Action Requested/Required:

- [x] Vote/Action Requested
- [ ] Discussion or Presentation Only
- [ ] Public Hearing

Report Date: _____
Hearing Date: _____
Voting Date: _____

Department: Community Development **Presenter(s) & Title:** Bethany Watson, City Engineer

Agenda Item Title:

Discussion and Possible Action on Replacement Membranes for Water Pollution Control Plant

Summary:

The Canton Water Pollution Control Plant (WPCP) Expansion Project's new membrane bioreactor (MBR) system, supplied by Veolia Water Technologies, suffered a complete system failure shortly after startup. After successfully managing operations on the failing membranes for nearly a year while negotiating a resolution, staff are now confident in their operational capabilities and request approval to proceed with the full replacement of all four membrane modules. Veolia has provided an initial discounted replacement estimate of $1.88 Million, excluding tariffs and on-site labor. A firm proposal, including requested additional cost-saving measures, is anticipated before the December 4 Council meeting.

Budget Implications:

Budgeted? [x] Yes [ ] No [ ] **N/A**

Total Cost of Project: $ 2,200,000.00 Check if Estimated [x]

Fund Source: General Fund [ ] Water & Sewer [x] Sales Tax [ ] Other:

Staff Recommendations:

Reviews:

Has this been reviewed by Management and Legal Counsel, if required? [ ] Yes [ ] No

Attachments:

Memo

Memorandum

To: Mayor and City Council

From: Bethany Watson, P.E., AICP, City Engineer

CC: Billy Peppers, City Manager

Date: November 24, 2025

Re: Update on Membrane at Canton Water Pollution Control Plant Expansion Project

Executive Summary

The Canton Water Pollution Control Plant (WPCP) Expansion Project's new membrane bioreactor (MBR) system, supplied by Veolia Water Technologies, suffered a complete system failure shortly after startup. After successfully managing operations on the failing membranes for nearly a year while negotiating a resolution, staff are now confident in their operational capabilities and request approval to proceed with the full replacement of all four membrane modules. Veolia has provided an initial discounted replacement estimate of $1.88 Million, excluding tariffs and on-site labor. A firm proposal, including requested additional cost-saving measures, is anticipated before the December 4 Council meeting.

Background and Chronology

System Failure and Dispute (Early 2025): The new Veolia membranes failed shortly after the system came online. In January 2025, the City formally demanded that the general contractor and Veolia rectify and replace the membranes under warranty at no additional cost. The core issue remains a dispute over responsibility:

- Veolia's Position: Primarily attributes the failure to high Mixed Liquor Suspended Solids (MLSS) due to operational issues.
- City's Position: Asserts the failure is due to a combination of design deficiencies, improper programming, and possible manufacturing defects.

WPCP staff demonstrated exceptional skill by successfully stretching the functionality of the failing membranes for an additional year. This prolonged lifespan

has allowed the overall Expansion Project to near completion before membrane replacement is required.

In May/June of 2025, The City contracted for a detailed cleaning of the membranes as a repair option. While the cleaning was technically successful in restoring some function, the associated cost proved to be prohibitively high, exceeding the estimated cost of full replacement.

Current Status and Staff Recommendation

With the Expansion Project nearing its final completion, the operational staff have achieved a high level of comfort and proficiency in managing the Veolia MBR system. They are now confident that, when operating under the designed and corrected parameters, the new membranes will perform optimally.

To ensure the WPCP can operate at its maximum designed capacity and reliability, Staff formally requests proceeding with the replacement of all four membrane modules. Staff has requested a firm proposal from Veolia.

While a final, firm proposal is pending, Veolia has provided the following estimated pricing for the full replacement:

- Four Train Membrane Replacement - $1.8 Million (reflects a 21% discount)
- Excludes tariffs and on site labor to assist with installation.

In addition, Staff has requested Veolia to provide additional discounts and/or cost-saving measures as a good-faith effort, acknowledging their contribution to the failure of the original membranes.

A complete and firm proposal will be made available to the City Council for review and action prior to the December 4, 2025, Council meeting.