

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:

October 1, 2024

Agenda Item Number: N-1

Action Required:

Yes

Department:

Engineering

Sponsor:

Ed Castle

Subject:

WEC FY 2025 Work Authorizations- Capital Projects & Construction Services

Summary of Discussion:

Attached is the WEC work authorization for FY 2025 matching the amounts in the approved budget. As is typical the WA request is an hourly not to exceed contract. The total not-to-exceed budget will be invoiced at our current hourly rates, with no increase in rates requested for FY25. Please note that Capital Projects are primarily grant funded including Engineering costs.

Reviewed / Approved

Operations: _____
Administration: _____
Finance: _____
District Counsel: _____
District Clerk: _____
Engineering: _____

Financial Impact

\$ 1,659,962.00

Expense

Funding Source:

Grant(s)

Budgeted:

Yes

Attachments

1. WEC FY25 WA Memo
2. WEC FY 2025 WA-Capital Projects & Construction Services

Approved By: _____

General Manager



Date: _____

09/26/2024



“Excellence in Engineering”

6805 Overseas Highway
Marathon, Florida 33050
(305) 289-4161 ph
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WEC FY 2024 Was & Fee Schedule

To: KLWTD Board of Commissioners

From: Ed Castle, PE

Date: September 18, 2024

Re: WEC FY25 Work Authorizations

WEC is pleased to present our work authorization for KLWTD's fiscal year 2025. In past fiscal years, WEC has worked under four work authorizations. However, due to a new FDEP requirement, we have added a fifth work authorization for FY25. The proposed Work Authorizations include the following:

WA No.	Description	Amount
WEC 25-01	Capital Projects & Construction Services	\$1,659,962.00
WEC 25-02	Wastewater Plant Engineering Services	\$75,000.00 (WWTP) \$20,000.00 (Islamorada Misc)
WEC 25-03	Field Operations Engineering Services	\$75,000.00
WEC 25-04	Administration Engineering Services	\$10,000.00
WEC 25-05	Collection System Action Plan	\$500,000.00
TOTAL		\$2,339,962.00

The above amounts for the WEC work authorizations match the approved budget amounts for FY25.

The new work authorization, WEC 25-05, is needed to comply with the requirements of Chapter 62-600.705 F.A.C., which requires each WWTP permittee to submit a complete inventory and GIS mapping of the its collection and transmission systems, a plan for ongoing maintenance of the collection system, for I&I monitoring and control, for control of grease and other detrimental substances, for procedures for power outages and a sanitary sewer overflow response plan. The plan must also provide documentation on the CMMS system used for scheduling and tracking the above procedures, included all costs associated with these activities. Information regarding

the requirements of Chapter 62-600.705 was presented as part of the FY25 preliminary budget discussion at the August 6, 2024 Board meeting. More detailed information was sent to the Commissioners via email from Ed Castle on August 7, 2024.

WORK AUTHORIZATION WEC 25-01

Professional Services Agreement Between the

Key Largo Wastewater Treatment District
(District) an independent special district created

by

Chapter 02-337, Laws of Florida, 2003

and

The Weiler Engineering Corporation (WEC)

SCOPE OF SERVICE:	Capital Projects & Construction Services
PROJECT COST:	Hourly (Not to Exceed \$1,659,962 for FY25)
PROJECT SCHEDULE:	As needed and directed by the District
PROJECT BILLING:	See EXHIBIT A

Edward R. Castle, Vice President
The Weiler Engineering Corporation
6805 Overseas Highway
Marathon, FL 33050

Nicolas Rodriguez
Chairman KLWTD
103355 Overseas Highway
Key Largo, FL 33037

Witness:

Shannon McCully, Clerk

Date: _____

WORK AUTHORIZATION WEC 25-01

CAPITAL PROJECTS AND CONSTRUCTION SERVICES

Weiler Engineering's Scope of Services

The Key Largo Wastewater Treatment District (District) provides wastewater collection, transmission, treatment and disposal services for the District and provides treatment and disposal for the wastewater from Islamorada, Village of Islands (Village). In order to provide these services, the District must construct and maintain the infrastructure necessary to collect, treat and dispose of the wastewater. The District will be undertaking various construction projects in FY25 and future years.

