



Kent County Water Authority

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PUBLIC UTILITIES COMMISSION

October 31, 2023

Mrs. Luly Massaro
Commission Clerk
Public Utilities Commission
89 Jefferson Boulevard
Warwick, Rhode Island 02888

Re: Capital Improvement Program

Dear Mrs. Massaro:

In accordance with Kent County Water Authority rate order Docket #5012, we are required to file a Capital Improvements Report semi-annually. The attached reports on Capital Improvements are through June 30, 2023.

If you have any questions or members of your staff would like further information, please feel free to call at any time.

Very truly yours,
Kent County Water Authority

A handwritten signature in blue ink, appearing to read "D.L. Simmons", is written over the typed name.

David L. Simmons, P.E.
Executive Director/Chief Engineer

cc: Board Members

KENT COUNTY WATER AUTHORITY
Report of Progress of CIP Project
As of June 30, 2023

<u>Description</u>	<u>Estimated</u>	<u>Expended</u>	<u>Estimated Funds to Complete</u>
New Office Facility (298)	\$24,479,515	\$8,475,973	\$16,003,543
East Greenwich Well (299)	\$404,667	\$351,894	\$52,773
TOTAL	\$24,884,182	\$8,827,867	\$16,056,315

CIP Report

This report contains information on the programs under the restricted funding approved by the Rhode Island Public Utilities Commission. The Kent County Water Authority (KCWA, or the Authority) receives Capital Improvement Project funding available to advance approved projects on a cash-based pay as you go basis. The restricted CIP account is funded at \$3.6 million annually without debt service.

CIP Bonding/Debt Service:

Docket #5012 authorizes the use of a portion of the CIP restricted account to fund debt service on project(s) that require bonding. KCWA filed for and received authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operations facility under Docket D-22-03. The debt service funding for this bond will be applied through approved restricted CIP collections. The amount of debt service carved out of the CIP funding is approximately 40%, or \$1.45 million dollars, annually. The annual accrual to the CIP restricted account after meeting the debt service obligation is \$2.15 million.

