



## MEMORANDUM

**To:** Sean Reese, Director – Department of Public Works

**From:** Ali Parand – AP Associates, Inc.

**Date:** August 5, 2020

**Re:** Greensand Filtration Facility for Well No. 5 – Progress Report for July 2020

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The intent of this progress memorandum is to provide a Project update for July 2020. The following is a summary discussion:

1. **Project Schedule:** The Project design phase is progressing according to the anticipated schedule. The design progression is at about the 90% completion stage.

The following project schedule has been established and is being used as a guide.

- a) **Design Completion (100%):** October 2020.
- b) **Bidding and Contract Award:** November 2020 through February 2021
- c) **Construction Start:** Spring 2021
- d) **Construction Completion:** Summer 2022
- e) **Keys to maintaining schedule:**
  1. Obtaining final decisions related to the addition of a fire protection sprinkler system and a second bathroom for male/female code compliance.
  2. Obtaining necessary local permits without any issues or delays.
  3. Deciding the funding mechanism (SRF vs. local).
  4. Obtaining MassDEP Project approval.
  5. Securing additional funding, if necessary.

Detailed discussions for key elements are as follow:

1. Chris Canney, Holliston Inspector of Buildings had reviewed the 60% progress drawings and specifications for code compliance. He has determined that the proposed facility requires a sprinkler system for fire protection, and a second bathroom to comply with male/female code requirements. The Project Team discussed both items with a project code Consultant and gathered supporting information. AP Associates, Inc. (APA) then issued a summary memo of the items for review by the Holliston DPW prior to its presenting it for a final decision to the Building Inspector. However, according to the Building Inspector, the requirements have to be waived by governing Boards at the State level through filing of variances.

The DPW then authorized APA to file two variances. The Project Team is in the process of completing the necessary variance application forms for review and comment by the DPW and the Building Inspector prior to submittal to the appropriate Boards.

2. During the 60% progress meeting with the DPW, it was discussed that Well No. 5 should be cleaned and redeveloped as part of this project. It would be more cost-effective to include this task in this project while the pump and motor are being replaced. Cleaning, surging to redevelop, and disinfection of Well No. 5 has been included in the specifications.
3. The Project Team has completed the Stormwater Management Report and the Notice of Intent (NOI) for filing with the Holliston Conservation Commission. A Conservation Commission hearing is scheduled for Tuesday, August 18, 2020.
4. The Project site plan was submitted for the Planning Board's review and consideration. The project is on the agenda for Planning Board's meeting of Thursday, August 6, 2020.
5. APA submitted the project site plan showing the proposed septic system to the Board of Health Agent. Two test pits were dug and one perc test was performed on July 29, 2020 and were witnessed by the Board of Health Agent. The Project Team will utilize the field data to finalize the septic system design. The Project Team will make a submittal to the Holliston Board of Health for review and approval in August.
6. Holliston is considering reapplying for a State Revolving Fund loan. The deadline for submitting the Project Evaluation Form (PEF) application is August 21, 2020. The Holliston DPW will be responsible for completing the necessary applications for submittal to MassDEP. The priority list of approved projects is normally issued in January. If the project is approved for an SRF loan, the Project's bidding phase would have to be postponed in coordination with SRF's specific follow up requirements.
7. The Project Team submitted the 60% Progress Documents to the Water Supply Division of MassDEP for preliminary review and comments. MassDEP reviewed the documents and provided a list of questions and comments. The Project Team reviewed and responded to all the questions and comments. The 60% progress review by MassDEP and resolution of its comments should reduce the number of potential comments during their final review at project completion.
8. As part of the 60% progress meeting discussions with the DPW, it was decided to install an aerator as part of the WTP design. Project documents have been revised to reflect the addition of an aerator.
9. During the 60% progress meeting with DPW, it was discussed that the Well No. 5 pump station needs considerable renovation (leaky hatch and roof, structural problems, exhaust fan and louver issues). The Project Team determined that demolishing the building completely would be the most cost-effective option. The Project Team consulted with MassDEP on this

option. Design documents have been revised to reflect demolition of the structure and addition of a pitless adapter with submersible pump and motor.

2. **Project Cost:** A 60% progress level cost estimate was performed by an independent estimator. It was reviewed by the Project Team in draft form and is being finalized. Preliminary indications are that additional funding will likely be necessary. Project Team will provide Holliston with the 60% progress level cost estimate once it is in its final form. For now, Holliston will use the previous estimate of \$8,375,000. The following are notable factors related to the project cost increase:

- a) The previous cost estimate was prepared in 2018 and has to be updated to account for inflation to 2021 and 2022 the actual construction period.
- b) An aerator has now been included in the design. The estimated cost for the aerator including all related work and controls is about \$100,000. Addition of the aerator will reduce potassium hydroxide chemical usage and result in a potential annual savings of about \$20,000.
- c) Cleaning of Well No. 5 was included in the scope of the project. Estimated cost for cleaning Well No. 5 as part of this project is about \$15,000.
- d) The potential addition of a fire protection sprinkler system and a second bathroom will increase the project cost.

The Project Team will provide an opinion of probable construction cost for the 60% progress once it is finalized, and later when the design has progressed to 100% completion.

3. **Upcoming Design Activities:**

- a) Complete variance applications for the sprinkler system and second bathroom for submittal to the DPW and the Holliston Building Inspector for review and comment. Finalize documents to include comments and supporting information, if any, for submittal to the governing Boards.
- b) Obtain final decisions from the governing Boards on the variance requests, and if necessary, prepare a contract amendment for the design of a sprinkler system and second bathroom for inclusion in the Contract Documents.
- c) Submit septic system design documents to the Board of Health for review and approval.
- d) Attend Planning Board meeting and perform follow up activities to obtain site plan approval.
- e) Perform a detailed peer review (QA/QC) of the Contract Drawings and specifications.
- f) Attend the Conservation Commission hearing to obtain an Order of Conditions for the project.
- g) Submit the 60% progress probable construction cost estimate to the DPW.
- h) Continue design progression toward completion to 100%.
- i) Prepare and submit application and supporting documents for NPDES permit associated with lagoons discharge.

**4. Specific Discussions:**

- a) Currently, the project specifications do not include SRF related boilerplate sections. These can be included if and when Holliston is approved for the funding. For the time being, no changes relative to SRF funding will be made to the front-end documents of the specifications.
- b) PFAS water quality test data will be submitted to the Project Team once available.
- c) Project Team to provide Osterman Propane with an updated site plan and loading data for propane-fueled equipment for pipe sizing, and design of the vaporizer and regulators.
- d) Project Team to submit updated electrical site plan and other drawings showing the primary and secondary service to Eversource for review and comments. Eversource then will provide an estimate for electrical charges to provide a new electrical primary.

**5. Progress Meetings:**

- 1. Next meeting at 95% completion deliverable in late August or September

**END OF MEMORANDUM**