The District requires assistance in the design of capital projects and in inspection and administration of the construction contracts. The Weiler Engineering Corporation (WEC), as the District's construction professional, will:

- Provide engineering design for the funded capital projects for FY25. The design services will include design, technical specifications and bidding assistance as needed
- Review and rank proposals from Contractors for construction tasks based on qualifications, references and pricing. The ranking will be submitted to the District for review and selection of Contractor(s).
- After selection and award of contract to Contractor(s), conduct Pre-Construction Meeting(s) with the Designer, Contractor(s), Representatives of local utilities, FDOT, District Staff and other interested parties.
- Review shop drawings and submittals provided by the Contractor(s) and approve such documents after determining compliance with the Designer's drawings and specifications.
- Conduct Construction Progress Meetings throughout the entirety of the construction project.
- Interact with the Designer and the Contractor(s) in response to Requests for Clarification by the Contractor(s) regarding the design, as well as serve as the District's liaison to the Designer

for other construction issues.

- Participate in start-up of the constructed infrastructure, as applicable.
- Review record drawings, and final close-out documents on completion of the projects. At the District's option, WEC may produce final record drawings based on the Contractor(s)'s record drawings as maintained in the field.

WEC will perform daily construction observation services or may rely on information provided by the District's General Manager and District Staff, should the District elect to provide daily construction observation services, with the agreement of WEC. The observation service may include:

- Preparing daily, weekly, and monthly inspection reports;
- Maintaining construction record field data; and
- Generating construction progress reports as required by the District.

A breakdown of service cost is detailed in "Exhibit B". Upon the District's authorization to proceed, WEC's services during may include those outlined above and more specifically as follows:

Basic Services

A. WEC's services during design will include specifically the following:

1. Design. WEC will consult with the District to define the capital projects and will produce design drawing to include Civil, Structural and Electrical engineering design as needed. Drawing will be produced in AutoCAD on 22" X 34" sheets. Final drawings will be signed and sealed and will be provided in both paper and PDF format
2. Technical Specifications. Technical specifications for the project will be produced to cover all aspects of the work. The technical specifications will be reviewed and will be signed and sealed by a licensed professional engineer. The technical specifications will be provided both in hard copy and in PDF format.
3. Bidding Assistance. WEC will prepare the RFP documents using the District's standard RFP format. The RFP will include the bid form and other forms and will include the Standard General Conditions, Supplementary Conditions and the FDEP Supplementary conditions as well as a construction cost estimate. The RFP will be prepared in PDF

format, ready for uploading to DemandStar for advertising.

B. WEC's services during construction will include specifically the following:

1. General Administration of Construction Contract. Consult with District and act as the District's representative as provided in the Agreement and the Construction Contract between the District and the Contractor(s). All of District's instructions to the Contractor(s) will be issued through WEC, who shall have authority to act on behalf of District in dealings with the Contractor(s) to the extent provided in the Contract for Consulting/Professional Services except as otherwise provided in writing.
2. Resident Project Representative (RPR). Provide the services of a RPR, on an as-needed basis to supplement District inspections, at the construction sites to provide more extensive observation of the Contractor(s)'s work. Duties, responsibilities, and authority of the RPR are as outlined in Exhibit B.
3. Pre-Construction Conference. Conduct the Pre-Construction Conference prior to commencement of Work at the Site.
4. Visits to Site and Observation of Construction. Make visits to the Site at intervals appropriate to the various stages of construction, as WEC deems necessary, in order to observe as an experienced and qualified design professional the progress and quality of the Work.
5. Defective Work. Recommend to District that the Contractor(s)'s work be disapproved and rejected while it is in progress if, on the basis of such observations, WEC believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
6. Clarifications and Interpretations-Field Orders. Provide clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Contractor(s)'s work and make recommendations to the District.
7. Change Orders and Work Change Directives. Recommend Change Orders and Work Change Directives to the District, as appropriate.
8. Shop Drawings and Samples. Review and approve or take other appropriate action in respect to shop drawings, samples and other data which the Contractor(s) is required to

submit.