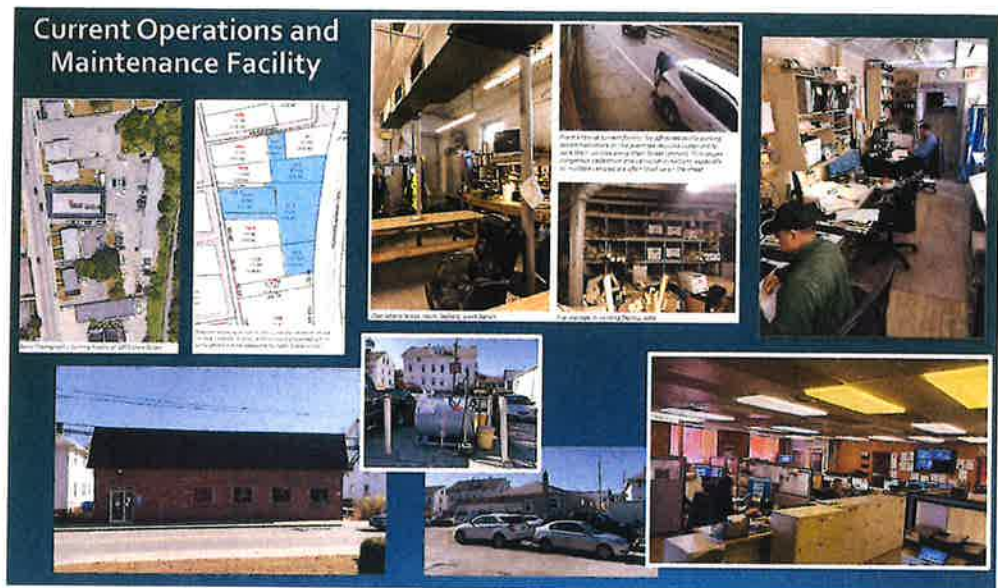
New Office and Maintenance Facility

The Authority currently operates out of its office and maintenance facilities located at 1072 Main Street, West Warwick, Rhode Island. These facilities were originally built at the turn of the century with modifications and new garages in the 1970's. Several additional renovations have been accomplished to support increased operations, and accommodate capital equipment acquisitions, spare parts warehousing and workforce needs. These existing facilities have no usable area for additional expansion and the Authority believes they can no longer support the Authority's daily operations. Furthermore, there is inadequate public parking to properly service KCWA customers. Customers have to park on the street in the lane of traffic in front of the building and exit their vehicle into oncoming traffic to conduct business at the Authority.

In 1999, Camp Dresser & McKee conducted a feasibility study for a new KCWA Facility. In 2016, C&E Engineering Partners prepared a Water Supply System Five-Year Capital Improvement Program Update for 2017-2022 for the KCWA and the Public Utilities Commission (PUC). The updated Capital Improvement Project (CIP) plan recommended a new facility supporting the 1999 findings, deeming the project as essential to provide the expected

level of service goals required by State Regulatory Requirements and the Authority's Strategic Plan.

A new updated feasibility study was necessary to support and supplement future Capital Plan implementation, Commission rate filings, and bond issues because the original study was



over 20 years old. The Authority requested proposals from qualified professional architects and engineers to conduct the update to the facilities analysis and evaluation study (2020 Study). The Authority publicly engaged the professional services of Vision 3 Architects (V3A) partnered with Pare Engineering to complete the study.

As a part of due diligence, the 2020 Study re-evaluated the potential modification and retrofitting the existing facility and concluded that the buildings have far exceeded their useful lives and are no longer adequate to support the future increase in capital equipment acquisitions, warehousing and administrative responsibilities of the KCWA. The study also calculated that a minimum net five acres would be required to meet the needs of the Authority. The Authority's current complex occupies in its entirety approximately one acre on 1072 Main Street. Exploring the viability of remaining at its current location by means of renovating the existing facility and /or constructing additional buildings would involve acquiring multiple separate sites, either adjacent to or in very close proximity to 1072 Main Street. Thus, it was reaffirmed that KCWA's current location was not an option. The efforts were then focused on spatial programming needs, potential site locations, and schematics.

The 2020 study submitted to the Authority detailed a comprehensive spatial programming analysis, conceptual building schematic options, and eleven available site locations. Based on spatial and programming needs, the study further recommended three sites that could best fit the Authority's facility requirements. Included in the study were pricing valuations, construction/site

cost estimates, and energy efficient design components such as, rooftop solar and electric vehicle charging stations.

In addition to the 2020 Study, the Board performed additional due diligence in searching for potential other property locations by issuing a public RFP, which was added to the study. After reviewing the thirteen properties in detail, the Board settled on pursuing 35 Technology Way in West Greenwich, which was deemed the best fit for the next phase. A subcommittee was formed to order a formal appraisal and negotiate and provide detailed information regarding the site and its ability to satisfy the Authority's future facility needs to the full Board. The Authority

entered into a purchase and sales agreement contingent upon the satisfactory full site due diligence evaluation inclusive of geotechnical, Phase 1 environmental,



wetlands delineation and verification, pre-application planning review, and a full ALTA survey.

The site was purchased in September of 2021 and the Board signed a resolution authorizing the engagement of financing for the design and construction of a new central operations facility. The Authority put out an RFP in December 2021 to complete the final design



and prepare construction bid documents. The contract was awarded to the V3A and Pare Corporation team. KCWA filed for and received debt service authorization in February 2022 to borrow \$20 million dollars for the construction of a new central operations facility under Docket D-22-03. On April 29, 2022, after completing all of the clearing house procedures, the Authority closed on two bonds with the Rhode Island Infrastructure Bank. The Safe Drinking Water bond (\$18,173,087) and the Efficient Buildings Fund bond (\$1,826,913). These bonds will be used to construct the new office and maintenance facility in West Greenwich. The final design and bid documents were completed for construction and the project was advertised for bid on September 9, 2022. The work of this project includes the construction of a new 16,000 square foot administrative building and the attached 30,000 square foot prefabricated metal garage. The

project includes construction of the proposed building and a covered storage area, a fueling area, an asphalt parking area, site improvements, and utilities. The construction project was awarded to Bentley Builders in January of 2023 and construction commenced immediately thereafter. Construction is anticipated to be completed in April of 2024.

