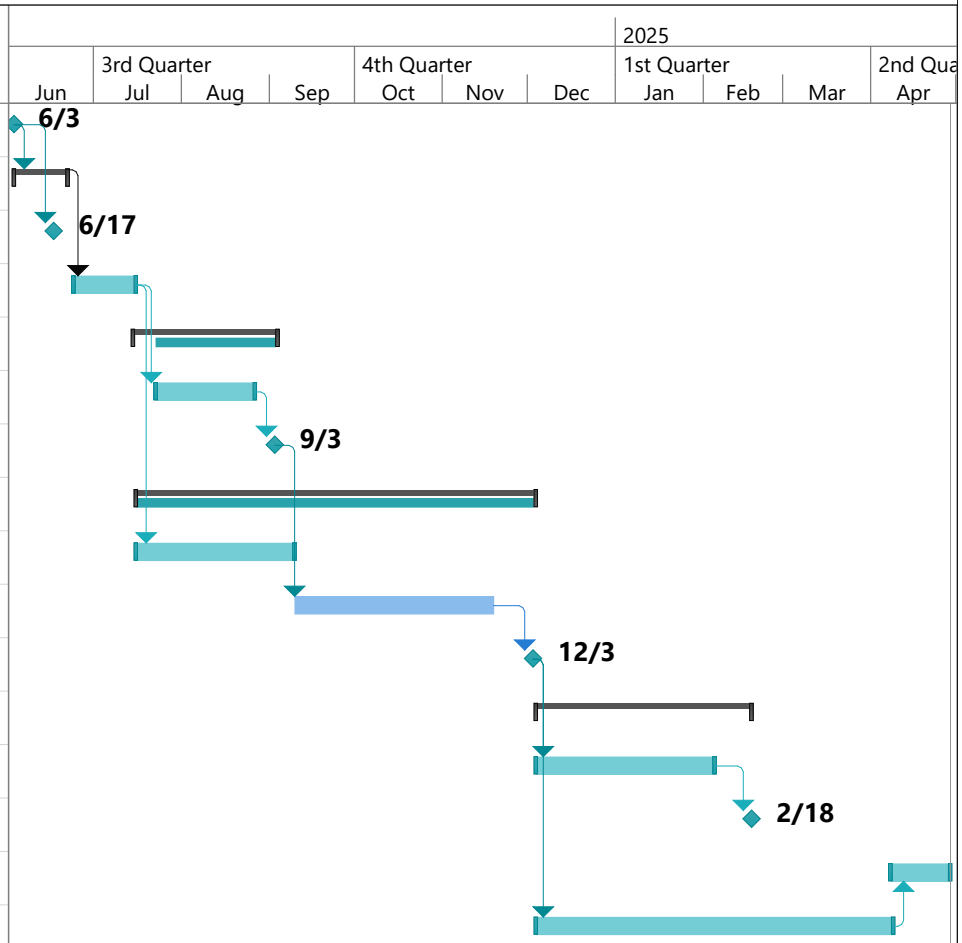
Subconsultants proposals for this TASK ORDER are provided as Attachment C.

ATTACHMENT A - ESTIMATED LEVEL OF EFFORT AND FEE

Role	Project Manager	Sr Engineer/ QA/QC	Lead Engineer	Lead Engineer	Mid Level Engineer	Mid Level Engineer	CAD Designer	CAD Designer	Cost Estimator	Specs Processor/ Controls	Document Controls	Safety Field Observation	Safety Professional	Safety Professional	Total Hours	Labor Cost	Permitting Expense	Subconsultant Expense	Travel Expenses	Total Cost
Rate Category	Eng 7	Eng 7	Eng 6	Eng 5	Eng 4	Eng 2	Tech 5	Tech 3	Tech 6	Admin Asst	Clerical Support	Tech 3	Eng 4	Eng 6						
Billing Rate FY 2024	*$267.00*	*$267.00*	*$247.00*	*$215.00*	*$188.00*	*$149.00*	*$162.00*	*$109.00*	*$179.00*	*$113.00*	*$101.00*	*$109.00*	*$188.00*	*$247.00*						
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours						
LUMP SUM REIMBERSIBLE TASKS A THROUGH F																				
Task A: Kickoff and Startup																				
TASKS A HOURS TOTAL	38	92	0	26	0	0	0	0	0	5	0	0	0	0	161					
TASK A TOTAL COST	$10,146.00	$24,564.00	$0.00	$5,590.00	$0.00	$0.00	$0.00	$0.00	$0.00	$565.00	$0.00	$0.00	$0.00	$0.00		$40,865.00	$0.00	$0.00	$7,362.70	$48,227.70
Task B: Data Collection																				
TASK B HOURS TOTAL	14	6	0	8	0	0	0	0	0	5	12	0	0	0	45					
TASK B TOTAL COST	$3,738.00	$1,602.00	$0.00	$1,720.00	$0.00	$0.00	$0.00	$0.00	$0.00	$565.00	$1,212.00	$0.00	$0.00	$0.00		$8,837.00	$0.00	$186,304.00	$0.00	$195,141.00
Task C: Conceptual Design Report																				
TASK C HOURS TOTAL	18	94	0	70	48	0	12	0	24	5	0	0	0	0	271					
TASK C TOTAL COST	$4,806.00	$25,098.00	$0.00	$15,050.00	$9,024.00	$0.00	$1,944.00	$0.00	$4,296.00	$565.00	$0.00	$0.00	$0.00	$0.00		$60,783.00	$0.00	$0.00	$0.00	$60,783.00
Task D: Preliminary 30% Design Documents																				
TASK D HOURS TOTAL	33	36	26	83	208	44	64	327	40	21	8	0	0	0	890					
TASK D TOTAL COST	$8,811.00	$9,612.00	$6,422.00	$17,845.00	$39,104.00	$6,556.00	$10,368.00	$35,643.00	$7,160.00	$2,373.00	$808.00	$0.00	$0.00	$0.00		$144,702.00	$0.00	$0.00	$0.00	$144,702.00
Task E: 90% Design																				
TASK E HOURS TOTAL	30	36	22	65	112	44	40	184	24	18	8	0	0	0	583					
TASK E TOTAL COST	$8,010.00	$9,612.00	$5,434.00	$13,975.00	$21,056.00	$6,556.00	$6,480.00	$20,056.00	$4,296.00	$2,034.00	$808.00	$0.00	$0.00	$0.00		$98,317.00	$0.00	$0.00	$0.00	$98,317.00
Task F: Final Dcouments																				
TASK G HOURS TOTAL	6	10	10	44	105	16	24	112	16	7	0	0	0	0	350					
TASK G TOTAL COST	$1,602.00	$2,670.00	$2,470.00	$9,460.00	$19,740.00	$2,384.00	$3,888.00	$12,208.00	$2,864.00	$791.00	$0.00	$0.00	$0.00	$0.00		$58,077.00	$0.00	$0.00	$0.00	$58,077.00
SUBTOTAL - LUMP SUM REIMBURSEABLE LABOR TASKS A THROUGH F																				
TASKS A THRU H HOURS TOTAL	139	274	58	296	473	104	140	623	104	61	28	0	0	0	2300					
TASKS A THRU H TOTAL COST	$37,113.00	$73,158.00	$14,326.00	$63,640.00	$88,924.00	$15,496.00	$22,680.00	$67,907.00	$18,616.00	$6,893.00	$2,828.00	$0.00	$0.00	$0.00		$411,581.00				
TIME AND MATERIAL REIMBERSIBLE TASKS G AND H																				
Task G: Permitting																				
TASK F HOURS TOTAL	34	44	0	52	24	0	12	32	0	7	0	20	4	12	241					
TASK F TOTAL COST	$9,078.00	$11,748.00	$0.00	$11,180.00	$4,512.00	$0.00	$1,944.00	$3,488.00	$0.00	$791.00	$0.00	$2,180.00	$752.00	$2,964.00		$48,637.00	$5,000.00	$38,600.00	$857.00	$93,094.00
SUBTOTAL -TIME AND MATERIALS REIMBURSEABLE LABOR TASKS G AND H																				
TASKS A THRU H HOURS TOTAL	34	44	0	52	24	0	12	32	0	7	0	20	4	12	241					
TASKS A THRU H TOTAL COST	$9,078.00	$11,748.00	$0.00	$11,180.00	$4,512.00	$0.00	$1,944.00	$3,488.00	$0.00	$791.00	$0.00	$2,180.00	$752.00	$2,964.00		$48,637.00				
SUBCONSULTANTS AND DIRECT EXPENSES REIMBERSIBLE ON A COST REIMBURSEABLE BASIS																				
SUBTOTAL - DIRECT COST REIMBURSEABLE EXPENSES																	$5,000.00	$224,904.00	$8,219.70	$238,123.70
TOTALS																				
HOURS	173	318	58	348	497	104	152	655	104	68	28	20	4	12	2541					
COSTS	$46,191.00	$84,906.00	$14,326.00	$74,820.00	$93,436.00	$15,496.00	$24,624.00	$71,395.00	$18,616.00	$7,684.00	$2,828.00	$2,180.00	$752.00	$2,964.00		$460,218.00	$5,000.00	$224,904.00	$8,219.70	$698,341.70

