

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

Meeting Date:

May 6, 2025

Agenda Item Number: M-3

Action Required:

Yes

Department:

Capital Projects

Sponsor:

Steve Suggs

Subject:

KLWTD Power Conditioning Project Change Order #1 Option 2B

Summary of Discussion:

Change Order #1 for the power conditioning project will be presented to the Board to upgrade the plant's electrical service to 3000A, a requirement for the upcoming EQ Tank and Headworks project and future expansion. Three options are proposed, each offering different levels of emergency generator readiness. This is option 2B, including all essential upgrades for 3000A service—new conduits, wiring, and an upsized SureVolt—and adds a generator camlock connection point to allow faster hook-up of a portable generator during an outage as well as the purchase of generator connection cables, which can be stored on-site to be readily available during an outage.



Reviewed / Approved

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

Financial Impact

\$ 539,457.38

Expense

Funding Source:

District

Budgeted:

No

Attachments

1. Change Order Form #1 Option 2B
2. Memo with Diagrams

Approved By: _____

General Manager

Date: _____

05/01/2025

**SECTION 00950
CHANGE ORDER FORM**

CONTRACTOR ("Contractor"): Pedro Falcon Contractors, Inc.	CHANGE ORDER No. 1 (Option 2B) PROJECT TITLE: KLWTD Power Conditioning & Electrical Upgrades PROJECT No. 03105.086:151
OWNER: Key Largo Wastewater Treatment District ("Owner" or "District")	ENGINEER: Weiler Engineering 6805 Overseas Hwy Marathon, Florida 33050
DATE OF ISSUE: May 6, 2025	EFFECTIVE DATE: <u>May 6, 2025</u> , contingent upon approval by the District's Board of Commissioners. Contractor shall commence work only after receipt of notification to proceed by the District's Contract Manager.
<p>Description of Work to be Performed: The Contractor is hereby authorized and directed to perform the following Work, generally described as: Upgraded 3000A Sure Volt installation requirements, also provide and install 4" Raceways between, provide, pull and terminate 500MCM wires, provide material and labor to install housekeeping pad. Additionally, this change order includes additional conduit and wiring needed for 3000A service and adding a camlock box to the ATS for mobile generator connection as well as purchase of connection wires which can be used for cam lock mobile generator connections in the future.</p> <p>Reason for Change: Additional Scope to be added to the project in the form of Cam-Lock connection for Emergency Generator Power, connection wires for future use, and upgraded 3000A SureVolt to add additional capacity to the WWTP.</p> <p>Work to be Performed is more specifically described as: See attached</p> <p>Attachments: N/A</p>	
Total Proposed Increase (decrease) in Contract Price and Contract Time for this Change Order	
Increase (decrease) in Contract Price: <div style="text-align: right;">\$ 539,457.38</div>	Increase (decrease) in Contract Time (Calendar days): <div style="text-align: right;">13 Days</div>
<p>Acknowledgments:</p> <p>The aforementioned change, and work affected thereby, is subject to and governed by all provisions of the original Agreement and RFP. It is expressly understood and agreed that the approval of this Change Order shall have no effect on the original Agreement, including all GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS, and STANDARD SPECIFICATIONS, other than matters expressly provided herein.</p> <p>This Change Order constitutes full and mutual accord and satisfaction for the adjustment of the Contract Price and Contract Time as a result of increases or decreases in cost and time of performance caused directly and indirectly from the change. Acceptance of this Change Order constitutes an agreement between OWNER and CONTRACTOR that the Change Order represents an equitable adjustment to the Agreement and that CONTRACTOR shall waive all rights to file a Contract Claim or claim of any nature on this Change Order. Execution of this Change Order shall constitute CONTRACTOR's complete acceptance and satisfaction that it is entitled to no more costs or time (direct, indirect, impact, etc.) pursuant to this Change Order. Owner may require consent of the Contractor's surety, if any, to the terms of this Change Order.</p>	
Original Contract Price: \$2,670,450.00	Original Contract Time: 500 Days (calendar days or dates)

