

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

Meeting Date:

September 16, 2025

Agenda Item Number: M-1

Action Required:

No

Department:

Capital Projects

Sponsor:

Steve Suggs

Subject:

Capital Projects Report - August 2025

Summary of Discussion:

Mr. Suggs will present the Capital Projects monthly report.

Reviewed / Approved

Operations: _____

Administration: _____

Finance: _____

District Counsel: _____

District Clerk: _____

Engineering: _____

Financial Impact

\$

Funding Source:

N/A

Budgeted:

N/A

Attachments

1. Monthly Report

Approved By: _____

General Manager



Date: 09/11/2025

Key Largo Wastewater Treatment District Capital Projects Report

Including updates through August 2025

Current Capital Projects

| Project | Original Contract Amount | Current Contract Amount (Including Direct Purchases, change orders and Amendments) | Engineering And Other Cost (Anticipated) | Total Project Cost (Anticipated) |
|---|--------------------------|--|--|--|
| Effluent Filtration Upgrades (LPA0243) | \$ 3,043,820.00 | \$3,343,823.76 | \$505,000.00 | \$3,848,823.76 |
| | Engineering Paid to Date | Construction Paid to Date | Balance to Complete (Anticipated) | Percentage Complete (Based off current processed pay applications) |
| | \$458,152.50 | \$2,882,800.16 | \$507,871.10 | 87% |

Start of Contract: 5/18/2023
Substantial Completion Date: 6/17/2025 (755 Days) **Project on Schedule?:** No
Current Time Extensions to Contract: 395 Days
Funding Source: FDEP Stewardship (LPA0243)

Project Updates:

- Evoqua provided a Final Inspection Report Summary documenting all test results and suggested corrective actions to the District on July 18th. They took the stance that the process/reuse water introduced to the system in combination with stagnant conditions allowed microbial growth and corrosion and that the damage is not attributed to workmanship by Evoqua.
- WEC/KLWTD and Reynolds jointly prepared a draft response that **rejected Evoqua's Final Inspection Report Summary claims**, consolidating field observations and contract/spec references.
- KLWTD's Nick Mulick and Peter Rosasco completed legal/administrative reviews and approved final language.
- The official KLWTD response letter was signed by Peter and sent to Evoqua both by certified mail from KLWTD and Reynolds, and via email by Reynolds, as the District's agent for matters regarding the filter per contract. Evoqua confirmed receipt of the letter on Sept 3rd and we are now awaiting Evoqua's response.
- Reynolds, WEC staff and KLWTD staff did not attend any construction progress meetings.

| Project | Original Contract Amount | Current Contract Amount (Including Direct Purchases, change orders and Amendments) | Engineering And Other Cost (Anticipated) | Total Project Cost (Anticipated) |
|--|--------------------------|--|--|--|
| Collection System Monitoring (LPA0424) | \$7,575,677.00 | \$9,581,964.94 | \$1,005,000.00 | \$10,586,964.94 |
| | Engineering Paid to Date | Construction Paid to Date | Balance to Complete (Anticipated) | Percentage Complete (Based off current processed pay applications) |
| | \$1,000,996.25 | \$7,882,378.44 | \$1,703,590.25 | 84% |

Start of Contract: 7/26/2022
Substantial Completion Date: 4/22/2026 (1,399 days) **Project on Schedule?:** Yes
Current Time Extensions to Contract: 609 days
Funding Source: Combination of USACE & FDEP Stewardship (LPA0424)

Project Updates:

- Work is completed in Basins A, B, D, G, H, F, I and JK
- Current Status:
 - **Sensor installation is approx. 95 % complete (Note: This is only sensors and does not include other aspects of the project)**
 - Total project installed: **2,768** out of **2,899**:

| | |
|--|---|
| Basin A: <u>316</u> installed (Basin complete) | Basin F: <u>338</u> installed (Basin complete) |
| Basin B: <u>376</u> installed (Basin complete) | Basin G: <u>221</u> installed (Basin complete) |
| Basin C: <u>280</u> installed (Basin installation in progress) | Basin H: <u>27</u> installed (Basin complete) |
| Basin D: <u>232</u> installed (Basin complete) | Basin I: <u>227</u> installed (Basin complete) |
| Basin E: <u>308</u> installed (Install complete) | Basin J/K: <u>443</u> installed (Basin Complete) |
- Valve rebuilds continued – 1,555 rebuilds completed.
- Flovac and IVC continued working in Basin C-4. Crews installed conduit and monitoring equipment, and rebuilt valves were installed throughout August.
 - **Specifically, installations and valve replacements were completed along Aqueduct Lane, Gulfstream Lane, Hialeah Lane, Tropical Lane, Tarpon Ave, Marlin Ave, Dolphin Road, and Pompano Ave.**
- WEC and FloVac have been working together throughout the period to determine 5-7 initial locations and areas of high concern or easy installation. One location was determined to be a good starting location by KLWTD and Flovac staff during this month near Silver Shores Mobile Home Park.
- Construction progress meetings were held on August 11th and August 26th attended by KLWTD, WEC, Flovac and Island Villa staff.