ATTACHMENT B: SCHEDULE

ID	Task Mode	Task Name	Duration
1		Notice to Proceed	0 days
2		**Task A: Kickoff and Start Up**	**15 days**
3		Kickoff Meeting	0 days
4		Task B: Data Colleciton	16 days
5		**Task C: Conceptual Design Report**	**37 days**
6		CDR Submittal	25 days
7		CDR Review Workshop	0 days
8		**Task D: Preliminary 30 Percent Deisgn**	**101 days**
9		Survey	40 days
10		30% Design Submittal	50 days
11		30% Design Review Workshop	0 days
12		**Task E: 90 Percent Design**	**54 days**
13		90% Design Submittal	45 days
14		90% Design Review Workshop	0 days
15		Task F: Final Documents	15 days
16		Task G: Permitting	90 days



Key West Fogart and 3rd Street
Date: Fri 3/29/24

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

ATTACHMENT C
Proposals from Sub Consultants

AVIROM & ASSOCIATES, INC.
SURVEYING & MAPPING
BOCA RATON / STUART / KEY WEST

February 27, 2024

Via E-Mail: Erik.Jorgensen@Jacobs.com

Mr. Erik Jorgensen. P.E.
Engineer
Jacobs
1300 White Street
Key West, FL 33040

Re. Stormwater Improvement Project (Vicinity of Fogarty Avenue), City of Key West, Florida Topographic Route Survey_Revised 2

We shall perform a topographic route survey of existing conditions along the streets within the area delineated in red on the attached map, referenced as Exhibit A below comprised of 16,823 linear feet (3.2 miles) and will include the northerly extension of 4th Street to capture the outfall into Garrison Bight.

Limits Topographic Route Survey:

The bandwidth shall be the full right-of-way width of all streets and will extend 50-feet beyond the furthest right-of-way line in all directions at street intersections.

1. Topographic Route Survey:

Obtain sufficient elevations to define the existing topography in detail, including significant grade changes in elevations.

The spot elevations will be obtained on a 25-foot grid with a bandwidth of the full right-of-way of the streets.

Cross-sections shall be performed at every 100-foot to capture centerline grade, edge of pavement grades, sidewalk grades, high/low points with intermediate grades obtained at all grade breaks and driveways.

This survey is to support the design of stormwater improvements and the spot elevations shall be densified within the areas of the street intersections.

The elevations shall be referenced to the *North American Vertical Datum of 1988 (NAVD 88)* and horizontally referenced to the North American Datum of 1983 (NAD 83-2011) Epoch 2010.00 and tied to the National Geodetic Survey benchmark network. Additionally, we shall establish benchmarks along the route at a maximum of 500-feet or line of sight to utilize for future construction. We shall calculate and place the vertical conversion factor from NAVD 88 to the National Geodetic Vertical Datum of 1929 (NGVD 29) on the face of the map.

We shall locate all above ground improvements including, but not limited to pavement, ramps, driveways, buildings, steps, gates, edge of curb, top of curb, flow line of curb, edge of pavement, centerline of pavement, back of walk, face of walk, parking pay stations and *above ground* evidence of utility.

We will obtain rim elevations, pipe size, material and inverts of sewer and drainage structures where accessible. Due to the nature of obtaining the data where the structures are in use and the actual inverts may be obscured, the information obtained will be the best approximation of the true measurements. It is the responsibility of the end user to verify the diameter and material utilizing as-built drawings or other resources prior to construction. Utility locations will include fire hydrants, water valves, meter boxes, vaults and electrical outlets, power poles and overhead wires. We will locate wells and main irrigation valves, but will not locate individual sprinkler heads.

There is no provision for the excavation, probing or location of underground utilities structures or improvements. Utilities shall be located to the extent that they are above ground and visible. *This proposal does not include the contracting of an underground utility locating service to locate the subsurface utilities.*

The survey data will be reported to the nearest 0.05 feet for horizontal locations and for the vertical component, 0.1 feet spot elevations on ground shots and 0.03’ spot elevations on paving or hard surfaces, with all work performed in accordance with the Standards of Practice as defined in Chapter 5J -17, Florida Administrative Code.

We shall establish a baseline of survey along the centerline of the rights-of-way, referenced horizontally to the North American Datum of 1983 (NAD 83-2011) Epoch 2010.00.

We shall research the Monroe County Property Appraiser’s database to delineate the current ownership lines within our survey. We will graphically delineate right-of-way lines and lot lines from information obtained by this firm from recorded plats and/ or right -of-way maps, readily available from the Public Records of Monroe County at the time of the survey. This information will be spatially placed within the digital file of the topographic survey, based on recovered monumentation to depict the lines relative to the topographic locations. This is not a boundary survey and the information should not be relied upon as such.

There is no provision to perform boundary surveys or surveys to resolve conflicts, ownerships or occupation issues relative to the recorded instruments. It is strongly recommended that if the design is contingent on accurate boundary placement and especially prior to construction, a boundary survey should be performed to establish the lines. We will not be responsible for the misuse of the topographic survey for purposes it was not intended.

Tree Survey:

We will locate all indigenous and protected specimen trees having a 4" and larger caliper diameter at breast height, with the tree species listed to the best of knowledge and ability of the surveyor (without the benefit of a botanist or landscape architect). It is the responsibility of the end user to verify the identity of the species.

The location of shrubbery and landscaping is not included in this proposal. Large, bunched groups of trees shall be located as clusters with a count and diameter listed. We will not locate exotic or non-native species.

2. Finish Floors:

We shall obtain the finish floor elevations at twelve (12) select residences with the addresses provided to us prior to mobilization.

3. Subsurface Utility Engineering (SUE)

The location of the underground utilities that have no visible above ground components shall be based upon a combination of visual findings in the field and utility location marks generated by GPRS utility locating consultant, contracted by Jacobs and is based on thirty (30) sites within a ten (10) foot diameter, within the survey limits.

We will locate the paint marks and flags generated by the consultant and seamlessly integrate the underground utilities within the survey. This work will be done during the course of our crew conducting the topographic survey. We will coordinate the work with GPRS (consultant) so that the work will be accomplished in conjunction with our crew's work in the field.

Deliverables:

1. Provide a digitally signed and sealed copy of the topographic survey in PDF format.
2. AutoCAD 2018 or lower format file of the above.
3. ASCII file and a LandXML file of the data points.

Clarifications:

- This proposal is based on mobilization by our field crew from our corporate office in Boca Raton to service the project.
- Requirements to the survey requested by governmental agencies that are more stringent than

Standards of Practice as set forth in Chapter 5J-17 FAC pursuant to Section 472 Florida Statutes will be an additional expense.

- This proposal is based on the site being free and clear of storm debris. We will not move obstacles that impede obtaining the survey data, or if field conditions are considered hazardous to the safety of our crews.

Timeframe:

After receipt of an executed contract or P.O. we can mobilize to the site within ten working days and have the work completed within sixty working days after mobilization. Mobilization is dependent on the availability of accommodations for our field crew.

Deliverables can be phased if client provides areas of priority, with phased deliverables beginning twenty working days after mobilization.

Fee:

The itemized fee to provide the above surveying services shall be a lump sum amount of:

1. Topographic Route Survey ……...$141,755.00
2. Finish Floors ……$ 600.00
3. Subsurface Utility Engineering (SUE) ……$ 4,500.00

TOTAL ……..$146,855.00

Thank you for the opportunity to submit this proposal. Should you have any questions, please contact me accordingly.

