

TASK ORDER 11-23

ENGINEERING DESIGN, PERMITTING, AND BID PHASE FOR THE INSTALLATION OF A GRINDER AT WASTEWATER PUMP STATION F

This TASK ORDER 11-23 is issued under the terms and conditions of the MASTER AGREEMENT TO PROVIDE GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and Jacobs Engineering Group, Inc. ("CONSULTANT") executed on March 29th, 2023.

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the "Scope of Services". This Task Order, when executed, shall be incorporated in and shall become an integral part of the AGREEMENT.

B. TIME OF COMPLETION

Start date for this project will be no later than ten days after execution of this authorization. The duration of this TASK ORDER is estimated in forty-nine (49) weeks.

C. COMPENSATION


Compensation for Labor portion of Task A TASK ORDER TO-11-23, will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for other direct charges will be on Cost Reimbursable basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT. The estimated compensation is shown as Attachment A.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 11-23 and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES."

For Jacobs Engineering

For City of Key West



Jill Rankin, P.E.
Manager of Projects

Albert P. Childress
City Manager

RR

 3/20/2024

Axel Rivera, PE, PMP
Senior Project Manager

Dated the _____ day of _____, 2024.

ATTEST:

TASK ORDER 11-23
ENGINEERING DESIGN, PERMITTING, AND BID PHASE FOR THE INSTALLATION OF A GRINDER AT
WASTEWATER PUMP STATION F

SCOPE OF SERVICES

Background

The City of Key West (CKW) owns and operates twenty-five wastewater pump stations responsible for conveying wastewater flows to the Richard A. Heyman Environmental Protection Facility. Pump Station F is part of those twenty-five facilities. CKW has been experiencing ongoing clogging problems at Pump Station F. The existing pumps are frequently getting clogged with rags and other solids, requiring immediate attention from the City Operations and Maintenance Staff. Also, this situation is increasing the possibility of wastewater overflows if the pumps cannot be unclogged quickly. To resolve the clogging issues, the City wants to install a Grinder upstream of the existing pumps to cut into smaller pieces any rags or solids that could clog the pumps.

The proposed scope of work is for the CONSULTANT to develop construction documents for the installation of a Grinder at Pump Station F. The Construction work will include the following:

1. Installation of a Grinder and all required supports and rails.
2. Installation of electrical and control infrastructure for the Grinder. This includes electrical and control conduits and wires, power panel, control panel, disconnect switch, etc.
3. Structural work inside the existing wet well for the installation of the Grinder.
4. Installation of a Temporary By-Pass system to redirect flow during the installation of the Grinder. Identify possible location for temporary bypass installation.

Task A – Design Documents

Subtask A.1 –Intermediate Design, 60% Design

The Consultant team will conduct a virtual kickoff meeting with CKW to review the scope of work and initiate the collection of any missing relevant information, such as pump station average and peak flows.

The Consultant will select the new Grinder for the Pump Station based on the data, information, and as-built drawings obtained from CKW. A visit to the pump station will be conducted to confirm the location and dimensions of the available space for the Grinder installation. Also, the availability of the required electrical power to energize the Grinder will be confirmed during the visit.

Based on the comments received in the kickoff meeting, the data provided by the CKW and the site visit, the CONSULTANT will prepare the 60 percent design documents.

To maintain an expedited schedule, it is assumed that one set of written comments from the CKW reviewers to the Consultant will be provided within two weeks of submission.

The Consultant will conduct a one-hour virtual design review meeting with CKW staff to discuss comments on the 60% design documents. Accepted CKW's comments will be incorporated in the next design phase.

Deliverables (issued electronically in .pdf format)

1. A Request for Information (RFI) to gather the relevant information and other information discussed during the kickoff meeting.
2. Baseline Project Schedule and Updated Project Schedule.
3. Plan and profile of proposed improvements.
4. Design drawings up to 60% and technical specifications for major equipment.
5. Draft list of proposed technical specifications.
6. Class 3 AACE International construction cost estimate.
7. Meeting agenda and design review meeting minutes including 60% comments.

