

Committee Members
Timothy Harris, Chair
John Foresto, Vice-Chair
Ted Kenney, Member
Barry Zide, Member



Medway DPW Offices
Medway Middle School Door #9
45B Holliston Street
Medway, MA 02053
Telephone (508) 533-3275
Fax (508) 321-4985

TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS

WATER FACILITY BUILDING COMMITTEE

APPROVED 04/11/2024

02/08/2024

In attendance: John Foresto-Vice Committee Chair and Medway Resident
Ted Kenney – Committee Member and Medway Resident
Barry Zide- Committee Member and Medway Resident
James Cray – Wright-Pierce
Robert Williamson – Wright-Pierce
Keith Black – Environmental Partners
Helen Gordon – Environmental Partners
Michael Boynton- Town Manager of Medway
Sandy Johnston- Director of Communications- Town of Medway
Peter Pelletier-Medway DPW Director
Barry Smith – Medway DPW Water & Sewer Superintendent
Michelle Dowley- Medway DPW Admin and Recording Secretary

Agenda:

- Public Comments
- Project Update
- Administrative Review

Meeting called to order at 7:01 pm a roll call was taken, and quorum was reached.

Public Comments:

No Public comments.

Project Update:

- The project is getting close to completion with startup on the horizon.
- The exterior is complete except for permanent doors; these will wait to be installed to avoid damage.
- The site work is done to completion as much as weather has allowed.
- Landscaping will need to be completed in the spring.
- Finish work is getting done in the operation area.
- The plant is getting very close to the startup process.
- Filtration system has been installed.
- Instrumentation wiring has been installed along with sprinkler systems.
- Overall, the plant is in good shape based on where they are in the schedule.
- Waiting on Walsh for detailed startup schedule.
- Tracking for substantial completion at the beginning of April.
- John Foresto asked, what are the big obstacles moving forward with startup?
- The answer is that it is hard to name specific obstacles because there is no way to foresee the issues that may arise.
- There are a few change orders that are still awaiting approval.
- Michael Boynton asked to go through each pending change order that is awaiting approval.
- Waiting for revisions on change orders and will have answers at the next progress meeting.
- Overall, the budget is on track including contingency.
- The committee asked the engineering team to present a potential budget and schedule for PFAS treatment installation.
- Helen Gordon presented the following documents for the Committee to consider moving forward.

MEMORANDUM

Date: February 6, 2024

To Medway Building Committee

From Helen Gordon, P.E., BCEE

CC Michael Boynton, Town Manager

Peter Pelletier, DPW Director

Barry Smith, Water & Sewer Superintendent

Wright-Pierce – Rob Williamson, P.E., James Cray, P.E.

Environmental Partners – Keith Black

Subject Medway, MA – Populatic Water Treatment Plant – PFAS Vessel Addition

Environmental Partners and Wright-Pierce were requested by the Building Committee on January 11, 2024, to provide a summary for a potential schedule and budget for the installation of PFAS Vessels in anticipation of the new USEPA MCL regulations.

The PFAS Vessel installation project will proceed in three phases:

- Phase 1 – Pilot Plant and Funding
- Phase 2 – Design
- Phase 3 – Construction

Wright Pierce prepared the attached memo outlining the steps required to conduct pilot testing of media, obtain appropriate approvals from MassDEP up to design. Before proceeding with the pilot testing the new WTP should be operating for 3 to 6 months and stabilized. Based on the current substantial completion date of April 1, 2024, the earliest the Pilot Plant testing could be conducted is October 2024. The following schedules for each task reflect a start date based on a notice to proceed for Phase 1 work by June 10, 2024. This would require an appropriation for OPM oversight and Designer Services totaling \$200,000 assuming 4 weeks of field piloting. The tentative schedule for Phase 1 is presented in Figure 1.

Figure 1 - Pilot Plant and Funding Schedule

Once Phase 1 is approved by MassDEP Phase 2 Design can commence with a tentative bidding opening date of October 30, 2026. A tentative schedule is provided on Figure 2.