| Project | Original Contract Amount | Current Contract Amount (Including Direct Purchases, change orders and Amendments) | Engineering And Other Cost (Anticipated) | Total Project Cost (Anticipated) |
|--|--------------------------|--|--|--|
| Power Conditioning and Electrical Upgrades at the WWTP (LPA0426) | \$2,670,450.00 | \$3,209,145.53 | \$485,000.00 | \$3,694,145.53 |
| | Engineering Paid to Date | Construction Paid to Date | Balance to Complete (Anticipated) | Percentage Complete (Based off current processed pay applications) |
| | \$413,838.55 | \$1,342,060.06 | \$1,938,246.92 | 48% |

Start of Contract: 1/22/2025
Substantial Completion Date: 07/08/2026 (532 days) **Project on Schedule?:** Yes
Current Time Extensions to Contract: 23 days
Funding Source: Combination of FDEP Stewardship (LPA0426) & R&R

Project Updates:

- By the end of August, approximately 90% of all conduits for the project had been installed.
 - Conduit was installed for cameras located around the plant, injection wells pumps, flow meters, turbidity meters, salinity probe display, chlorine analyzers displays, lighting, etc.
- Pedro Falcon installed pull strings in completed conduit runs in preparation for pulling wire. The crew began pulling power wiring from the new PVC junction box on SBR #3 to the Post EQ tank using vacuum at the end of the month.
- Contractor installed outlets along the rims of SBR #1, #2, and #3 throughout the period.
- During August, the contractor cored holes through the wall of the DCU1 Local Control Panel room to route new conduit through the wall.
- All site lighting conduit and poles have been installed except for (1) dual light pole on the Filter Platform.
- Unit deliveries and staging were completed for the upcoming disconnect modifications at all vacuum stations. Deliveries included disconnect switches, conduits, and mounting hardware needed to provide safe connection points for powering the vacuum trailer at each vacuum station wall.
 - Pedro Falcon, KLWTD, and WEC staff met to discuss shutdown schedule and plan in early September. Work is to be completed before Sept. 16th.
- During August, technical discussions were held with the manufacturer (UST) regarding the internal electronic bypass included in the SureVolt design. Unlike a traditional “cold” bypass that isolates the unit during an overheat or failure, the installed bypass still allows power to flow through the unit while in “bypass mode.”
 - WEC and Pedro Falcon evaluated the operational risks and developed a proposed change order to address the bypass configuration. This was recommended to the Board in August and was approved and added to the contract
- Pedro Falcon, KLWTD and WEC staff attended the construction progress meetings on August 13th and August 27th.

| Project | Original Contract Amount | Current Contract Amount (Including Direct Purchases, change orders and Amendments) | Engineering And Other Cost (Anticipated) | Total Project Cost (Anticipated) |
|--------------------------------------|--------------------------|--|--|--|
| Vacuum Stations Odor Control (KG004) | \$4,009,141.26 | \$4,009,141.26 | \$400,000.00 | \$4,409,141.26 |
| | Engineering Paid to Date | Construction Paid to Date | Balance to Complete (Anticipated) | Percentage Complete (Based off current processed pay applications) |
| | \$198,460.00 | \$896,934.59 | \$3,331,721.67 | 25% |