Respectfully,

Keith M. Chee-A-Tow, P.L.S.
Project Surveyor

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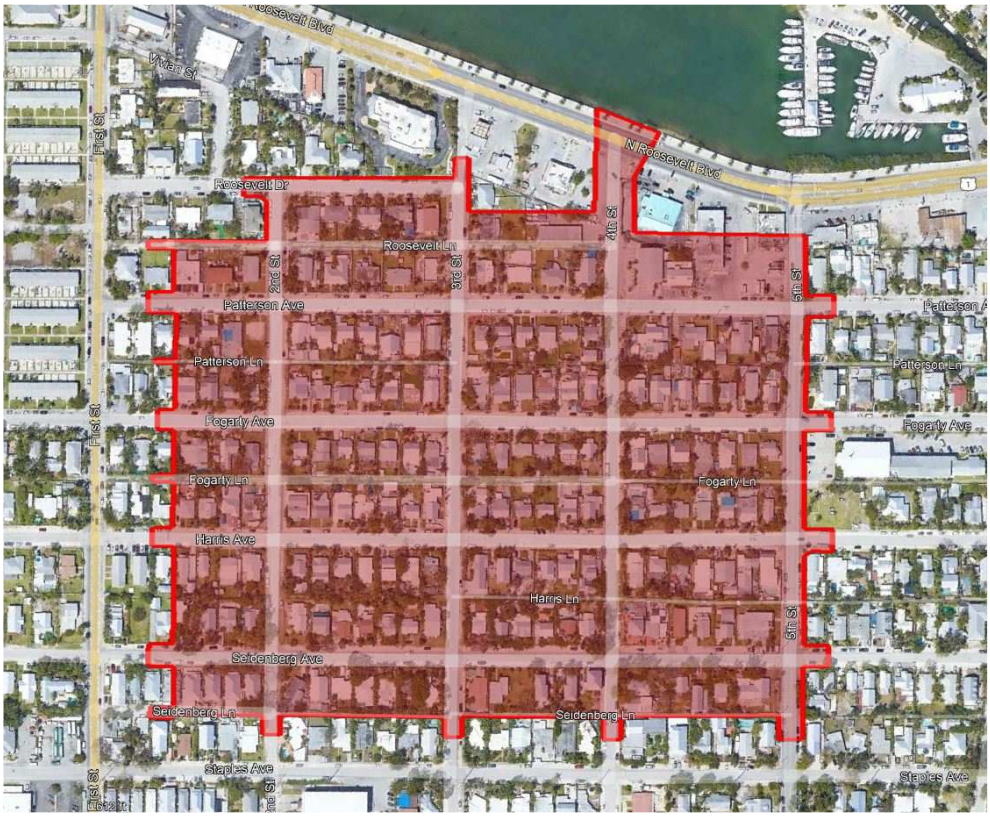
EXHIBIT A


N Roosevelt Blvd
Vivian St
First St
Roosevelt Dr
Roosevelt Ln
2nd St
3rd St
4th St
5th St
Patterson Ave
Patterson Ln
Fogarty Ave
Fogarty Ln
Harris Ave
Harris Ln
Seidenberg Ave
Seidenberg Ln
Staples Ave

CUMMINS | CEDERBERG
Coastal & Marine Engineering

February 9, 2024 139100

Jacobs Engineering Group
Attn: Mr. Erik Jorgensen

Sent via email: erik.jorgensen@jacobs.com

RE: Proposal for Marine Engineering and Environmental Consulting Services
For the proposed Stormwater Outfall Retrofit Project at 3rd St. and N Roosevelt Blvd, Key West, FL

Dear Mr. Jorgensen:

Pursuant to our recent discussion, Cummins Cederberg, Inc. (Cummins Cederberg) is pleased to present this proposal for our marine engineering and environmental consulting services for the proposed Stormwater Outfall Retrofit Project, located at 3rd Street and N Roosevelt Blvd, Key West, Monroe County, Florida (Project).

Project Introduction

It is our understanding that the City of Key West would like to retrofit a stormwater outfall discharging into Garrison Bight, near the intersection of 3rd Street and N Roosevelt Blvd in Key West.

The following is a brief discussion beginning with our experience, followed by the proposed scope of services.

About Cummins Cederberg

Cummins Cederberg is a coastal and marine engineering company who can lead a project from start to finish including inspection, fieldwork, environmental permitting, design, and construction administration. Design experience ranges from small docks and seawalls to large cruise ship piers and ports, where the use of advanced numerical models is often implemented to support or improve analyses and designs. The following section presents representative experience from recent projects.

- *Higgs Beach, Key West:* Mitigation planning and biological monitoring of nearshore resources to support permitting and construction of a beach nourishment project.
- *Pedestrian Baywalk and Bikeway Bridge Project, Miami:* Engineering and marine resources survey for 20-foot wide, over-the-water pedestrian and bicycle bridge to activate the Baywalk and surrounding parks/amenities.
- *Derecktor Shipyard, Dania Beach:* Engineering, permitting, construction drawings, and construction administration for both 900- and 200-ton travel lift operations.
- *Bal Harbour Beach Shoreline, Miami:* Pre- and post-construction marine habitat surveys associated with a beach nourishment project. Developed an EM-385 compliant Dive Safety Plan for the USACE.
- *Marina, Papagayo, Costa Rica:* Post-hurricane marine structures inspection, funding application for re-construction through insurance, engineering QA/QC of floating docks.
- *Sunset Harbour Yacht Club:* Engineering and permitting of extensive marina repairs, including overwater patchwork of concrete spalling and cracks, as well as the replacement of eight (8) precast concrete deck slabs.
- *Great Stirrup Cay Coastal Engineering Analysis, The Bahamas:* Prepared coastal engineering analysis to support the design of improvements including coastal modeling, surge analysis, wind analysis, wave propagation, operational downtime, design criteria for marine structures.
- *Catamaran Boatyard, Key Largo:* Marine engineering and environmental consulting services relating to the proposed reclamation of a boat basin.

Scope of Services

The following section outlines the scope of services to be provided by Cummins Cederberg for Jacobs Solutions, Inc. (Client).

Task 1 – Field Investigations

The fee provided for this task assumes the Marine Resources Survey and Engineering Inspection will be conducted concurrently.

Task 1.1 Dive Safety Plan, Field Preparation, and Planning

Cummins Cederberg marine scientists will develop a benthic resource survey plan (BRS Plan) in accordance with the *Florida Keys National Marine Sanctuary Resource Assessment Survey Protocols for Nearshore Construction Projects* (November 2022). The Plan will include all methods, equipment, and materials proposed for the in-water portion of the survey; survey approaches and strategies relative to tide cycles (survey should be conducted at slack tide during high or low tide), vessel traffic, and communication with local agencies; post-survey reporting and submittals; and proposed daily activities and staffing. In addition, Cummins Cederberg will perform a desktop assessment of available resources per the FDEP guidelines and provide information about previous data on natural resources in the immediate area.

Cummins Cederberg has an existing FKNMS permit (FKNMS-2018-168-A1; attached), and we have confirmed with the FKNMS Resource Protection and Permit Coordinator that this permit is inclusive of all activities needed to complete the BRS. A copy of the permit will be kept onboard the survey vessel at all times.

Dive Safety

Cummins Cederberg will prepare a Dive Safety Plan (Dive Plan) that follows JEG dive safety standards and AAUS standards. The Dive Plan will include, but is not limited to, an overview of the project and diving operations, names and roles of all divers, documentation for each diver (e.g., certifications, trainings, medical clearance) dive logs, environmental conditions, diving and safety equipment (including bailout bottles and facemasks with comms, as required), pre- and post-dive procedures, proposed number of dives and location, all tools and survey equipment to be used, and a detailed Emergency Action Plan (EAP) with information on procedures and details/locations of nearest hospital and recompression chamber. The comprehensive dive plan will be provided to the JEG Scientific Dive Safety Officer and the JEG Enterprise Dive Safety Specialist for review and approval prior to commencing field preparations and survey activities.

Field Preparation and Scheduling

Upon final authorization of the BRS plan by JEG and the Dive Safety Plan, Cummins Cederberg will review local tide charts during the preferred survey time period (June-September 2023) and propose survey windows and timeframes for the survey.