[illegible]

Figure 2 - Design and Bidding

Phase 3 – Construction could begin January 1, 2027. The overall construction period is set at 18 months. Most of the construction time will be spent on the initial submission of shop drawings, purchasing and manufacturing of the vessels to delivery. The physical work itself is anticipated to be conducted over a 4-month period with two- months of startup. Figure 3 presents the construction schedule.

[illegible]

Conceptual Budget

Based on recent quotes received for similar size installation, the cost of equipment and installation could be in the vicinity of \$2.0M to \$2.25M. At this stage of the process if you add in contingency, engineering design, and construction oversight a conceptual level budget of \$2.5M is recommended. This cost will be further refined once an approach is chosen by the Town.

Attachments: Complete Project Schedule - PDF
Wright Pierce Memo Dated January 22, 2024



Medway, MA - Populatic WTP - PFAS Vessel Installation Proposed Project Schedule

TASK	2024												2025												2026												2027												2028											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec												
Pilot Plant and Funding																																																												
Engage MassDEP																																																												
Solicit Pilot Costs																																																												
Prepare Pilot Proposal																																																												
Submit Proposal to MassDEP																																																												
MassDEP Approval																																																												
Pilot Testing																																																												
Receipt of Pilot Data																																																												
Prepare Pilot Report																																																												
Submit DWSRF PEF - 2026 IUP																																																												
Submit Pilot Report to MassDEP																																																												
MassDEP Approval																																																												
Design/Bidding																																																												
Design																																																												
Appropriation for 2026 IUP																																																												
Submission 80% Design to MassDEP Review																																																												
Review and Approval for Bidding MassDEP																																																												
Bidding																																																												
Contract Negotiation																																																												
Construction																																																												
Construction - (shop drwg review, manufacturing, delivery of vessels)																																																												
Installation of Equipment, Apurtences																																																												
Startup																																																												

Date: **2/5/2024**

Project No.: **T17821**

To: Town of Medway

From: **Wright-Pierce**

Subject: **Medway, MA – PFAS Piloting – Preliminary Planning**

The following outlines the steps, timing, and approximate costs to conduct a pilot and design for PFAS removal addition to Medway's Populatic water treatment plant (WTP) currently under construction. It is important to note that this plan, particularly related to piloting, is subject to change/modification based on input from MassDEP. Before any piloting begins, the new WTP should be operating for 3-6 months and be completely stabilized. We want the facility to be performing as it was intended for an extended time to best simulate the conditions which PFAS treatment will be operating under.

In general, the tasks/activities and approximate timing of each that will occur to pilot and design the PFAS system include the following.

1. Execute Engineering Agreement or Amendment for services through piloting.
2. Engage MassDEP to review the intent of piloting and obtain feedback and buy-in.
3. Solicit scope and costs from piloting firms to conduct the field pilot testing. In addition, if required by MassDEP, solicit scope and costs from firms to conduct Rapid Small Scale Column Tests (RSSCT) on each of the medias proposed.
4. Prepare and submit for review and approval to MassDEP a pilot study proposal (WS-21).
5. Mobilize field pilot testing firm.
6. Based on the results of the field piloting, prepare, and submit for review and approval to MassDEP a pilot study report (WS-22).

Engage MassDEP

The requirements of MassDEP within each region can differ substantially and it is unfortunate that there is not a standard approach across the state. We will want to engage those responsible for approving subsequent steps early in the process to be certain we fully understand their requirements throughout piloting and design. This step can proceed approximately 2-3 months following substantial completion of the WTP.