Updated East Greenwich /Warwick Well Treatment Facility

The East Greenwich well is a critical facility designed to maximize water quality and allow sufficient hydraulic capacity to meet the needs of the KCWA system now and into the future. This source in combination with KCWA's Mishnock treatment facility provide sufficient capacity to continue to provide essential service to its critical customers, and emergency interconnections, in the event something goes wrong with water supplied from Providence Water and/or major disruption to the associated transmission systems.

The East Greenwich/Warwick Well has a full production yield capability of approximately 2,000 gallons per minute. The East Greenwich/Warwick Well is located at 5870 Post Road, in the general vicinity of the intersection of Post Road and Franklin Street, along the East Greenwich and Warwick city line within the Hunt River Aquifer. The existing facilities consist of one submersible pump well, emergency power, SCADA control and monitoring, disinfection and pH adjustment. The Authority requested proposals from qualified Professional Engineering firms to conduct an inspection, evaluation, and review of the newly constructed well facilities and prepare final design and contract documents for construction of a new water treatment facility at the existing site under its Capital Improvement initiatives. Pare Engineering in partnership with Stantec was chosen and awarded the contract to design the updated facility in December of 2019. A preliminary design report and plans were completed and reviewed by the Rhode Island Department of Health and Rhode Island Department of Environmental Management during 2021.

The updated treatment plant included an addition to the rehabilitated well facilities constructed in 2018 under the KCWA Infrastructure Replacement initiative. The facility was being designed to provide an average daily output capacity of 1.44 MGD (1,000 gpm) to the system with one treatment unit offline and to provide for a maximum daily output capacity of 3 MGD (approx. 2,000 gpm) with both treatment units online. The output capacity was being designed at a maximum of 3 MGD to ensure resiliency and redundancy of individual unit processes, treatment trains, and discharge pumping. With recent Federal and State regulatory changes, and

discussions with QDC and the Town of North Kingstown faced with similar challenges we are currently looking at increasing the throughput of this facility. The updated design will allow the ability to treat additional well(s) if acquired in the future. This design and subsequent responsible operation will not adversely affect the Hunt River, today or in the future, as it reflects significantly less volume than historic withdrawals from this basin.

The goal of the new treatment facility design is to provide a reliable source of high-quality potable water that meets and exceeds drinking water regulations. Mainly, the objective of the design was to reduce manganese levels to below the applicable secondary standards to prevent water discoloration and staining, provide enhanced disinfection treatment (4-log inactivation), and facilitate radon removal. However, during the final design and permitting, the Biden-Harris Administration proposed the first ever national standard for Per- and polyfluoroalkyl substances (PFAS). This signaled to the States that regulation is imminent and for affected water utilities to start preparing. The Rhode Island legislature passed a law ahead of the EPA setting proposed contaminant concentration standards that now must be incorporated/planned into the design.

Design Changes to Comply with State Law and Prepare for Future Federal PFAS Regulations

PFAS are an emerging contaminant of concern in groundwater throughout the United States. PFAS are man-made chemicals used to fight fires and in a variety of products and applications that are resistant to water, grease, or stains, including nonstick cookware, carpets, upholstered furniture, clothing, and food packaging. These chemicals are highly recalcitrant to degradation in the environment and can mobilize into surface and groundwater from areas throughout the country that may have been contaminated for various reasons.