Task 1.2 Marine Resources Survey

A marine scientist from Cummins Cederberg will conduct a benthic resources survey at the Project site. The biologist will identify potential seagrasses, corals, oysters, and other marine resources of significance within the proposed Project boundaries. As the Project site is located in the Florida Keys National Marine Sanctuary (FKNMS), the FKNMS Benthic Survey Protocols will be adhered to. Cummins Cederberg is authorized to perform benthic surveying within the FKNMS under Permit No. FKNMS-2018-168-A1. The different environmental agencies recognize different seagrass growing seasons, with the narrowest window occurring between June 1st and September 30th. It is assumed that this survey will be conducted within this window.

The survey area will include approximately 25 feet on either side of the existing outfall and approximately 25 feet waterward of the outfall. The submerged bottom will be surveyed via snorkel or SCUBA, to be determined on site based on water conditions and water depths. Data (e.g., species, percent coverage, and location of marine resources observed) will be collected on prepared underwater paper. Representative photos will be taken. The data will be processed and illustrated on a basemap. The basemap will include location and coverage of documented marine resources. A brief observation report, including representative photographs, will be prepared summarizing the investigations.

Deliverables: Dive Safety Plan, Environmental Survey Report in PDF-format

Task 1.3 Marine Engineering Inspection: An engineer diver, will perform an above- and below-water inspection of the seawall within approximately 25 feet on either side of the existing outfall at the Project site. Water depths will be collected along the toe of the seawall during the inspection. The inspection will include visual assessment of the structural components (e.g. cap, panels, piles, endwall, outfall pipe, manatee grate) to identify dimensions, forms of deterioration (e.g. cracking, spalling, displacement, undermining) and methods for repair or replacement, as needed. Field notes will be collected to document observed conditions, which will be referenced to stationing established along the seawall. Above- and below-water photographs will be obtained to document the assessment and will be included in the engineering report. The inspection will be conducted generally following methods provided in Standard Practice Manual for Waterfront Facilities Inspection and Assessment, ASCE Manual No. 130.

A report will be prepared to summarize the engineering observations and results of the inspection. The report will include an assessment of the existing marine structures and recommendations for repairs or replacement. Photographs to reference observations will be included. The report will be signed and sealed by a Florida Registered Professional Engineer.

Deliverables: Report Signed/Sealed by a Florida Registered Professional Engineer in PDF

Fees for Task 1 are lump sum (including expenses): **$20,200.00**

Task 2 – Environmental Permitting

Task 2.1 SWERP Individual Permit Form & Processing: Cummins Cederberg will prepare and process a Statewide Environmental Resource Permit (SWERP) Individual Permit Form with the South Florida Water Management District (SFWMD), requesting authorization of the proposed stormwater outfall retrofit activities, pursuant to Chapter 62-330, F.A.C. Cummins Cederberg will maintain contact with SFWMD to review plans and provide additional information. The Client will provide Cummins Cederberg with a signed application form, engineering drawings, Section E of the SWERP application, proof of ownership and a processing fee (in an amount of $420.00). Scope assumes no resources will be present and, therefore, mitigation will not be required.

Task 2.2 USACE Application & Processing: Cummins Cederberg will prepare and process a Department of the Army Application with the U.S. Army Corps of Engineers (USACE) requesting authorization of the proposed stormwater outfall retrofit, pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Cummins Cederberg will maintain contact with the USACE to review plans and provide additional information (e.g., checklists and additional forms). The Client will provide Cummins Cederberg with a signed application form, proof of ownership, and engineering drawings.

Fees for Task 2 are lump sum (including expenses): **$18,400.00**

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 as-built drawings, historical photographs, permits or other documentation.
- Overall Project Management to performed by the Client. Cummins Cederberg will support the Project team with guidance as to obtaining environmental approvals but is not responsible for the oversight of the Engineer of Record or their contract deliverables. Cummins Cederberg is available to provide full project management, as well as engineering services under a separate scope of services.
- Fees include field gear equipment and rental.
- Scope of work is based on no marine resource impacts and mitigation will not be required. **Please understand the different agencies recognize different seagrass growing seasons. FDEP recognizes a seagrass growing season between April 1 and October 31, the USACE growing season is between June 1 and September 30.** Cummins Cederberg can provide additional biological assessments and/or mitigation negotiations under a separate scope of services, if required.
- Cummins Cederberg does not guarantee, warranty, ensure or otherwise assert that the project will receive the necessary regulatory authorizations.

- Design and drawings to be provided by the Client. This scope assumes the permit drawings will include all required details and information to facilitate a streamlined permitting process. Scope can be re-evaluated if design does not match conditions and assumptions described herein.
- Legal, agency or permit fees not included.
- This scope does not include in-person pre-application meetings with the agencies.
- This scope of services does not include review of upland structures, local building department permits, or any encumbrances of the properties.
- Client to provide a boundary survey to be utilized for preparation of the basemap representing observed field conditions.
- After the Fact permitting for unauthorized structures is not included in this scope.
- It is assumed there will be no legal encumbrance issues, and no historical or archaeological resource issues.
- The assessment does not include subsurface explorations, destructive testing (e.g., concrete coring), material testing, utilities, or other infrastructure located upland of the seawall.
- In-water work will only be conducted pending determination of safe working conditions for the area. Cummins Cederberg maintains the right to make its own determination on safe working conditions for its divers.

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 marine engineering and 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 954-401-2578 or pcutt@cumminscederberg.com.

Sincerely,
CUMMINS CEDERBERG, INC.

Penny Cutt
Senior Director

Read and Accepted by **Client:**

By:_____

Name:_____

Title:_____

Date:_____

Enclosures:
General Terms & Conditions
Certificate of Insurance
FKNMS Permit

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 agrees, to the fullest extent permitted by law, to indemnify and hold harmless CC and its officers, directors, members, partners, agents, employees, and Consultants from losses, damages, and judgments (including reasonable consultants' and attorneys' fees and expenses) arising out of or connected with the Agreement or performance by any of the parties above-named, of the services performed under this Agreement, except those damages, liabilities or costs attributed to the negligent acts by CC specifically in the performance of the Agreement..

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.

PURSUANT TO SECTION 558.0035. FLORIDA STATUTES, AN INDIVIDUAL EMPLOYEE OR AGENT OF CC MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

6 – Use of Documents: All Documents prepared by CC 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. Instruments of service by CC are for the sole use of Client and are not to be copied or distributed, in any manner, to a third party, without the express written permission of CC. 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. Electronic information and files are for the informational purposes only. It is the responsibility of Client to verify the accuracy of the information therein and to hold CC harmless for any damages that may result from the use of the information.

7 – Cost Estimates: CC opinions of probable construction cost are made based on experience, qualifications, and general knowledge of the construction industry. However, CC has no control over the cost of labor, materials, equipment, or services furnished by others, or methods of determining prices, or market conditions. 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 – Mediation/Dispute Resolution: Client and CC agree to negotiate all disputes or conflicts between them in good faith for a period of 30 days from the date of notice. If said dispute or conflict is not resolved within 30 days, Client and CC agree to then submit any and all unsettled disputes or other matters in question between them arising out of or relating to this Agreement to non-binding mediation. The fees and/or costs of mediation shall be equally borne by the parties to the Agreement. The process shall be conducted on a confidential basis. If such mediation is unsuccessful in resolving a dispute, then the parties may seek to have the Dispute resolved in circuit court.

In the event of litigation, the prevailing party shall be entitled to recover from the non-prevailing party all reasonable attorney fees, taxable court costs, expert witness fees and costs, demonstrative evidence costs, and such other reasonable fees and/or costs generally associated with the litigation of such matters, as determined upon hearing, post-trial, by the court.

Irrespective of any contract provision or obligation of either party hereunder pursuant to contract or agreement with person(s) and/or entity(ies) not specifically named herein, CC shall not be obligated to participate in, nor be a named party in, any arbitration proceeding without the express written consent of CC.

11 – 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.

12 – Notice: Whenever either party desires to give notice unto the other, it must be given by written notice, sent by registered United States mail, with return receipt requested, addressed to the party for whom it is intended.

13 – Agreement: This Agreement constitutes the entire agreement between Client and CC and supersedes all prior written or oral understandings. This Agreement may only be amended or modified in writing and duly executed by both parties.