Subtask A.2 – 90% Design

The CONSULTANT will progress the design up to 90 percent and incorporate the comments received on the 60 percent design. This deliverable includes the preparation of required design drawings and technical specifications. The CONSULTANT will conduct a one-hour virtual design review meeting with CKW to discuss comments on the 90% design documents. The comments received from this meeting will be incorporated into the 100% Design Documents. The CONSULTANT is anticipating receiving one set of comments from the CITY.

After submitting the 90 percent design documents, the CONSULTANT will prepare a Class I Cost Estimate.

Deliverables (issued electronically in .pdf format)

1. 90 percent Design Drawings (11" x 17") and Technical Specifications.
2. Class 1 AACE International construction cost estimate.
3. Updated schedule in electronic format (PDF) and one hard copy.
4. Meeting agenda and design review meeting minutes including 90% comments.

Subtask A.3 – 100% Design

The CONSULTANT will complete the plans and specifications up to 100 percent based on the 90 percent review comments. Only minor comments from the 90 percent design are anticipated.

Deliverables (issued electronically in .pdf format)

1. 100 percent Design Drawings (11" x 17") and Technical Specifications.

Subtask A.4 – Permitting

CONSULTANT will prepare a letter for FDEP stating the proposed improvements to PS "F" and request confirmation that a permit is not required. The CONSULTANT will submit a draft of the proposed letter to the CKW for review and comments. No permitting applications are included in this scope of work.

Deliverables (issued electronically in .pdf format)

An electronic copy of the FDEP letter.

Task B – Limited Construction Phase Engineering Services

The CONSULTANT will provide engineering support to assist the CITY during the construction of the project. The services include the review of submittals and requests for information (RFI), substantial completion inspection and preparation of record drawings, which are described in more detail below:

1. CONSULTANT'S project manager to attend one (1) preconstruction meeting.
2. CONSULTANT'S project manager to attend construction progress meetings once a month. This scope and fee assume a total of 8 monthly progress meetings over the duration of the project.
3. Review of shop drawings and other data that the Contractor is required to submit. CONSULTANT shall review and approve or take other appropriate action upon Contractor's submittals such as shop drawings, product data and samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents. CONSULTANT will reasonably rely upon the accuracy and completeness of the information provided. Reviews shall be completed within 14 calendar days after the package is transmitted electronically by the CITY to the CONSULTANT. It is assumed that the Contractor shall submit complete and timely shop drawings. This scope and fee assume a total of 6 submittals (see attachment "C" for the list of anticipated submittals) with 3 resubmittals. As requested by the City of Key West, only electrical submittals and some mechanical and structural submittals will be review by Jacobs.
4. Provide technical interpretations of the drawings, specifications, and Contract Documents, and evaluate requested deviations from the approved design or specification. This scope and fee assume a total of 6 requests for information (RFIs).
5. Review of Contractor's as-built drawings and preparation of Record Drawings.
6. Attendance to the Substantial Completion Inspection and preparation of electrical work punch list items.

The assumed construction duration is 8 months.

Deliverables (electronically, in pdf format):

1. Electrical work punch list items.
2. Record Drawings.

CKW’s Responsibilities

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

1. Prompt review and comment on all deliverables (within ten working days of document reception).
2. Facilitate access to required facilities.
3. Attendance of key personnel at meetings as requested.
4. Contract and manage the construction contract with selected contractor.

Completion Dates

The design Phase may begin within ten days from the NTP. Periods of performance shown below are assumed to run consecutively, with the Kick-off meeting occurring within two weeks of receiving NTP.

Task Name	Task Start (wk)	Task End (wk)	Task Duration (wk)
Task A – Design Documents			
Kickoff Meeting	1	1	1
Subtask A.1 – Intermediate Design 60%	2	8	7
Subtask A.1 – Reviewal period	9	10	2
Subtask A.2 – 90% Design	11	14	4
Subtask A.2 – Reviewal period	15	16	2
Subtask A.3 – 100% Design	17	17	1
Subtask A.4 – Permitting (after 90% Design)	15	16	2

Task B – Limited Construction Phase Engineering Services	18	49	32
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The estimated project duration is 49 weeks.