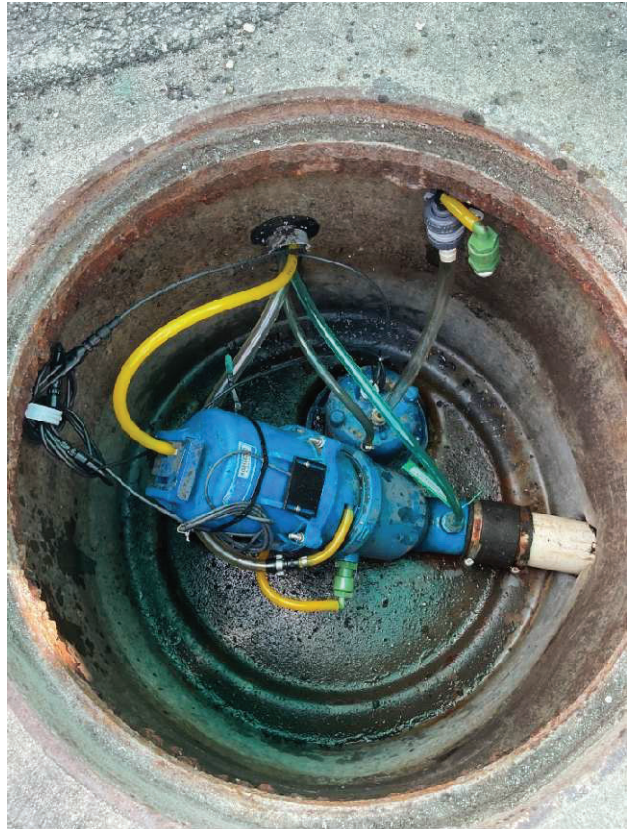
Start of Contract: 03/28/2025
Substantial Completion Date: 02/04/2026 (330 Days) **Project on Schedule?:** Yes
Current Time Extensions to Contract: 0 Days
Funding Source: Combination of FDEP Stewardship (KG004) & R&R

Project Updates:

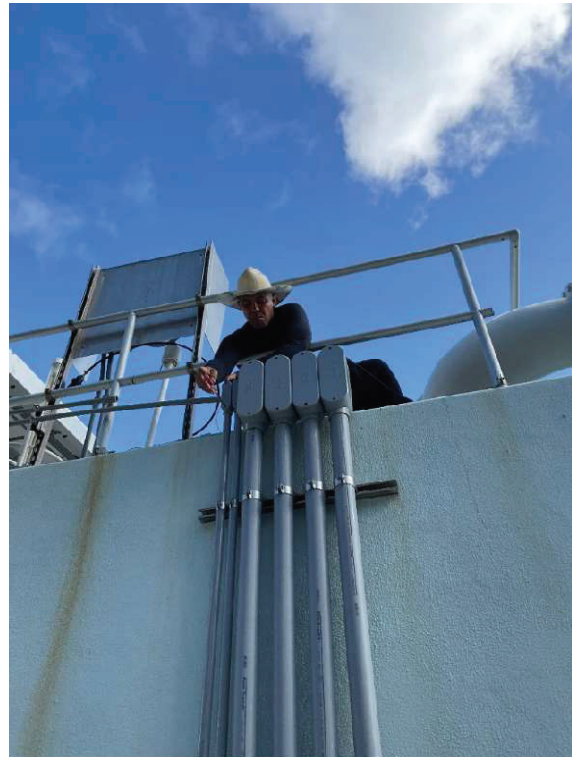
- Vacuum Station A – During August, foundation slab drains were GPS-located by WEC inspector and locations were reviewed by WEC staff for approval and the foundation slab was poured on Tuesday, August 19th. Contractor began placing CMU blocks for first phase of wall construction.
- Drywell locations at Vacuum Stations E, G, I, and J/K were GPS-located by WEC inspector and locations were reviewed by WEC staff for approval. Contractor has finished installation of 12” dry wells in late August.
- Contractor has begun initial coatings of the Odor Control concrete slabs at Vacuum Stations D, G, and I to ensure smooth, high-quality finishes and protection against environmental and chemical factors.
- Contractor plans to have (3) sets of Odor Control Tanks arrive in the next period around Sept. 15th. Vacuum Stations D, G, and I are planning to receive the initial shipment.
- Belle Construction, KLWTD, and WEC staff attended a progress meeting on August 7th and August 21st.