9. Substitutes and "or-equal." Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by the Contractor(s).
10. Inspections and Tests. Assure that the Contractor(s) has required such special inspections or tests of the Contractor(s)'s work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents.
11. Disagreements between the District and Contractor(s). Render formal written recommendations on all claims of the District and Contractor(s) relating to the acceptability of Contractor(s)'s work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of Contractor(s)'s work.
12. Applications for Payment. Review Contractor(s)' Applications for Payment and all required documentation.
13. Contractor(s)'s Completion Documents.
 - a. Review maintenance and operating instructions, record drawings, certifications, schedules, and guarantees received from the Contractor(s).
 - b. From the Contractor(s), receive bonds, certificates, or other evidence of insurance not previously submitted and required by the contract documents which are to be assembled by the Contractor(s) to obtain final payment.
 - c. WEC shall transmit these documents to the District.
14. Substantial Completion. Promptly after notice from the Contractor(s) that the entire work is ready for its intended use, in company with the Contractor(s), conduct an inspection to determine if the Work is Substantially Complete. If after considering any objections of the District and if WEC considers the Work Substantially Complete, WEC shall prepare a Certificate of Substantial Completion and a final punch list for execution by the District, WEC and the Contractor(s) to the District.
15. Final Notice of Acceptability. Conduct a final inspection to determine if the completed Work of the Contractor(s) is acceptable so that WEC may recommend, in writing, final payment to the Contractor(s).

The fees for these services, as specifically set forth in EXHIBIT A will be charged on an hourly basis. The Construction Phase will commence with the execution of the Construction Agreement for each Project or any part thereof and will terminate upon written recommendation by WEC for final payment to the Contractor(s) and acceptance by the District. WEC will not perform services under this Work Authorization that would exceed the FY25 "Not to Exceed" amount stated above, without prior written authorization from the District.

Anticipated Capital Projects may include the projects listed below, depending on Board action.

- Vacuum Pump Stations Piping Modifications
- Odor Control and Generator Upgrades at Vacuum Pump Stations
- Effluent Filtration Upgrades
- Collection System Monitoring
- Power Conditioning, Electrical Upgrades and Lightning Protection at WWTP
- EQ Tank, Headworks & Screening Upgrades
- Ventilation Upgrades at the Vacuum Pump Stations
- Direct Potable Reuse Demonstration Project Planning
- Islamorada Pinch Valve
- Grinder Pump Lateral Kits Upgrades
- Operations Building Blower Room Upgrades
- Sea Level Rise Mitigation for County Road-raising Projects
- Ductile Iron Piping Replacement and Protection at WWTP

Other capital projects that may arise during FY25 may result in additional engineering efforts. If needed, a proposal for increased engineering fees may be presented for Board approval to cover efforts for the listed conceptual projects and any other projects that may arise in FY25.