Certificate of Insurance

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 09/26/2023

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
LassiterWare LLC 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
INSURED Cummins Cederberg, Inc. 201 Alhambra Circle, Suite 601 Coral Gables FL 33134	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: American Casualty Co-Reading — 20427 INSURER B: Continental Insurance Company — 35289 INSURER C: Benchmark Ins Co — 41394 INSURER D: Pacific Insurance Company Ltd — 10046 INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: 23-24 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:			7034507431	09/26/2023	09/26/2024	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 $ 15,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY X HIRED AUTOS ONLY SCHEDULED AUTOS X NON-OWNED AUTOS ONLY			7034507445	09/26/2023	09/26/2024	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	$ $
C	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		MWC2200075-01	09/26/2023	09/26/2024	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
D	Professional Liability / Pollution Incident Liability (Claims-Made)			OH046445623	09/30/2023	09/26/2024	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	CANCELLATION
~Evidence of Insurance c/o Cummins Cederberg, Inc. 201 Alhambra Circle, Suite 601 Coral Gables FL 33134	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 Patricia Marie Schmaltz

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, Florida 33040

August 17, 2021

Ms. Gina Chiello
Cummins Cederberg, Inc.
140 Intracoastal Pointe Drive, Suite 208
Jupiter, FL 33477

Dear Ms. Chiello:

The National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries (ONMS) has approved the issuance of permit amendment number FKNMS-2018-168-A1 to conduct activities in Florida Keys National Marine Sanctuary (sanctuary). This amendment supersedes all previous permits or amendments for this activity. Activities are to be conducted in accordance with the permit application and all supporting materials submitted to the sanctuary, and the detailed terms and conditions of permit number FKNMS-2018-168-A1 (enclosed).

You are responsible for reviewing and understanding all terms and conditions of this amendment. However, the changes made in this amendment from the previous permit or amendment can be summarized as follows:

- The permit expiration date has been extended to February 21, 2024.
- Permitted Activity Description #2 has been added to authorize coral relocation activities at the direction of FKNMS.
- Special Conditions #3 and 4 have been added related to coral relocation and the remaining Special Conditions have been renumbered accordingly.
- Special Condition #6 has been changed to provide an updated link for dive gear decontamination protocols.
- Special Condition #11 has been updated with the new permit number.
- Special Condition #12 has been added to reference the permit and amendment applications.

This permit is not valid until signed and returned to the ONMS. Retain one signed copy and carry it with you while conducting the permitted activities. Additional copies must be signed and returned, by either mail or email, to the following individual within 30 days of issuance and before commencing any activity authorized by this permit:

Joanne Delaney
Permit Coordinator
Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, Florida 33040
Joanne.Delaney@noaa.gov

Your permit contains specific terms, conditions and reporting requirements. Review them closely and fully comply with them while undertaking permitted activities.

If you have any questions, please contact Joanne Delaney at Joanne.Delaney@noaa.gov. Thank you for your continued cooperation with the ONMS.

Sincerely,

Sarah Fangman
Superintendent

Enclosure

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Florida Keys National Marine Sanctuary
33 East Quay Road
Key West, Florida 33040

FLORIDA KEYS NATIONAL MARINE SANCTUARY
PERMIT TO ASSIST IN SANCTUARY MANAGEMENT

Permittee:
Ms. Gina Chiello
Cummins Cederberg, Inc.
140 Intracoastal Pointe Drive, Suite 208
Jupiter, FL 33477

Permit Number: FKNMS-2018-168-A1
Effective Date: August 17, 2021
Expiration Date: February 21, 2024

Project Title: Benthic resource surveys in Florida Keys National Marine Sanctuary

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This permit is issued for activities in accordance with the National Marine Sanctuaries Act (NMSA), 16 USC §§ 1431 *et seq.*, and regulations thereunder (15 CFR Part 922). All activities must be conducted in accordance with those regulations and law. No activity prohibited in 15 CFR Part 922 is allowed except as specified in the activity description below.

Subject to the terms and conditions of this permit, the National Oceanic and Atmospheric Administration (NOAA), Office of National Marine Sanctuaries (ONMS) hereby authorizes the permittee listed above to conduct assist in sanctuary management activities within Florida Keys National Marine Sanctuary (FKNMS or sanctuary). All activities are to be conducted in accordance with this permit and the permit applications received November 8, 2018 and May 13, 2021. The permit application is incorporated into this permit and made a part hereof; provided, however, that if there are any conflicts between the permit application and the terms and conditions of this permit, the terms and conditions of this permit shall be controlling.

Permitted Activity Description:
The following activities are authorized by this permit**:**

1. Temporary deployment of equipment on the seafloor, including transects, quadrats, marker blocks and rebar stakes, associated lines and buoys, cameras, and other materials.

2. Relocation of stony corals of various species that are attached to loose substrate (e.g., rocks), relocation of corals by chipping and reattaching using suitable adhesives, and/or chipping and moving corals to nursery(ies), only as directed by FKNMS staff.

No further activities prohibited by sanctuary regulations are allowed.

Permitted Activity Location:
The permitted activity is allowed only in the following locations:

Nearshore waters throughout FKNMS, exclusive of the FKNMS fully-protected zones.

Special Terms and Conditions:

1. All surveys shall be conducted in accordance with the FKNMS Benthic Survey Protocols.

2. No activities are allowed in any Sanctuary Preservation Area, Special Use (Research Only) Area, or Ecological Reserve.

3. The relocation/removal of coral colonies shall occur only under the direction of FKNMS staff. Documentation of coral relocation may be required.

4. The permittee is responsible for obtaining any necessary Florida Fish and Wildlife Conservation Commission (FWC) Special Activities License(s) to authorize coral relocation, and copies of all licenses shall be forwarded to FKNMS (Joanne.Delaney@noaa.gov).

5. This permit does not authorize activities in any state park, state aquatic preserve, national wildlife refuge, or other protected area that may overlap sanctuary waters but have additional jurisdictional authority. The permittee is responsible for obtaining any additional permit(s) or permission that may be needed to conduct surveys in these areas.

6. The permittee shall adhere to the detailed dive gear decontamination guidelines found at https://floridakeys.noaa.gov/coral-disease/citizen-participation.html (or other decontamination protocols as advised by FKNMS) during all dives in the sanctuary to avoid inadvertently spreading pathogens associated with the stony coral tissue loss disease (see https://floridakeys.noaa.gov/coral-disease/disease.html for information). Adherence to the decontamination guidelines is critical when traveling between infected and uninfected locations or countries.

7. All materials deployed on the seafloor shall be removed upon the conclusion of each benthic survey or monitoring event. Site markers must be removed as soon as possible based on permitting and/or construction schedules. The permittee is responsible for ensuring that all markers are removed from each site.

8. In the event of a hurricane or other severe weather, the permittee shall retrieve, upon request of the sanctuary, any materials placed on the seafloor.

9. Any accidental damage to stony corals or other marine resources during the course of benthic surveys or coral relocation or monitoring shall be reported immediately to FKNMS. Contact Joanne Delaney at (305) 809-4714 for notification of damage.

10. The permittee shall submit a final report of activities thirty (30) days after the permit expires or (30) days prior if a renewal is desired. The report shall consist of a summary of activities conducted under this permit including the date and location of all benthic surveys conducted, details on any coral relocation conducted (date, location, species, sizes, relocation site, monitoring data), and status of equipment placed on the seafloor. The report shall be submitted to Joanne Delaney (Joanne.Delaney@noaa.gov), FKNMS Permit Coordinator. In addition to the required report, the permittee shall provide raw data resulting from activities conducted under this permit at the request of FKNMS.

11. Any reports and/or publications resulting from activities conducted under the authority of this permit shall include the notation that the activity was conducted under permit number FKNMS-2018-168-A1. Copies of / links to any publications that result from work conducted under this permit shall be submitted to Joanne Delaney (Joanne.Delaney@noaa.gov), FKNMS Permit Coordinator. Additionally, the permittee and their respective institution(s) are required to acknowledge during any media coverage (press releases, video/photo, social media, or other means) that activities occurred within the FKNMS and under permit. Boilerplate language on the sanctuary is available by request; contact Joanne Delaney as needed.

12. All activities are to be conducted in accordance with the Permitted Activity Description, Permitted Activity Location, and all Special Terms and Conditions of this permit. Activities that are not explicitly addressed in this permit shall be conducted in accordance with the specific methods detailed in the permit applications submitted to NOAA FKNMS on November 8, 2018 and May 13, 2021 and any additional information submitted or follow-up correspondence between the permittee and NOAA FKNMS. If any changes are made to the project methods or if methods deviate from those provided to NOAA FKNMS, the permittee shall notify NOAA FKNMS. Upon such notification, NOAA FKNMS shall re-review the project and provide a supplementary determination.