SUMMARY OF PRIOR CHANGE ORDERS			
C-O No.	Description of Change	Change in Contract Price	Change in Contract Time
1		\$	Days
2		\$	Days
3		\$	Days
4		\$	Days
5		\$	Days
TOTAL OF ALL PRIOR CHANGES		\$ 0.00	0 Days
CURRENT CONTRACT PRICE AND TIME (Adjusted by Prior Change Orders BUT before adjusting for this Change Order)		\$ 2,670,450.00	500 Days
NEW CONTRACT PRICE AND TIME (Adjusted by Prior Change Orders AND this Change Order)		\$ 3,209,907.38	513 Days
Original Contract Substantial Completion Date: 06/15/2026		New Contract Substantial Completion Date: 06/28/2026	
APPROVAL AND CHANGE ORDER AUTHORIZATION			
Contractor: <u>Pedro Falcon Contractors, Inc.</u> By (Signature) _____ <u>Roman Sviridenko, Project Manager</u> (Printed Name and Title of Officer) (Date) _____ ATTEST: _____ (Secretary) (Corporate Seal)		Owner: <u>Key Largo Wastewater Treatment District</u> By (Signature) _____ <u>Peter Rosasco, General Manager</u> (Printed Name and Title of Officer) (Date) _____ ATTEST: _____ District Clerk (Seal)	



MEMORANDUM

To: Peter Rosasco, General Manager
From: Lexi Connor, E.I., Weiler Engineering
Date: May 6, 2025
Re: KLWTD Power Conditioning & Electrical Upgrades Project

Project Background and Need for Change Order

As KLWTD prepares for the upcoming EQ Tank and Headworks Project, our evaluation of the Main Wastewater Treatment Plant's electrical infrastructure determined that the existing 1500 kVA transformer and 2500A service are not adequate to support this project or future plant needs.

This change order is being driven by the EQ Tank and Headworks project's additional load and the need to ensure long-term capacity, and it is most cost-effective and least disruptive to upgrade these recommended items during this project, rather than in the future. NEC standards and sound engineering practice require service upgrades to avoid overloading and to ensure reliable power distribution for existing and future operations.

To help illustrate the differences between each option, the attached diagrams show the existing setup, planned contract upgrades, and the proposed change order options (Option 1, 2A, and 2B).

Change Order Options for Consideration


Option 1 (Baseline Recommended Upgrade)

- Upgrade service to **3000A rated SureVolt (upsized to 2500 kVA), and necessary conduits/wiring.**
- Provides the required service capacity for EQ Tank/Headworks and future expansions.
- **Portable generator connection would still require hardwiring into ATS or MCC main breaker during emergencies.**

Cost: \$277,454.87

Option 2 (Enhanced Generator Readiness Options)

Option 2A – Generator Camlock Only (Rent Cables in Emergency)

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- Includes all components of **Option 1**.
 - Adds permanent **generator cable camlock box**, enabling rapid “plug and play” portable generator connection.
 - **Cables would be rented if/when needed.**

Estimated Cost: \$449,756.95

Note: Rental cables not included in this cost.

Option 2B – Generator Camlock + Purchase Cables

- Same as **Option 2A**.
- **Purchases generator power connection cables now** (stored on-site), ensuring immediate readiness for emergencies.

Estimated Cost: \$539,457.38

(Includes \$89,700.43 for purchase of cables.)

Additional Considerations

- **Existing Generator:** Remains in good condition (589 run hours and 569 starts lifetime).
- **FKEC Transformer Upgrade:** A transformer upgrade (to 2500 or 3000 kVA) will also be required to support the EQ Tank and Headworks project, but is not part of this change order (est. \$153,000).

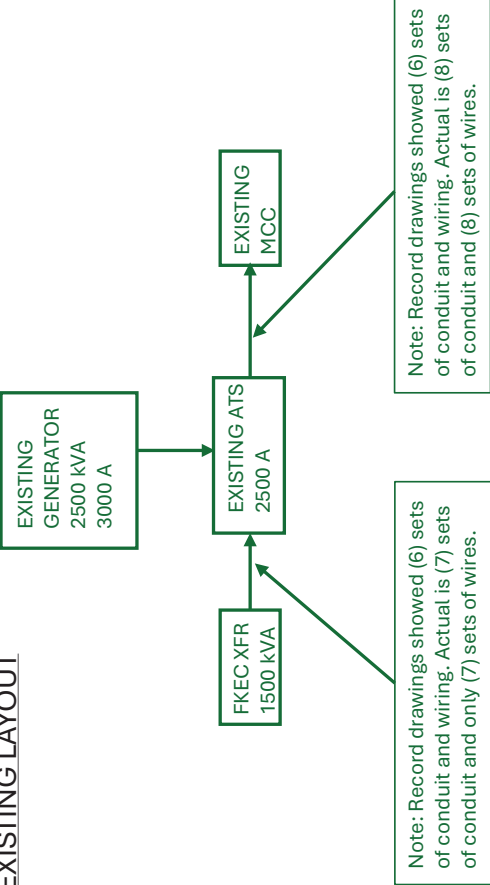
Recommendation

Weiler Engineering recommends Option 1 as the minimum upgrade necessary to meet the EQ Tank and Headworks project needs and ensure service reliability and capacity.

