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To: Chairman Board and members of the Public Works Commission From: Peter Hartz - Water Systems Manager

May 8, 2024

Re: May 14, 2024, Public Works Commission agenda items

Water Systems:

1. Review and update 2024 Private Lead Service Line Replacement project professional services by Strand & Associates.

Background: In September 2022, we hired Strand to help Watertown submit documents for our replacement project through the Safe Drinking Water Loan Program - Notice of Intent to Apply (ITA) & Priority Evaluation and Ranking Form (PERF). That was due to changes within the WDNR as they no longer supported the private lead service line replacement program in the same manner as the last 2 years. Starting in 2024 DNR switched to utilizing the Bipartisan Infrastructure Law (BIL) funding for the future of the LSL funding program.

Before June 30, 2024, Strand will be submitting 2 separate applications but will have one project – this is to maximize the principal forgiveness available, and it's based on mean household income from the census tract. Once we find out how much funding is awarded to Watertown, we will bring forward the next steps for the replacement program, including the possible use of Water Rate Payer funds; which is Watertown got approval from the PSC to use Rate Payer funds to supplement the private side replacement program. There is no rate increase expected if using this source of funding (for 1-year), but it only allows for up to 50% of the cost. The balance we hope will be covered by the funding from the BIL funding program.

2. Review and take possible action / update 2024 Biosolids Dryer Project Department of Energy grant and professional services by Mead–Hunt.

Background: In April of 2023, we circled back on our previous biosolids and methane gas evaluation and hired Mead-Hunt to review and study a conceptual biosolids dryer, with a grant from Wisconsin Focus On Energy. Furthermore, on December 19, 2023, we moved forward with our application for the U.S. Department of Energy (DOE) grant application for a combined heat and power engine to pair with the biosolids dryer project. The DOE awarded Watertown funds to pursue a solar array project to power the dryer, the combined heat and power engine is still under review as we needed to update the Industrial Assessment that was completed with help from the University of Wisconsin Milwaukee. That request is still pending but we seek guidance on accepting the solar grant match of funds of 100,000K or up to \$300,000 after an update of the solar const; we were approved for 50% of the cost up to \$300,000 in matching funds.

Separately (and independent) from the DOE grants for solar and or the combined heat and power engine we continue moving forward with Mead-Hunt on the process design and capital cost estimates for the dryer type. We hope to have a complete conceptual dryer selection later this year in time to include with the 2025 capital improvement budget. I recommend accepting the grant from the Department of Energy for up to 50% of the cost for the solar array.

3. <u>Review and approve</u> 2024 Compliance Maintenance Annual Report (CMAR) – Wastewater Utility permit to discharge summary.

Included for review and discussion is a copy of the CMAR report for the calendar year 2023. Please note that we had 11 months of influent biological oxygen demand (BOD) concentrations over 90% of the plant design, and 9 months with influent BOD concentrations over 100% of the plant design. The plant effluent discharge to the Rock River was well below the permitted limits for all those months, however, we scored poorly on that section of the annual report due to the high loads at the treatment plant. Watertown began working on the wastewater treatment plant facility plan last June of 2023, we anticipate the completed report to be brought forward in a few weeks; there were some delays due to sensitivity & outside of our control regarding data collection from the sewer users in Watertown.

I recommend forwarding a resolution to the Watertown City Council which includes a specific mention of action the wastewater utility is required to conduct.

Whereas; The Public Works Commission has recommended the following action regarding the influent BOD design exceedance for loading. To continue working with our engineering consultant who is actively engaged with the facilities plan update regarding the plant design parameters for BOD, and to continue supporting the wastewater utility staff with equipment and infrastructure improvements when and where necessary, pending available funding.

4. <u>Review and approve</u> Wastewater Department purchase of launder covers for wastewater treatment plant final clarifiers.

Launder covers were approved and included in the 2024 capital improvement budget. We solicited equipment suppliers and contractors for quotes and received the following prices for the final clarifiers. I recommend approval of the low quote from Sabel Mechanical LLC for \$202,301.60.

<u>Contractor</u>	<u>Covers</u>	Installation	<u>Total Cost</u>
Sabel Mechanical, LLC.	\$142,931.75	\$59,369.85	\$202,301.60
Drydon Equipment, Inc.	\$160,440	\$110,560 (by others)	\$271,000
William / Reid	\$174,000	\$110,560 (by others)	\$284,560

The benefit of launder covers at wastewater facilities include:

- **Prevent Algae Growth**: Algae tend to thrive in water and wastewater treatment plants, disrupting hydraulic dynamics and obstructing design features. Launder covers, once installed, create an attractive and low-maintenance structure that helps eliminate algae growth. Additionally, larger algae can dislodge and interfere with ultraviolet (UV) bulbs used in disinfection technology. By preventing algae growth, launder covers save money on repairs and UV bulb replacements.
- **Control Gas and Odor Emissions**: Launder covers provide a continuous protective environment above the effluent stream. They contain noxious gases generated during wastewater treatment processes, preventing environmental pollution, help control odors, and safeguarding workers' health in the area.
- **Maintain Weir Structural Integrity and Function**: By shielding the weir and clarifier launder from direct sunlight, launder covers inhibit algae growth. This also enhances flow consistency and reduces maintenance needs. Additionally, they prevent windblown debris (such as dust, leaves, and plastics) from entering the water stream.

In summary, launder covers are lightweight, cost-effective solutions that contribute to efficient wastewater treatment while protecting infrastructure and the environment plus save staff time on tank draining and cleaning to remove the algae; which needs to be done all months of the year not just in summer.

5. <u>Review and approve</u> – Water Department; City Well #5 rehab and rehabilitation project.

We solicited 3 contractors and posted an RFP for quotes for rehab and rehabilitation for City Well #5 with a defined scope and received quotes from two local contractors. Note: Supplemental items may or may not be needed as it can only be determined after the base bid work is completed.

<u>Contractor</u>	Well #5 Base Price	Well #7 Supplemental items	<u>Total Cost</u>
Municipal Well & Pump	\$20,730	\$49,970	\$70,700
Water Well Solutions	\$9,500	\$50,657	\$60,157

Funds are available in the 2024 budget from account # 03-99-99-98. I recommend approval of the low quote from Water Well Solutions which includes the base bid & supplemental items for a total not to exceed \$60,157.

Sincerely, Peter Hartz Water Systems Manger