General Terms and Conditions:

1. Within 30 (thirty) days of the date of issuance, the permittee must sign and date this permit for it to be considered valid. Once signed, the permittee must send copies, via mail or email, to the following individual:

   Joanne Delaney
   Permit Coordinator
   Florida Keys National Marine Sanctuary
   33 East Quay Road
   Key West, Florida 33040
   Joanne.Delaney@noaa.gov

2. It is a violation of this permit to conduct any activity authorized by this permit prior to the ONMS having received a copy signed by the permittee.

3. This permit may only be amended by the ONMS. The permittee may not change or amend any part of this permit at any time. The terms of the permit must be accepted in full, without revision; otherwise, the permittee must return the permit to the sanctuary office unsigned with a written explanation for its rejection. Amendments to this permit must be requested in the same manner the original request was made.

4. All persons participating in the permitted activity must be under the supervision of the permittee, and the permittee is responsible for any violation of this permit, the NMSA, and sanctuary regulations for activities conducted under, or in conjunction with, this permit. The permittee must assure that all persons performing activities under this permit are fully aware of the conditions herein.

5. This permit is non-transferable and must be carried by the permittee at all times while engaging in any activity authorized by this permit.

6. This permit may be suspended, revoked, or modified for violation of the terms and conditions of this permit, the regulations at 15 CFR Part 922, the NMSA, or for other good cause. Such action will be communicated in writing to the applicant or permittee, and will set forth the reason(s) for the action taken.

7. This permit may be suspended, revoked or modified if requirements from previous ONMS permits or authorizations issued to the permittee are not fulfilled by their due date.

8. Permit applications for any future activities in the sanctuary or any other sanctuary in the system by the permittee might not be considered until all requirements from this permit are fulfilled.

9. This permit does not authorize the conduct of any activity prohibited by 15 CFR Part 922, other than those specifically described in the "Permitted Activity Description" section of this permit. If the permittee or any person acting under the permittee's supervision conducts, or causes to be conducted, any activity in the sanctuary not in accordance with the terms and conditions set forth in this permit, or who otherwise violates such terms and conditions, the permittee may be subject to civil penalties, forfeiture, costs, and all other remedies under the NMSA and its implementing regulations at 15 CFR Part 922.

10. Any publications and/or reports resulting from activities conducted under the authority of this permit must include the notation that the activity was conducted under National Marine Sanctuary Permit FKNMS-2018-168-A1 and be sent to the ONMS official listed in general condition number 1.

11. This permit does not relieve the permittee of responsibility to comply with all other federal, state and local laws and regulations, and this permit is not valid until all other necessary permits, authorizations and approvals are obtained. Particularly, this permit does not allow disturbance of marine mammals or seabirds protected under provisions of the Endangered Species Act, Marine Mammal Protection Act, or Migratory Bird Treaty Act. Authorization for incidental or direct harassment of species protected by these acts must be secured from the U.S. Fish and Wildlife Service and/or NOAA Fisheries, depending upon the species affected.

12. The permittee shall indemnify and hold harmless the Office of National Marine Sanctuaries, NOAA, the Department of Commerce and the United States for and against any claims arising from the conduct of any permitted activities.

13. Any question of interpretation of any term or condition of this permit will be resolved by NOAA.

Your signature below, as permittee, indicates that you accept and agree to comply with all terms and conditions of this permit. This permit becomes valid when you, the permittee, countersign and date below. Please note that the expiration date on this permit is already set and will not be extended by a delay in your signing.

gina Chiello

August 17, 2021

Ms. Gina Chiello — Date
Cummins Cederberg, Inc.

M. Sarah Fangman

August 17, 2021

Sarah Fangman — Date
Superintendent
Florida Keys National Marine Sanctuary

February 1, 2024

JACOBS
550 W Cypress Creek Road, Suite 400
Fort Lauderdale, Florida, 33309

Attention: Mr. Erik Jorgensen. P.E.

Re: **Proposal for Geotechnical Services**
Fogarty Avenue and 3rd. Street Stormwater Improvements
City of Key West, Florida
GEOSOL Proposal No. P-224106

Dear Mr. Jorgensen.:

In accordance with your request on February 1, 2024, Geosol, Inc. (GEOSOL) is pleased to submit this proposal for geotechnical services for the above-referenced project. The enclosed proposal includes an estimate of the work effort and our anticipated approach, based on our understanding of the project.

PROJECT INFORMATION

As we understand it, based on a scope document provided by Jacobs on February 1, 2024, The City of Key West is planning the design to mitigate flooding in northwest New Town where repeated flood losses have occurred. The low-lying landscape of the area and the existing drainage infrastructure are insufficient to prevent flooding. Deeper runoff staging occurs at the intersections of 3rd Street and Fogarty Avenue, and along 4th Street at Patterson and Harris Avenues. The bowl-like terrain is low along Fogarty and extends from 1st Street to the west, 5th Street to the east, and to Seidenberg Avenue to the south. U.S. 1, N. Roosevelt Blvd, is the northern boundary acting as a sea barrier. While the existing 36-inch outfall into Garrison Bight at 4th Street serves U.S. 1 well, it is undersized to serve the neighborhood. Much of the existing pipe network in the neighborhood is undersized.

Jacobs has studied this area and defined potential long-term needs, including new stormwater pumps, larger diameter drainage pipes, and a new larger outfall discharging to Garrison Bight that will be routed under U.S. 1. Jacobs provided a project description for the study area in the 2024 Stormwater Master Plan. The ultimate project's scope of improvements includes the design of stormwater infrastructure that involves drainage pipes and inlets; Class V injection wells; a stormwater pump station with equipment platform; a standby generator with associated controls; an emergency ocean outfall force main; roadway restoration, including signing, striping; utility coordination; and cost estimating. However, due to funding constraints, an interim Phase 1 project will be designed that is gravity-based but will consider future phasing to incorporate the ultimate scope.

Below is a summary of the field exploration program requested by Jacobs.

- Perform standard penetration test (SPT) borings for proposed drainage infrastructure.
- Perform SPT borings at proposed pump station location. Generally, as approved by the CITY, these borings will be conducted near intersections in the project area.
- Collect asphalt pavement cores.
- Perform SPT borings to determine the thickness and characteristics of base and subgrade materials across the site. Generally, as approved by the CITY, these pavement cores will be mid-block on several roads where work will occur.

GEOSOL, Inc.
5795-A N.W.151st Street
Miami Lakes, FL 33014
Phone (305) 828-4367; Fax (305) 828-4235
E-mail: geosolusa@bellsouth.net

SCOPE OF SERVICES

General

As requested, geotechnical services will be required consisting of the performance of Standard Penetration Test (SPT) borings along the alignment for the proposed tidal barrier wall. The following section provides a discussion regarding the proposed geotechnical investigation program.

Field Exploration and Laboratory Testing Programs

1. Perform site reconnaissance, locate and coordinate for existing utilities that may interfere with the drilling operations.

2. Provide traffic control in accordance with the Index 600 series of the FDOT Roadway and Traffic Design Standards.

3. Perform eight (8) standard penetration test (SPT) borings to depths of 15 feet below grades for proposed drainage infrastructure.

4. Perform two (2) SPT borings to 25-ft deep at proposed pump station location. Generally, as approved by the CITY, these borings will be conducted near intersections in the project area.

5. Collect twelve (12) pavement cores.

6. Perform twelve (12) standard penetration test (SPT) borings to three (3) feet in depth to determine the thickness and characteristics of base and subgrade materials across the site. Generally, as approved by the CITY, these pavement cores will be mid-block on several roads where work will occur.

7. Backfill the boreholes using cement grout mix.

8. Visually examine all recovered soil/rock samples and asphalt pavement specimen in the laboratory. A geotechnical engineer will examine all recovered soil and rock samples.

The location of the tests will be determined and paint marked during a site walk through with a City of Key West representative prior to commencing work.

Traffic Control

The work will be coordinated to minimize the amount of traffic disruption. Flagmen, barricades, signs, cones and off-duty police officers will be used in accordance with Index 600 Series of the FDOT Roadway and Traffic Design Standards to allow for continuous traffic flow. Based on our site review, some test locations may need to be performed adjacent to on-going traffic and/or lane closure. We are anticipating that the borings pavement coring will require MOT.