Assumptions

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

1. The services in the Task Order will be considered complete once the 100% Design Drawings and Technical Specifications are delivered to the CITY and Limited Services During Construction are completed.
2. Bid Phase Services are not included in this Scope of work.
3. Limited Services During Construction are included in this Scope of Work.
4. The design 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 to scope.
5. Existing utilities have been constructed in accordance with provided record documentation. Design of existing structures complied with governing codes at time of original design, not necessarily the current ones.
6. The design documents will be prepared for a single construction contract.
7. The CONSULTANT master specifications will be used as the basis for all technical sections in Divisions 1 through 49.
8. Legal, easement, or plat surveys are not included in the scope of work. If additional property is required, it shall be the responsibility of the CITY to obtain it.
9. This Task Order assumes that no FDEP permit is required, and it does not include any Building Department permit application. If permits are required, negotiated, and agreed, the CONSULTANT will not be responsible for delays associated with regulatory agencies unless caused by CONSULTANT.
10. The construction contract will be awarded after the first bidding process. Re-bidding will be considered as an Additional Service.
11. This Task Order anticipates that submittal review comments that can significantly impact the design plans and technical specifications shall be provided during the 30, 60 and 90 percent review stages. Due to this, significant revision or addition requests received after the approval of the 30, 60 and 90 percent submittals will require a negotiation to compensate for the additional effort not included in the economic proposal. To avoid significant revisions, The CITY will authorize CONSULTANT in writing to proceed to the next design milestone (i.e., 30% to 60%).
12. CITY will assist the CONSULTANT with any available survey data, record drawings, and historical information. CAD native files of survey and record drawings, include updated site plan, including recent

improvements, spot elevations, main utilities.

13. Demolition plans will be prepared based on available record drawings provided by CKW.
14. CITY will provide CONSULTANT with consolidated written review comments following receipt of deliverables (design review workshops, reports, permit applications) and completion of the submittal review within 10 working days.
15. No Architectural, Hydraulic, or Landscaping disciplines are included in this scope. If these services are required, the additional scope of work will be negotiated.
16. CONSULTANT will provide detailed minutes of meetings to all attendees within ten working days of meetings. After allowing five working days with no comments, the CONSULTANT will assume the minutes as final.
17. BIM modeling is not included in this Scope of Work.
18. Ground modification techniques, deep foundations or specialized foundation systems are not included in this Scope of Work. If those services are deemed necessary after the geotechnical analysis is finalized, renegotiation of this scope of work will be necessary.
19. This Scope of Work does not include environmental site assessments or environmental mitigation services.
20. CONSULTANT standard specifications will be used for this project. Technical specifications will be prepared in Microsoft Word format and follow the Construction Specifications Institute numbering system (Divisions 1- 49). CKW will provide the Division 0.
21. Cost estimates will be prepared in accordance with the American Association for Cost Engineering.
22. CKW will reproduce and distribute the contract bidding documents and addenda, maintain the plan holders list, tabulate bids, and make award recommendations.
23. The design, installation and construction of a temporary flow bypass is the Contractor's responsibility. CONSULTANT services will provide a conceptual design taking into consideration space constraints and temporary pipe routing.
24. Client will be Furnishing Data/Information – Jacobs will reasonably rely upon the accuracy, timeliness, and completeness of the information/data provided by the Client or other third parties without independent verification. Additional effort by Jacobs due to invalid data or information provided by the Client or others, may entitle Jacobs to additional Compensation.
25. Providing Construction/Cost Estimates - In providing opinions of cost, financial analyses, economic feasibility projections, for the project, Jacobs 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, Jacobs makes no warranty that Client's actual project costs, financial aspects, economic feasibility, will not vary from CONSULTANT'S opinions, analyses, projections, or estimates and the CONSULTANT shall have no liability for such variances.