Solicit Piloting Scope and Costs

Once MassDEP's requirements are understood, we can solicit scope and costs to conduct a field pilot test. We anticipate that the pilot will be run for a minimum of 4 weeks. If required by MassDEP, we will also solicit scope and cost to conduct RSSCT's for each of the medias proposed for piloting. RSSCT's are a test used to simulate performance of GAC media and IX media to estimate the end of life (EOL) cycle of media. The results from RSSCTs are purely estimates for the purpose of understanding the potential frequency of media replacement. Actual full-scale results may be different. This step can begin following the initial engagement of MassDEP and is expected to take 1-2 months to complete.

Pilot Proposal

Prior to conducting field piloting, a pilot study proposal must be submitted for review and approval by MassDEP under permit WS 21: Approval to Conduct Pilot Study. The pilot proposal must outline the purpose and details of the proposed piloting. It must include all constituents and parameters to be sampled and analyzed, frequency of sampling, proposed processes (medias) to be tested, flow rates, backwash provisions, chemicals to be used as well as a variety of other data. This step can begin following receipt of pilot scope and costs and is expected to take 1 month to draft. Once drafted, the pilot proposal will be submitted to MassDEP for review and approval. We can expect up to 3 months for approval from MassDEP.

Field Pilot Testing

Once approval of the pilot test proposal has been granted by MassDEP, the field pilot testing and RSSCT testing (if required) may commence. The start date of the piloting may vary depending on the availability of the pilot testing firm. The water sample required for RSSCT testing would be taken at some point during the field pilot testing and sent to the RSSCT testing firm's facility. Pilot testing, including mobilization, start-up and actual testing will cover 2 months. Receipt of the pilot data report will take 3-6 months from demobilization of piloting.

Pilot Test Report

Following completion of the field piloting, the piloting firm will prepare and submit a pilot data report. We will review their report and prepare a separate pilot study report which will be submitted to MassDEP for review and approval under permit WS 22: Approval of Pilot Study Report. The pilot study report will evaluate the data collected and develop recommendations for full-scale design and treatment. It will include conceptual layouts of the recommended equipment, preliminary project costs and related data. The pilot report will take up to 3 months to complete following receipt of the pilot data report.

Design

Following approval of the Pilot Study Report by MassDEP, a design scope can be prepared and executed for the recommended system. It is expected that design will take 4-6 months to complete after which it will be submitted to MassDEP for review and approval. Their approval can be expected to take 3 months or more.

Budgetary Costs

Subcontract Scope	Estimated Fee
RSSCT Tests (if required by MassDEP)	\$15,000 - \$20,000/media
Field Piloting & Pilot Study Report	\$200,000*

*Assumes 4-weeks of field piloting.

	2024				2025				2026			
	June-Jul	Aug-Sep	Oct-Nov	Dec-Jan	Feb-Mar	Apr-May	June-Jul	Aug-Sep	Oct-Nov	Dec-Jan	Feb-Mar	Apr-May
Engage MassDEP	----											
Solicit Pilot Costs	----											
Prepare Pilot Proposal		----										
Submit to MassDEP		-										
MassDEP Approval			-									
Pilot Testing			-----									
Receipt of Pilot Data						-						
Prepare Pilot Report						-----	-----	-----				
Submit to MassDEP								-				
MassDEP Approval									-			
Design										-----	-----	-----

- The committee had questions about the technology of removing PFAS and whether to wait for newer technologies.
- The consensus was to move forward as soon as The Town can because the vessels that would be put in place will have the ability to test various ways of removing PFAS.
- All the guidelines from EPA have not been released and the Team and Town are still waiting for these numbers.
- The Engineering team were dismissed for the Committee to discuss public outreach.
- Barry Zide and John Foresto met with Medway Cable Access to get an idea of how to present the new treatment plant to the Town.
- Ted Kenney suggested that the Committee work with Sandy Johnston, the Director of Communications for the Town.
- Members of the Committee will meet with Sandy in the coming weeks to discuss an outreach campaign.

Administrative Review:

Next meeting is scheduled for 03/14/24 at 7pm.

Motion to adjourn by Ted Kenney, seconded by Barry Zide. Vote unanimous and motion carried at 8:18pm.