REPORTING

The data will be used in performing geotechnical engineering evaluations and developing foundation recommendations in the following areas:

1. Location of Borings with GPS coordinates
2. Identification of groundwater levels.
3. Estimation of seasonal high groundwater tables (SHGWT).
4. Discussion of some critical design or construction considerations based on the subsurface conditions developed from the test borings.
5. A review of surface features and site conditions that could affect construction and site preparation.
6. General evaluation of the site considering the proposed project and estimated subsurface conditions.
7. Foundation analysis and recommendations for the proposed tidal barrier wall.
8. Construction considerations.

Geotechnical Report

A geotechnical report will be prepared for this study to summarize the course of the study pursued and for support of the design plans. The report will contain the results of the field and laboratory testing data generated, and subsurface conditions encountered. The reports will contain the results of the SPT borings, pavement coring, as well as geotechnical recommendation for the proposed improvements.

SCHEDULE

Our study can begin within one (1) day upon receiving your formal notice to proceed. We will begin by calling SunShine One Call Services to have underground utilities marked and cleared. This task typically takes up to five (5) days. Any permit required by the city will take an additional five (5) days. Given the scope described herein, we can complete the field study for the site within eight (8) working days. The laboratory testing can be completed within a period of five (5) working days. The geotechnical reports can be completed in ten (10) working days after completion of the laboratory testing program. Therefore, we can complete the requested services in about six (6) weeks period upon receiving Notice to Proceed.

FEES

Based on our general knowledge and an interpretation of your requirements, we are willing to complete the subsurface exploration and report preparation for the subject site for a total sum of $33,199.00. We have enclosed a detailed Fee Proposal for your review in Attachment 1.

GEOSOL appreciates your consideration of our firm to undertake this project. If you have any questions, please do not hesitate to contact us.

Sincerely,
GEOSOL, INC.

Oracio Riccobono, P.E.
Chief Geotechnical Engineer
President

Adnan Ismail, P.E.
Senior Geotechnical Engineer

Attachment 1 – Fee Proposal

ATTACHMENT 1

FEE PROPOSAL

GEOSOL, INC.

FEE PROPOSAL FOR GEOTECHNICAL SERVICES
Fogarty Ave. and 3rd. St. Stormwater Improvs.
City of Key West, Florida

GEOSOL PROPOSAL No. P-224106

DESCRIPTION	UNITS	# OF UNITS	UNIT RATE ($)	TOTAL $
1. MOBILIZATION/DEMOBILIZATION				
Mobilization of Truck Mounted Drill Rig	each	1	$1,200.00	$1,200.00
Traffic Control- Cones, Flags, Barricades,etc	day	8	$250.00	$2,000.00
Traffic Control- Arrow Board	day	8	$175.00	$1,400.00
Traffic Control- Off-duty Police Officer	day	8	$550.00	$4,400.00
Engineering Technician (Boring Layout, Utility Clearance, Field Meetings, & MOT Set-up)	hour	64	$95.00	$6,080.00
SUB-TOTAL (MOBILIZATION/DEMOBILIZATION)				**$15,080.00**
2. FIELD INVESTIGATION				
Eight (8) standard penetration test (SPT) borings to depths of 15 feet below grades for proposed drainage infrastructure.	feet	120	$15.00	$1,800.00
Two (2) SPT borings to 25-ft deep at proposed pump station location	feet	50	$15.00	$750.00
12 SPT borings to 3 feet to determine hickness &characteristics of base and subgrade materials	feet	36	$15.00	$540.00
12 Asphalt pavement cores	each	12	$125.00	$1,500.00
Grout Seal Boreholes	feet	206	$6.50	$1,339.00
Visual Classification of Samples (By Engineering Intern)	hour	6	$125.00	$750.00
SUB-TOTAL (FIELD EXPLORATION)				**$6,679.00**
4. LABORATORY PROGRAM				
Natural Moisture Test	each	8	$15.00	$120.00
Grain Size Analysis (Full Gradation - w/o -200 Sieve)	each	8	$70.00	$560.00
Fine Content Determination - Single Sieve (-200 Sieve)	each	8	$45.00	$360.00
Organic Content Determination	each	6	$50.00	$300.00
Corrosion Series (pH, Chloride, Sulfate & Resist.)	each	2	$165.00	$330.00
SUB-TOTAL (LABORATORY TESTING)				**$1,670.00**
TOTAL FIELD AND LABORATORY PROGRAM				**$23,429.00**
5. ENGINEERING AND TECHNICAL SERVICES				
Senior Geotechnical Engineer	hour	14	$225.00	$3,150.00
Project Geotechnical Engineer	hour	20	$175.00	$3,500.00
Engineering Intern	hour	16	$125.00	$2,000.00
CADD Technician	hour	8	$105.00	$840.00
Clerical	hour	4	$70.00	$280.00
SUB-TOTAL (ENGINEERING SERVICES)				**$9,770.00**
TOTAL GEOTECHNICAL FEES FOR PROJECT				**$33,199.00**

JACOBS

PROPOSAL

GPRS is the nation's premier company specializing in the detection of underground utilities and underground storage tanks, video pipe inspection, leak detection and the imaging of concrete structures. Our services enable your projects to stay safe, on time and on budget.

SIM-CERTIFIED FIELD STAFF

Our SIM-Certified Project Managers are equipped with the latest technology, industry leading training and a methodology that has produced over 99.8% accuracy on over 300,000 projects. Visit SIMSPEC.ORG today for details.

NATIONWIDE FOOTPRINT

GPRS is the largest company of our kind. With highly trained Project Managers across America we can provide rapid response to your job site — wherever it may be located.

CONSULTATIVE APPROACH

GPRS Project Managers are trained to help you remove barriers that could impact your project being safe, on time and on budget. They provide industry-leading deliverables such as CAD, 3D drawings, NASSCO reports, and a .KMZ and .PDF map is included with every utility locating project which accelerates planning, organizes operations and increases communication.

VISUALIZING THE BUILT WORLD™

ABOVE AND BELOW GROUND

February 12, 2024
Client: JACOBS
Project Address: 3rd Street, Key West, FL 33040
Quote Number: GPRSQUOTE-115322
GPRS Opportunity Name/Number: 239039

Submitted By:
Caleb Dachenhaus
To schedule, please email:
floridainfo@gprsinc.com

GPRS appreciates the opportunity to provide this proposal. We encourage you to visit our website (www.gprsinc.com) and contact any of the numerous references listed. Our insurance certificate and W-9 can also be downloaded here. Please feel free to contact us if you have any questions or need additional information.