The Rhode Island Legislature, working with the RI Department of Health (RIDOH), passed a law in June of 2022 to set an interim concentration standard of 20 parts per trillion (ppt) and to require water systems to conduct additional sampling by July 1, 2023. Systems that cannot provide water less than 20 ppt are required to find alternative sources.

One part per trillion is equivalent to one drop in an Olympic sized swimming pool.

Soon after the State legislation was introduced, the Biden-Harris Administration proposed the first ever national standard to protect communities from PFAS in drinking water. Because a potential maximum contaminant level (MCL) of 4 ppt for PFAS is being set at the Federal level, if promulgated, the State requirement will have to shift to the EPA standard.

EPA Press Release on PFAS March 14, 2023:

"The proposal, if finalized, would regulate PFOA and PFOS as individual contaminants, and will regulate four other PFAS – PFNA, PFHxS, PFBS, and GenX Chemicals – as a mixture.

- *PFOA and PFOS: EPA is proposing to regulate PFOA and PFOS at a level they can be reliably measured at 4 parts per trillion.*
- *PFNA, PFHxS, PFBS, and GenX Chemicals: EPA is also proposing a regulation to limit any mixture containing one or more of PFNA, PFHxS, PFBS, and/or GenX Chemicals. For these PFAS, water systems would use an established approach called a hazard index calculation, defined in the proposed rule, to determine if the **combined** levels of these PFAS pose a potential risk."*

Source: Biden-Harris Administration Proposes First-Ever National Standard to Protect Communities from PFAS in Drinking Water
<https://www.epa.gov/newsreleases/biden-harris-administration-proposes-first-ever-national-standard-protect-communities>

An evaluation of per- and polyfluoroalkyl substances (PFAS) for all KCWA wells was performed in June of 2023. During this testing, PFAS were detected at 11.18 parts per trillion (11.18 ppt) at the East Greenwich Well. Although currently below the interim standard of 20 ppt, the proposed Federal maximum contaminant level (MCL) is 4 ppt. In anticipation of this, the proposed treatment facility and major unit processes at the East Greenwich well facility were reevaluated based on achieving the primary objective of protecting public health by providing a regulatory compliant, reliable source of potable water that meets or exceeds current and foreseeable future proposed drinking water regulations. The updated design, inclusive of PFAS treatment, should be completed by Spring of 2024 and KCWA will be seeking any and all available grants to help facilitate construction of the facility. With the passage of the Bipartisan Infrastructure Law (BIL), the Drinking Water State Revolving Fund (DWSRF) will be receiving approximately \$292 million of additional funding for projects, including \$179 million for lead service line replacements and addressing emerging contaminants over the next five years, including Per and Polyfluoroalkyl Substances (PFAS). In addition to the funding research and development, KCWA has entered into a class action lawsuit. Below is an excerpt from our most recent press release the regarding PFAS lawsuit.

The costs to remove of these toxic 'forever chemicals' has created a financial burden for the Kent County Water Authority and initiation of this litigation and the terms of the proposed settlement will allow KCWA to hold the PFAS manufacturers financially accountable for the costs, expenses, and impacts caused by this contamination. The KCWA has and continues to spend countless efforts and resources testing and working to remediate PFAS from the drinking water to remain in compliance with State and Federal water quality guidelines.

The Executive Director of the Kent County Water Authority, David L. Simmons, PE, said "This lawsuit represents the collective interests of all residents within the Kent County Water Authority's service area and aims to safeguard the preservation of clean drinking water. Joining this litigation demonstrates our continuing efforts to prioritize the protection of our water supply and will help guarantee a sustained supply of clean water for future generations." The Director added, "The litigation will help to ensure that the cost of removing PFAS contaminants are borne by the manufacturers and sellers of these products, not the ratepayers."

Source: <https://www.businesswire.com/news/home/20230803434638/en/Kent-County-Water-Authority-Joins-PFAS-%E2%80%98Forever-Chemicals%E2%80%99-Lawsuit-Against-Manufacturers-3M-DuPont-and-Others-For-PFAS-Drinking-Water-Contamination>