### Consent Item 5:

Capital Improvements Program Semiannual Report

### Purpose:

To summarize project and program performance for OWASA's Capital Improvements Program (CIP) for Fiscal Year (FY) 2024

### Background:

The report details overall CIP performance during the reporting period, provides status updates for projects active during the reporting period, provides information on Minority and Women Business Enterprise (MWBE) participation and outreach measures, and updates on the implementation of the Project Delivery Optimization Plan (PDOP).

### Program Summary:

During FY 2024, approximately \$20.1 million (125% of the planned CIP budget) was invested in 71 active capital projects to rehabilitate, replace, or improve various components of OWASA's water and wastewater infrastructure, most notably:

- construction of a new permanganate chemical facility at University Lake,
- improvements to the solids handling facility process, equipment, and building at the Water Treatment Plant (WTP),
- replacements of water mains throughout the distribution system, both by contractors and by our internal construction crew,
- rehabilitation of Secondary Clarifier No. 4 at the wastewater treatment plant (WWTP),
- rehabilitation of the existing clearwell at the WTP,
- rehabilitation of pipe and manholes throughout the wastewater collection system, and
- planning for and piloting of PFAS removal systems at the WTP.

The CIP expenditures for FY 2024 exceeded the budget primarily due to shifts in construction timelines, changes in scope, and addressing emergency work. Construction on two of the largest facility projects (the WTP Belt Filter Press and University Lake Permanganate Facility) was delayed from FY 2023 into FY 2024, which increased the expected spending in FY 2024 on those projects compared to the original budget. Additionally, some expensive equipment for the WWTP Secondary Clarifier 4 arrived at the end of FY 2024 that was originally expected to arrive within FY 2025. Furthermore, the CIP team has implemented some of the strategies from the Project Delivery Optimization Plan (PDOP), which has increased our efficiency throughout the program. These strategies include, utilizing on-call engineering services, reducing

unnecessary paperwork, increasing coordination with the Town of Carrboro, and preparing to utilize collaborative delivery in the coming fiscal year. More details on the PDOP strategies implemented during FY 2024 are provided below.

A considerable amount of CIP work was completed in FY 2024 despite staffing challenges which continued throughout the year. For the majority of the FY, the six-person CIP team was understaffed which limited the team's ability to continue to push projects forward at the expected pace or start new projects. In order to combat this, temporary project management support from Jacobs, an engineering consulting firm, was utilized for about half of the year.

Figure 1 shows the actual FY 2024 CIP expenses against the monthly baseline projection, as well as the expenditure target of 90% to 105% of budgeted funds. The primary excursion shown in the June 2024 reflects the arrival of a\$1.5 million dollar clarifier mechanism for the WWTP project as previously mentioned and the push for final construction close out costs at the end of the FY.



Figure 1 – FY 2024 CIP Expenses

The FY 2024 expenditures of \$20.1 million are 125% of (or about \$4 million more than) the budgeted funds, primarily due to construction delays from last fiscal year pushing into the current fiscal year and materials arriving earlier than anticipated. This expenditure-to-budget percentage falls outside the Board-adopted target of executing between 90 to 105% of the CIP budget but is a significant improvement from the FY 2022 and FY 2023 spending and is an achievement considering the staffing challenges. The reasons behind the variance to budget can be broadly summarized as:

- A net \$770,000 increase in spending due to timing (schedule-based) changes, including:
  - planned FY 2023 work being delayed primarily from the University Lake
    Permanganate Facility, WTP Belt Filter Press and Bolinwood Sewer project
    construction schedules slipping into FY 2024, and
  - delivery of the WWTP Secondary Clarifier mechanism in FY 2024 rather than FY 2025 as expected.
- A net \$2.4 million increase in spending due to changes in scope, with the primary contributors being:
  - the Clearwell Stabilization project that was expedited to rehabilitate the existing clearwell, and
  - expanded project bounds for the Briarcliff and Ridgefield Neighborhood Water Main Replacements.
- A net \$200,00 increase in spending due to higher-than-expected pricing, particularly from the Jones Ferry Road Campus security fencing project.
- A net \$640,000 increase in spending due to other project changes, such as mid-year requests or emergencies.

Table 1 (attached) contains summaries of project performance for all active projects during this reporting period. The projects in the table are color-coded according to the primary reason for the fiscal year cost variance (price, schedule, or scope) or included in a fourth category (other) for projects that have little to no cost variance, are in preliminary stages for which baseline budget and schedules have not yet been established, or were a mid-year request or emergency.