Scope of Work

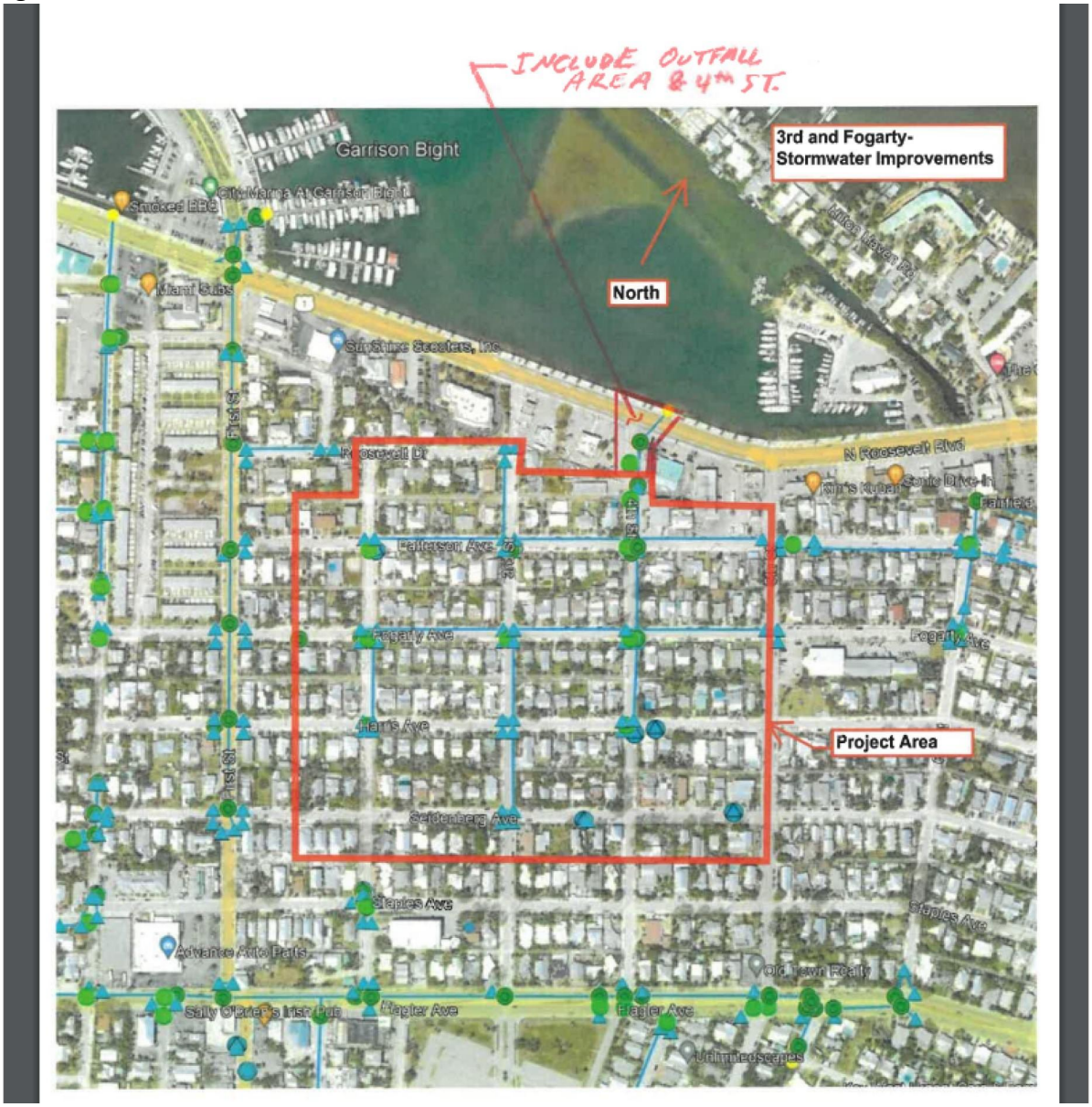
Soil Bore Scan: We understand the scope of work on this project is to search for underground utilities around soil bores, as listed in the table below. We will attempt to trace any utilities for which structures are visible from the work area. Utilities will be marked on the surface using spray paint or other appropriate means. The client will be responsible for providing drawings or notifying GPRS of any utilities known to be entering the work area for which there are no apparent surface features or structures that are visible from the work area. To avoid additional charges, the areas should be laid out, marked, and cleared of obstructions prior to our arrival.

Soil Bore Count	Scan Area Radius
30 Soil Bores	10 ft. radius around each

Equipment

- **Underground Scanning GPR Antenna.** This GPR Antenna uses frequencies ranging from 250 MHz to 450 MHz and is mounted in a stroller frame that rolls over the surface. Data is displayed on a screen and marked in the field in real-time. The surface needs to be reasonably smooth and unobstructed to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the efficacy of GPR. The total effective scan depth can be as much as 8’ or more with this antenna but can vary widely depending on the soil conditions and composition. Some soil types, such as clay, may limit maximum depths to 3’ or less. As depth increases, targets must be larger to be detected, and non-metallic targets can be challenging to locate. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: Link
- **Electromagnetic Pipe Locator.** This receiver can passively detect the signals from live AC power or radio signals traveling along some conductive utilities. Operators can connect a transmitter directly to accessible metallic pipes, risers, or tracer wires to generate a current at a specific frequency. The receiver can then detect the resulting signal along the pipe or tracer wire. Various factors may impact this device's effectiveness, including (but not limited to) access to the utility, conductivity, grounding, and interference from other utilities. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: Link
- **Traceable Rodder.** The rodder consists of a copper wire encased in fiberglass. This device is pushed through a pipe with direct access, such as a sewer line at a cleanout or a storm drain catch basin. Operators then induce a current on the wire and trace the signal from the surface. The maximum traceable depth is 10’ depending on the soil conditions, and the maximum distance is 200’. Inserting the rodder into deeper pipes within manholes may not be feasible depending on site conditions. GPRS will not access electrical conduits. The signal is not detectable through metallic pipes. For more information, please visit: Link
- **GPS.** This handheld unit offers accuracy down to 4 inches; however, the accuracy achieved will depend on the satellite environment at the time of collection and is not considered survey-grade. Features can be collected as points, lines, or areas and then exported as a KML/KMZ or overlaid on a CAD drawing. For more information, please visit: Link

Supporting Documentation



Project Costs

SERVICE	DESCRIPTION
Soil Boring	Described in Scope of Work
Mobilization - Utility Locating	
TOTAL	**$ 6,250.00**

General Terms & Conditions

This proposal is subject to the General Terms and Conditions for Services of Ground Penetrating Radar Systems, LLC (GPRS) posted at Link (the "Terms and Conditions") and is hereby incorporated by reference into and made a part of this proposal. Customer acknowledges it has read and agrees to be bound by such Terms and Conditions. In the event of any conflict between the terms of this proposal and the Terms and Conditions, the Terms and Conditions will prevail. Customer also acknowledges that GPRS may, from time to time and at its discretion, modify the Terms and Conditions and Customer agrees to be bound by such Terms and Conditions as modified.

1. Customer agrees to meet and perform all requirements described in this document and has fully read and understands all items listed within this document including the proposal-specific Assumptions.
2. It is the customer's responsibility to prepare the site for scanning, including clearly identifying areas to be scanned, securing access to all areas required for scanning, and keeping these areas clear and free of obstructions. Delays caused by customer's failure to do so may result in an increased price.
3. GPRS does not conduct an investigation, analysis, or interpretation of soil composition, soil/concrete conditions, or geophysical, geological, engineering, or land surveying information. Customer acknowledges it understands that we are merely reporting retrieved data and that we do NOT provide geophysical, geological, engineering, or land surveying services. Customer should contact a professional in those fields if such services are needed.
4. If any work to be performed is within a road or street, unless specifically included by GPRS within this proposal, it is the customer's responsibility to provide adequate traffic control to allow GPRS' personnel to safely and efficiently work in the road/street.
5. If this proposal is not accepted within 90 days of February 12, 2024, the pricing may be subject to review.
6. If for some reason the technician arrives on site and the work is cancelled there will be a charge of $500 per requested technician.
7. If your project is in WV, SD, NM, or HI: State sales tax is not included in the total on this proposal, but will be included on the invoice.
8. Payment Terms are Net 30; or as specified if a current Master Service Agreement is in place.

Accepted and Agreed

Company Phone/Email:_____PO#:_____Job#:_____

Print Name:_____Signature:_____Date:_____

Project-Specific Assumptions

- Standard full-day rates are based on an 8-hour workday. Time-on-site in excess of 8-hours will be billed at overtime rates.
- This price assumes that we will be given access to perform the work during weekday business hours (6am-5pm). Work performed outside of this is billed at time and a half.
- All of our technicians have OSHA-10 safety training or greater. Site-specific safety training is not included in this quote. Please notify us if this project requires additional safety training.
- As-builts and any other applicable drawings shall be made available to GPRS prior to the project.
- The equipment listed in this proposal is the standard recommended equipment for your project. Depending on site conditions, your GPRS Project Manager may use all of the equipment listed or a subset thereof on your project. At their discretion, they may also employ additional tools not listed above to provide you with the best results possible.
- A thorough utility search can only be completed if GPRS is given access to all utility structures, interior and exterior. This service is never a replacement for the use of the state One Call system (811).
- If your project includes scanning an elevated concrete slab: Some slabs may not be completely penetrable from the top only and would need to be scanned from both top and bottom and should be considered an unforeseen circumstance that would incur additional time onsite and charges.
- If your project includes scanning a wall or elevated concrete slab: Ladders, manlifts, or safe access for scanning wall or ceiling locations is the responsibility of the client.
- If your project includes scanning a concrete slab with roofing material or other surface obstructions, these obstructions should be removed by the customer or customer's representative prior to our arrival. GPRS will need direct access to the surface of the concrete to obtain optimal results.
- These rates assume that there are no certified payroll requirements. GPRS has not been notified of any PLA, DIR, or Certified Payroll requirements. If GPRS receives notice that any of these conditions exist, there will be additional costs.