EXHIBIT A

WEILER ENGINEERING FEE SCHEDULE

<i>Title</i>	<i>Rate</i>
<i>Principal in Charge</i>	<i>\$210.00</i>
<i>Expert Witness</i>	<i>\$280.00</i>
<i>Registered Professional Engineer (P.E.)</i>	<i>\$165.00</i>
<i>Environmental Scientist</i>	<i>\$160.00</i>
<i>Mining Specialist PhD (non-P.E.)</i>	<i>\$160.00</i>
<i>Project Manager</i>	<i>\$160.00</i>
<i>Structural Manager</i>	<i>\$155.00</i>
<i>Senior Planner</i>	<i>\$140.00</i>
<i>Registered Engineer Intern (E.I.)</i>	<i>\$140.00</i>
<i>Certified Floodplain Manager (CFM)</i>	<i>\$140.00</i>
<i>Plans Examiner</i>	<i>\$130.00</i>
<i>Structural Inspector</i>	<i>\$130.00</i>
<i>Code Inspector</i>	<i>\$130.00</i>
<i>Senior Construction Inspector</i>	<i>\$115.00</i>
<i>Senior Engineering Designer</i>	<i>\$115.00</i>
<i>Engineering Designer</i>	<i>\$100.00</i>
<i>Construction Inspector</i>	<i>\$100.00</i>
<i>Engineering Technician</i>	<i>\$90.00</i>
<i>Structural Technician</i>	<i>\$90.00</i>
<i>Field Technician</i>	<i>\$90.00</i>
<i>Clerical</i>	<i>\$60.00</i>

Reimbursable Expenses:

<i>Vellums</i>	<i>\$10.00 / each</i>	<i>(24 x 36)</i>
<i>Mylars</i>	<i>\$25.00 / each</i>	<i>(24 x 36)</i>
<i>Blue Prints / Sheet</i>	<i>\$2.80 / each</i>	<i>(24 x 36)</i>
<i>Copies</i>	<i>\$0.30 / each</i>	<i>(11 x 17)</i>
<i>Copies</i>	<i>\$0.20 / each</i>	<i>(8 ½ x 14)</i>
<i>Copies</i>	<i>\$0.15 / each</i>	<i>(8 ½ x 11)</i>
<i>Travel *</i>	<i>Cost plus 15%</i>	
<i>Overnight mail</i>	<i>Cost plus 15%</i>	
<i>Other Reimbursable Expenses</i>	<i>Cost plus 15%</i>	

**Outside of Monroe County*

EXHIBIT B

Resident Project Representative

- A. WEC shall furnish a Resident Project Representative ("RPR"), assistants, and other field staff to assist WEC in observing progress and quality of the Work. The District shall provide at least one staff employee to assist the RPR with inspections and other duties as directed by the RPR. The RPR, assistants, and other field staff as described within this Exhibit B may provide full time representation or may provide representation to a lesser degree, at the District's option, with deductions in billing to the District based on reduced services.
- B. Through such additional observations of the Contractor(s)'s work in progress and field checks of materials and equipment by the RPR and assistants, WEC shall endeavor to provide further protection for the District against defects and deficiencies in the Work. However, WEC shall not, during such visits or as a result of such observations of the Contractor(s)'s work in progress, supervise, direct, or have control over the Contractor(s)'s Work nor shall WEC have authority over or responsibility for the means, methods, techniques, sequences, or procedures selected by the Contractor(s), for safety precautions and programs incident to the Contractor(s)'s work in progress, for any failure of the Contractor(s) to comply with Laws and Regulations applicable to the Contractor(s)'s performing and furnishing the Work, or responsibility of construction for the Contractor(s)'s failure to furnish and perform the Work in accordance with the Contract Documents.
- C. The duties and responsibilities of the RPR are limited to those of WEC in the Scope of Services and Contract for Consulting/Professional Services with the District and in the Contract Documents, and are further limited and described as follows:
1. General: RPR is WEC's agent at the Site, will act as directed by and under the supervision of WEC, and will confer with WEC regarding RPR's actions. RPR's dealings in matters pertaining to the Contractor(s)'s work in progress shall in general be with WEC and the Contractor(s), keeping the District advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of the Contractor(s). RPR shall generally communicate with the District with the knowledge of and under the direction of WEC.