## Minority and Women Business Enterprise (MWBE) Participation

OWASA's goal for minority participation in public building construction projects (vertical buildings and other structures over \$300,000) is 10% of the overall contract value. However, OWASA encourages and tracks MWBE participation in all formal and informal construction contracts. Historical averages for the CIP program are reported in Table 2. Seventeen construction contracts were awarded during FY 2024, and six of the seventeen contracts awarded met the 10% MWBE goal. Of the remaining eleven construction contracts not meeting the MWBE requirements, none of them were in the formal range (over \$500,000). In situations where the participation goal was not met, bidders met good faith effort requirements to solicit MWBE participation or else did not have any subcontracts or there were limited subcontracting opportunities.

	Black	Hispanic	Asian American	American Indian	Female	Total MWBE
Dollar amounts in MWBE categories	\$606,549	\$ 1,398,919	\$ O	\$ O	\$ 8,412,193	\$ 10,417,660
% of the sum of the contract value (\$40,213,415)	1.5%	3.5%	0%	0%	20.9%	25.9%**

Table 2OWASA Average MWBE Participation Summary, FY 2020 through FY 2024

\*\*overall goal is 10%

In FY 2024, the CIP team partnered with the Town of Chapel Hill, the Town of Carrboro, and the University of North Carolina to conduct an outreach event geared toward minority and women owned businesses in the region. The CIP team hopes to encourage additional MWBE firms to participate in our future construction bids as prime contractors and subcontractors. Staff continues to further develop the MWBE outreach practices as previously discussed with the Board during the August 27, 2020 <u>Semiannual CIP Report</u>. Staff will continue to track information about prime contractors and subcontractors who are bidding on OWASA projects and report relevant information about any potential trends in MWBE participation in future CIP Semiannual Reports.

## Project Delivery Optimization Plan (PDOP)

As part of OWASA's Strategic Plan, the CIP team began working on the strategic initiative to increase reliability and resiliency by developing a project delivery optimization plan (PDOP) in FY 2023 and has made significant strides in FY 2024. The main goal of this initiative is to leverage different approaches to improve capital project timelines and efficiency moving forward. Brainstorming on different approaches and ideas to improve project delivery has been a focus for the CIP team as well as others throughout the organization who have participated in several workshops. Several strategies to increase project delivery are already underway at the time of this report. These strategies include:

- Alternate/Collaborative Delivery
  - OWASA has completed an almost yearlong preparation program, consisting of trainings and workshops, and contract development, with a consultant for Progressive Design Build (PDB) and Construction Manager at Risk (CMAR) delivery methods. Alternate delivery/collaborative delivery has the potential to expedite construction schedules and generate additional bidder interest. In FY 2025, two PDB projects have been selected, and the initial solicitation for consultant support ("owner's agent" for the PDB process) is ongoing.

- On-Call Consulting Services and Surveying Services
  - OWASA completed successful solicitation of qualified consultants and surveyors to be part of an "on-call" list for FY 2024 and FY 2025. The on-call services have dramatically reduced the contracting timeline necessary to get projects started. Projects that utilized the on-call were able to be started in an average of 44 days (or about one and a half months), whereas conventional solicitation projects started in an average of 141 days (or about four and a half months), providing a savings of about 3 months (or a quarter of a fiscal year) per project. OWASA plans to resolicit for the on-call services, with a few changes, at the end of FY 2025 to continue to support project delivery optimization goals in the upcoming years.
- Temporary Utilities Engineers
  - Filling the Utilities Engineer vacancies was challenging during FY 2024. The CIP team utilized a temporary project manager from an engineering consultant to augment the current staff and allow for additional workload.
- Creation of Two Project Manager positions
  - Since staffing has been a challenge, an additional Utilities Engineer position has been reclassified to a Project Manager (PM) position, which does not require an engineering degree or professional engineering license. With this change, the current makeup of the CIP team is two Utilities Engineer (UE) positions, two PM positions, and one Engineering Associate, all of whom report to the Engineering Manager for Capital Projects. PM recruitments have been well received, with eight times the number of applicants submitting on PM recruitments compared to UE recruitments. The second PM recruitment in FY 2024 was successful, and a Project Manager was hired and started at the end of March.
- Streamlining paperwork within CIP processes
  - Certain protocols were revised to allow the removal of unnecessary or underutilized paperwork to create efficiencies in project management.
- Project Scope Checklists
  - In coordination with the Asset Management program, the CIP team is developing a checklist of items to better define project requests and limit unplanned scope growth.
- The team is continuing contractor outreach to increase bidding on our projects to reduce necessary re-bids.
- The team is continuing to utilize the Omnia Partnership, which is a program for the public sector and non-profit companies to streamline competitive procurement, to expedite bidding for applicable projects.

As additional work is completed on the PDOP, more information will be shared with the Board.

# Action Needed:

Information only, no action needed.

# Information:

• Table 1: Project Performance Summary – FY 2024