

January 12, 2024

Honorable Mayor Justin Nickels  
and Members of Manitowoc Common Council  
Manitowoc City Hall  
900 Quay Street  
Manitowoc, WI 54220

RE: Wastewater Treatment Facility Stack Filter Project Request

PREPARED BY: Michael Jaeger, MPU Wastewater Manager

REVIEWED BY: Troy Adams, MPU General Manager

ACTION REQUESTED:

1. Per 12.050(1) Large Construction Projects, regarding construction projects exceed \$5,000,000, the MPU Commission requests approval to proceed with the Wastewater Treatment Facility Stack Filter Project.
2. The MPU Commission requests approval to proceed with the Clean Water Fund Loan for the Wastewater Treatment Facility Stack Filter Project.

Honorable Mayor and Members of Council:

Donohue Engineering completed a Master Plan study of the WWTF in 2022. The purpose was to identify the most critical needs for rehabilitation, repair, and replacement of equipment and structures. An executive summary is attached.

The Capital Improvements most critical for the Manitowoc Public Utilities Wastewater Treatment Facility are for the rehabilitation/repair of the first stage trickling filter process and the secondary clarifiers. These improvements will address age, reliability, and performance related concerns. Performance specific to the additional removal of Biochemical Oxygen Demand (BOD) to meet compliance per our Wisconsin Pollutant Minimization Discharge Elimination System Permit.

A presentation to City Council on the rehabilitation project was provided at a City Common Council meeting on October 17<sup>th</sup>, 2022. MPU and Donohue received approval from Council to begin the Clean Water Fund application in 2022/2023.

In Wisconsin, nearly all significant capital improvement projects at municipal wastewater treatment facilities are funded with the Clean Water Fund Program (CWFP), which provides public treatment facility owners financial assistance in the form of subsidized loans, additional subsidies that reduce size of the loan (principal forgiveness), or a combination. Principle forgiveness is like a grant. MPU submitted a

notice of intent to apply (ITA) by Oct. 31<sup>st</sup>, 2022. This notifies the WDNR that MPU intends to apply for funds from the next fiscal budget. In advance of submitting plans, specs, and the application MPU-WWTF needed a WDNR approved Facility Plan or Facility Plan Amendment. Donohue Engineering and MPU-WWTF worked together and sent the Facility Plan Amendment and CWF Application to the WDNR for review and approval Sept. 28<sup>th</sup>, 2023. MPU Wastewater received 20% principal forgiveness to a maximum of \$2.1M for this project. The anticipated cost with current bid specifications is estimated at \$17 Million. The current interest rate on a 20-year loan is 2.15%.

The project schedule is listed below:

<u>Activity</u>	<u>Completion</u>
<b>Design</b>	
Reviewable Bidding Documents and Loan Application	September 28 <sup>th</sup> , 2023
Owner Reviewable Bidding Documents	Early December 2023
Final Bidding Documents	Early January 2024
<b>Bid and Award</b>	
Advertisement	January 2024
Bid Closing/Opening	March 2024
Award of Contract	May 2024
<b>Construction</b>	
Notice to Proceed	June 2024
Completion of Stack Filter 1	September 2025
Substantial Completion	September 2026
Final Completion	November 2026

Please contact Michael Jaeger at 686-3551 or me at 686-4377 if you have any questions.

Best regards,



Troy Adams, P. E.  
General Manager

Attachment - Donohue Executive Summary



## Memorandum

**Date:** January 5, 2024

**From:** Mike Gerbitz, PE – Wastewater Engineer

**Re:** **Stack Filter and Final Clarifier Maintenance Improvements Project**  
Wastewater Treatment Facility  
Manitowoc Public Utilities – Manitowoc, Wisconsin

### Background

The Manitowoc Wastewater Treatment Facility (Facility or WWTF) is located at 1015 South Lakeview Drive in Manitowoc, Wisconsin. The Facility is owned and operated by Manitowoc Public Utilities (MPU). Ownership and operation was transitioned from the City of Manitowoc (City) to MPU on January 1, 2023, after a multi-year intergovernmental agreement that allowed MPU to provide administrative, management, and operational oversight. The WWTF is regulated by the Wisconsin Department of Natural Resources (WDNR) and a Wisconsin Pollution Elimination Discharge System (WPDES) Permit (Permit).

### Purpose

Equipment associated with two important processes – the stack filters and final clarifiers – have reached the end of their reliable service lives. These processes treat the wastewater to produce Permit-compliant effluent. The **Stack Filter and Final Clarifier Maintenance Improvements Project (Project)** will replace this aging equipment. The stack filters provide most of the wastewater treatment. The final clarifiers remove suspended solids before the treated water is discharged to Lake Michigan. The WDNR recognizes the need and importance of this Project and has approved the plan to rehabilitate the stack filters and final clarifiers.

### Schedule

The project will be bid in the January – March timeframe. Construction is expected to start in the April – May timeframe. Construction is expected to be completed by June 2026.

### Project Cost and Financing

The construction cost opinion is \$15.5M. The estimated total project cost is \$17M. MPU intends to finance the project using the Wisconsin Clean Water Fund Program (CWFP). The CWFP provides subsidized loans to communities within Wisconsin for publicly-owned wastewater infrastructure. In some instances, the CWFP provides principal forgiveness (grants). The City received \$2.1M of principal forgiveness (grant) funding. The subsidized interest rate on the 20-year loan will be approximately 2.15%. Interest payments on the amount borrowed will be due the first of each May and November. The first principal and interest payment will be due May 1, 2027.

### User Cost Implications

The average residential user rate increase to pay for the Project will be roughly \$5 per month, \$15 per quarter, or \$60 per year. Given the repayment schedule presented above, MPU has the flexibility to incorporate the associated rate increase over the next several years.