2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by the Contractor(s) and consult with WEC concerning acceptability.
3. Conferences and Meetings: Attend meetings with the Contractor(s), such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
4. Liaison: Serve as WEC's liaison with the Contractor(s), working principally through the Contractor(s)'s superintendent and assist in understanding the intent of the Contract Documents.
 - a. Assist WEC in serving as the District's liaison with the Contractor(s) when the Contractor(s)'s operations affect the District's on-Site operations.
 - b. Assist in obtaining additional details or information from the District, when required for proper execution of the Work.
5. Interpretation of Contract Documents: Report to WEC when clarifications and interpretations of the Contract Documents are needed and transmit to the Contractor(s) clarifications and interpretations as issued by WEC.
6. Shop Drawings and Samples:
 - a. Record date of receipt of Samples and approved Shop Drawings.
 - b. Receive Samples which are furnished at the Site by the Contractor(s), and notify WEC of availability of Samples for examination.
 - c. Advise WEC and the Contractor(s) of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by WEC.
7. Modifications: Consider and evaluate the Contractor(s)'s suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to WEC. Transmit requests for modifications to the Designer as needed. Transmit to the Contractor(s) in writing decisions as issued by WEC and the Designer.
8. Review of Work and Rejection of Defective Work:

- a. Conduct on-Site observations of the Contractor(s)'s work in progress to assist WEC in determining if the Work is in general proceeding in accordance with the Contract Documents.
- b. Report to WEC whenever RPR believes that any part of the Contractor(s)'s work in progress will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise WEC of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

9. Inspections: Tests and System Startups:

- a. Consult with WEC in advance of scheduled major inspections, tests, and system startups of important phases of the Work.
- b. Verify that tests, equipment, and system start-ups and operating and maintenance training are conducted in the presence of appropriate District personnel, and that the Contractor(s) maintains adequate records thereof.
- c. Observe, record, and report to WEC appropriate details relative to the test procedures and system startups.
- d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to WEC.

10. Records:

- a. Maintain at the Site orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Contract, WEC's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to the Contractor(s), and other Project related documents.

- b. Prepare a daily report or keep a diary or log book, recording the Contractor(s)'s hours on the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to WEC.
- c. Record names, addresses and telephone numbers of all contractors, subcontractors, and major suppliers of materials and equipment.
- d. Maintain records for use in preparing Project documentation.
- e. Upon completion of the Work, furnish original set of all RPR Project documentation to WEC.

11. Reports:

- a. Furnish to WEC periodic reports as required of progress of the Work and of the Contractor(s)'s compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to WEC and the Designer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from the Contractor(s).
- c. Furnish to WEC and the District copies of all inspection, test, and system startup reports.
- d. Report immediately to WEC the occurrence of any Site accidents, any Hazardous Environmental Conditions, emergencies, or Acts of God endangering the Work, and property damaged by fire or other causes.

12. Payment Requests: Review Applications for Payment with the Contractor(s) for compliance with the established procedure for their submission and forward with recommendations to WEC, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

13. Certificates. Operation and Maintenance Manuals: During the course of the Work,

verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by the Contractor(s) are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to WEC for review and forwarding to the District prior to payment for that part of the Work.

14. Completion:

- a. Before WEC issues a Certificate of Substantial Completion, submit to the Contractor(s) a list of observed items requiring completion or correction.
- b. Observe whether the Contractor(s) has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public agencies having jurisdiction over the Work.
- c. Participate in a final inspection in the company of WEC, the District, and the Contractor(s) and prepare a final list of items to be completed or corrected.
- d. Observe whether all items on final list have been completed or corrected and make recommendations to WEC concerning acceptance and issuance of the Notice of Acceptability of the Work.

D. Resident Project Representative shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of WEC's authority as set forth in the Agreement or the Contract Documents.
3. Undertake any of the responsibilities of the Contractor(s), subcontractors, suppliers, or the Contractor(s)'s superintendent.
4. Advise on issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Contractor(s)'s work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on issue directions regarding, or assume control over safety precautions and programs in connection with the activities or operations of the District or the

Contractor(s).

6. Participate in specialized field or laboratory testing or inspections conducted off-site by others except as specifically authorized by WEC.
7. Accept Shop Drawing or Sample submittals from anyone other than the Contractor(s).
8. Authorize the District to occupy the Project in whole or in part.