26. No CONSULTANT-produced operations and maintenance manuals are included in this scope of services.
27. It is assumed that CONSULTANT will provide services during construction for an 8-month construction project. Should time extension(s) become necessary for completion of the project through no fault of CONSULTANT, the CITY and CONSULTANT shall meet to discuss the level of effort and any additional compensation that may be required.
28. The CITY will be responsible to provide full time on-site inspection during construction and start-up activities, prepare daily diaries and maintain document control for all construction documents. CONSULTANT will receive copies of these diaries.
29. The presence or duties of CONSULTANT personnel at a construction site, whether as onsite representatives or otherwise, do not make CONSULTANT or CONSULTANT'S personnel in any way responsible for those duties that belong to CITY and/or the construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.
30. CONSULTANT AND CONSULTANT'S personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of the construction contractor(s) or other entity or any other persons at the site except CONSULTANT'S own personnel.
31. The presence of CONSULTANT'S personnel at a construction site is for the purpose of providing to CITY a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the construction contractor(s). CONSULTANT neither guarantees the performance of the construction contractor(s) nor assumes responsibility for construction contractor's failure to perform work in accordance with the construction documents.
32. CONSULTANT will reasonably rely upon the accuracy, and completeness of any information/data provided by the City or other third parties.
33. The CITY shall review all reports, sketches, drawings, specifications, contracts, and other documents presented by Engineer.
34. The CITY will be furnishing Data/Information – 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 the CONSULTANT due to invalid data or information provided by the CITY or other third-parties, may entitle the CONSULTANT to additional compensation.

Exclusions

1. A basis of design report (BODR) is not included in this Scope of Work. If the permitting agencies require a BODR as part of the permitting process, the CONSULTANT will request CKW to renegotiate the scope of work.
2. Corrosion analysis or infrastructure condition assessments are not included in this Scope of Work.
3. CONSULTANT understands there is no CBE participation requirements, therefore they are no included in this proposal.
4. 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 Client's actual project costs, financial aspects, economic feasibility, will not vary from CONSULTANT opinions, analyses, projections, or estimates and the CONSULTANT shall have no liability for such variances.
5. The design will be based on the federal, state, and local codes and standards in effect on the effective date of the authorization. Any changes in these codes or standards may necessitate a change in scope, to include an equitable adjustment.
6. Review of pay applications and change order requests.
7. Construction Inspections.

Additional Services

As directed, the CONSULTANT will provide additional services related to the project but not Included within this Scope of Services. These and other services can be provided, if desired by the CKW, as an amendment to the Task Order. Work will begin for the Additional Services after receiving of a written notice to proceed from the CKW. Additional services may include, but are not limited to, the following:

1. Detailed Design of additional rehabilitation to the wastewater pump stations not already identified above.
2. Re-bidding any or all portions of this project.
3. Review of Contractor pay applications.
4. Application for a Building Permit (if necessary). Permitting for the Florida Department of Environmental Protection (FDEP) if required.
5. Additional Site Visits.

Attachment B: LIST OF DRAWINGS

Preliminary Drawing List

Drawing #	Description
1	Vicinity and Location Maps and Index of Drawings
2	Abbreviations
3	General Notes & Legends
4	Structural Notes
5	Electrical Legend
6	Electrical Legend
7	Mechanical legend
8	Conceptual Temporary Bypass Plan
9	Site Plan
10	Standard Details
11	Mechanical Plan & Sections
12	Mechanical Standard Details 1
13	Mechanical Standard Details 2
14	Electrical Plan & Sections
15	Electrical Single Line Diagram
16	Electrical Standard Details 1
17	Electrical Standard Details 2
18	Structural Plan & Sections
19	Structural Standard Details 1
20	Structural Standard Details 2

Attachment C: LIST OF SUBMITTALS

Preliminary Limited Submittals List

Item #	Description
1	Grinder Shop Drawings and Specs
2	Electrical (conductors, conduits, etc.)
3	Grinder Controls System
4	Structural Concrete Mix Design (for the installation of the grinder on the existing wet well)
5	Grinder Railings, Metal Fabrications
6	Temporary Bypass Pumping System