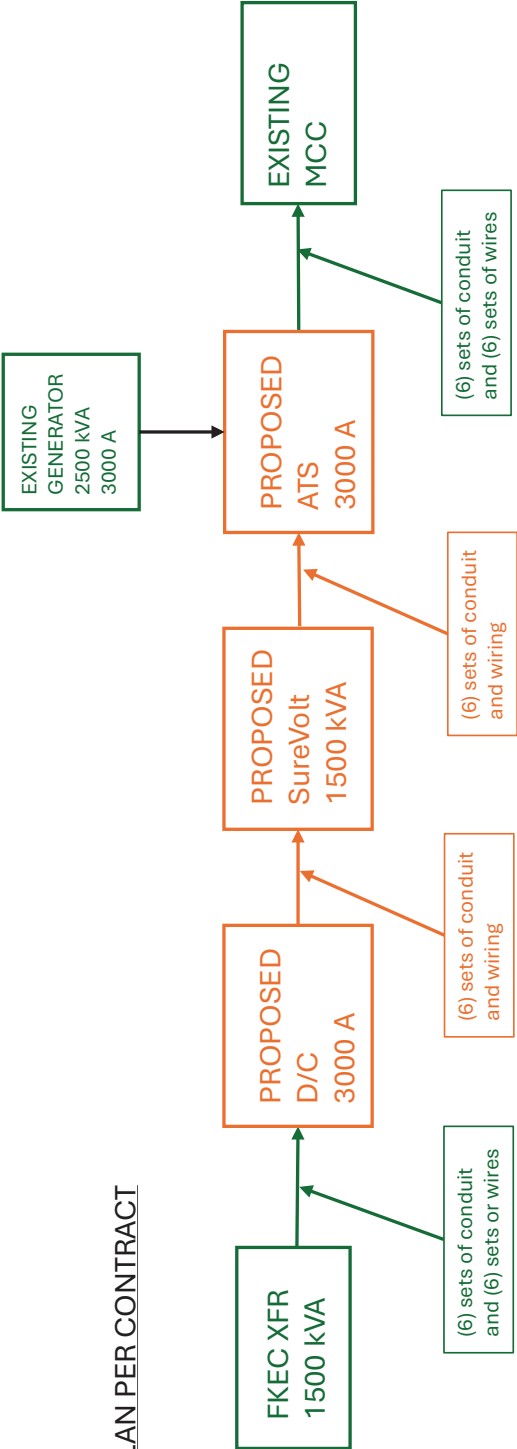
Options **2A** and **2B** provide enhanced generator readiness and allow for faster and easier connection of portable generators in emergencies. These options may be considered if the Board prioritizes rapid response capability during power outages.