Upcoming Construction Projects

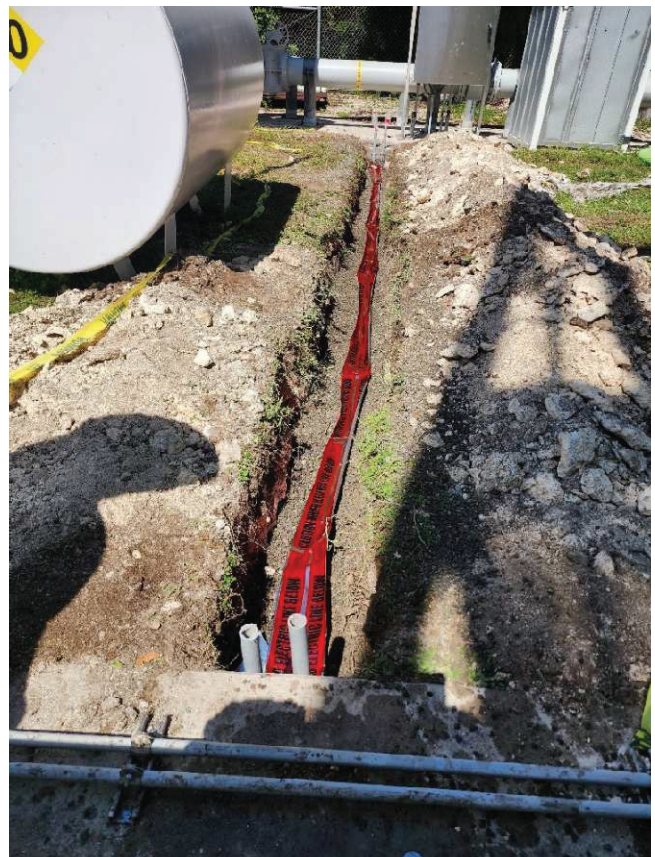
| Project | Estimated Data | Status |
|---|---|---|
| EQ Tank and Headworks Project (LPA 0425) | Project Cost: \$11,523,215 Existing State Funds: \$4,570,813.25 Design: 60% Design Completion: December 2025 Construction: July 2026-July 2028 | The EQ Tank and Headworks project consists of a new 1.00 MGD pre-equalization tank and a new headworks screening system. The project team is actively coordinating with manufacturers and suppliers on key design components such as the odor control system, aeration diffusers, headworks screens, and disposal system. Pricing for several components has been received and is under review as design coordination and equipment selection progress. A permit modification has been submitted to FDEP to reflect the proposed improvements, with coordination ongoing to address any RAIs. The District is also working closely with the Village of Islamorada, its largest customer, as they evaluate design changes involving in-line booster pumps and macerators, which could increase peak flows and require additional screening capacity. Hydraulic modeling has been completed by Islamorada's engineers to assess potential impacts and the District is reviewing and corresponding with the Village of Islamorada. |
| Vacuum Tank Upgrades | Project Cost: \$12,370,312 Design: Preliminary Design Completion: April 2026 Construction: TBD based on funding | Replaces existing steel vacuum tanks at all KLWTD vacuum stations with new corrosion-resistant, high strength, fiberglass reinforced plastic vacuum tanks. Additionally, this project upgrades foundations for flood resistance and integrates new valves, fittings, gaskets, and SCADA controls. These vacuum tanks form the backbone of the wastewater collection system, which serves over 20,000 residents and thousands of seasonal visitors in the Upper Keys, including the Village of Islamorada. The only design that has started is on the replacement of the Vacuum Station E tank. |
| Pipe Protection Project | Project Cost: \$2,401,285 Design: 30% Design Completion: April 2026 Construction: March 2026-March 2027 | This project rehabilitates 3,400 ft of corroded ductile iron mains within the Key Largo Wastewater Treatment Plant using a combination of cured-in-place pipe (CIPP) lining for larger-diameter mains and selective open-cut replacement with high-density polyethylene (HDPE) for smaller and more severely deteriorated segments. In addition, a cathodic protection system with sacrificial anodes will be installed to prevent future corrosion and harden the plant's underground piping against the harsh coastal environment. New isolation valves and SCADA-integrated flow meters are also included in this project scope. The result is tighter, longer lasting piping with better control and measurement, reducing leak and spill risks. |
| Blower Room Modifications Project | Project Cost: \$250,000 Design: Preliminary | The KLWTD staff has requested the addition of an access door behind blower #4 to better service the blower. Currently, the other blowers must be removed to access blower #4. These modifications will allow for more efficient service of the blowers. This project is currently in the preliminary design phase. |



Figures 1 & 2. Flovac Installed Valve and Monitoring Located on 1525 Aqueduct Lane.



Figures 3 & 4. Pull Strings in Conduits Along the East Side of the Disinfection Basin



Figures 5 & 6. PVC Conduits Installed Between KLWTD & Islamorada Salinity Probe & Flow Meters



Figure 7. New Odor Control Slab at Vacuum Station I



Figure 8. Construction of New CMU Wall Extension and Foundation at Vac Station A