EXISTING LAYOUT



PLAN PER CONTRACT



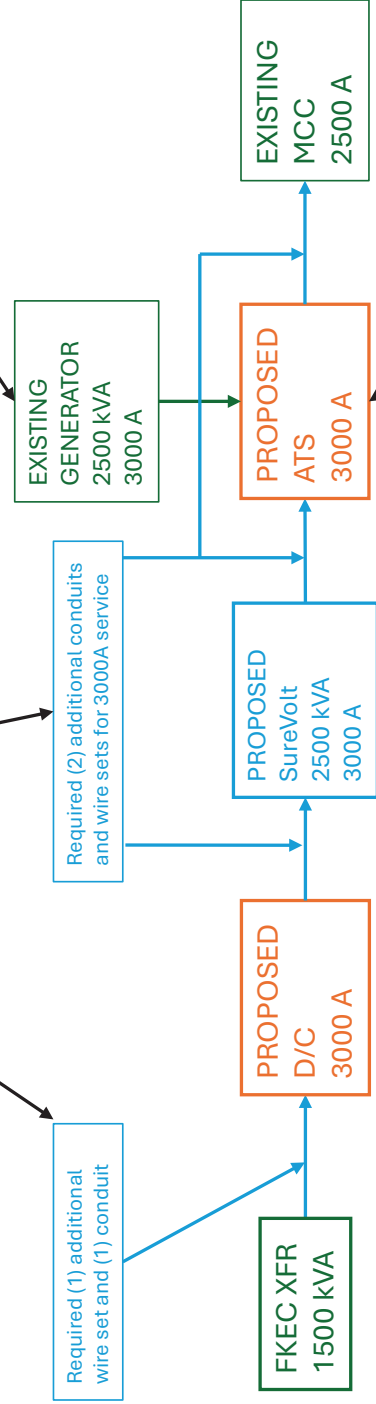
OPTION #1
TOTAL: \$277,454.87

Legend

- Existing Conditions
- Proposed Upgrades per Contract
- Change Order Items

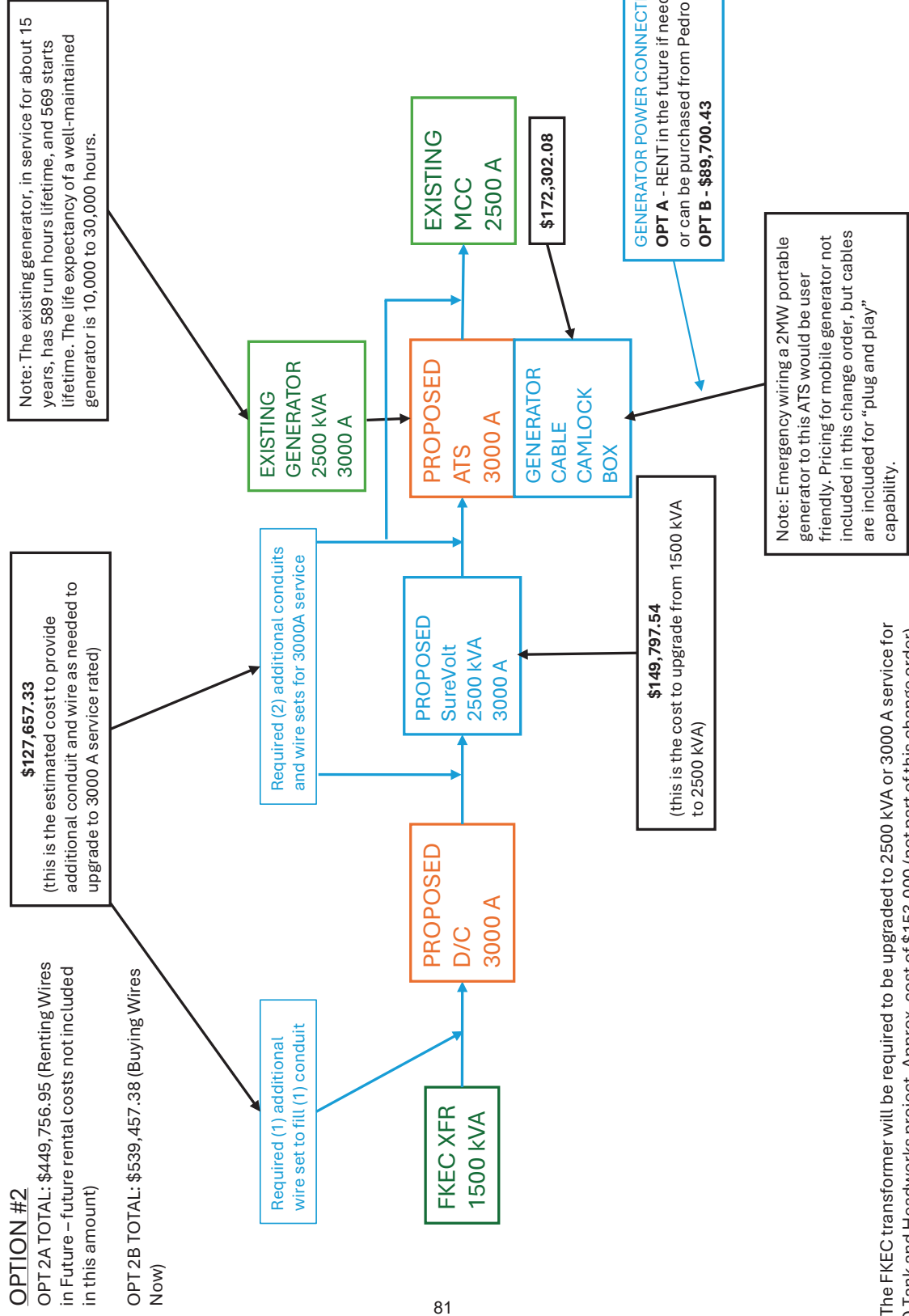
Note: The existing generator, in service for about 15 years, has 589 run hours lifetime, and 569 starts lifetime. The life expectancy of a well-maintained generator is 10,000 to 30,000 hours.

\$127,657.33
(this is the estimated cost to provide additional conduit and wire as needed to upgrade to 3000 A service rated)



\$149,797.54
(this is the cost to upgrade from 1500 kVA to 2500 kVA)

Note: The FKEC transformer will be required to be upgraded to 2500 kVA or 3000 A service for the EQ Tank and Headworks project. Approx. cost of \$153,000 (not part of this change order)



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