

D'Angelis (Wells 1 & 2) PFAS Treatment Plant – Update July 2023

Town of Millis Select Board, July 10, 2023

Kirsten Ryan, PG. Senior Project Manager
Drinking Water Practice Lead
Kleinfelder
1 Beacon Street, Boston MA



Well 1 & 2 Status:

- ✓ Substantial completion
- ✓ Successful start-up test and MassDEP inspection on 06/28/2023
- ✓ All PFAS = not detectable
 - Awaiting final written approval from MassDEP
 - Plant will go online in July
 - Project is on-time and under budget



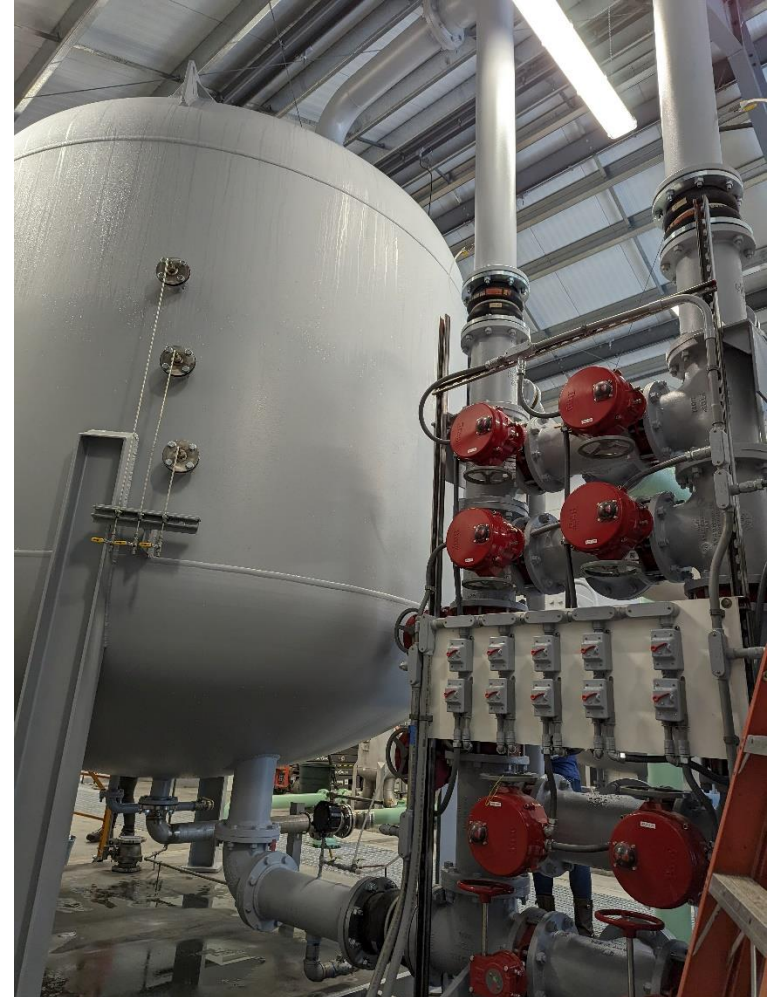
Thank you to Winston Builders, Town of Millis / DPW for a collaborative effort

Well 1 & 2 Pump House Upgrades:



- ✓ Wells cleaned
- ✓ New well pumps
- ✓ Relined screens

New GAC Filtration for PFAS Removal, Wells 1&2



Village St. (Well 3) Water Treatment Plant – PFAS Treatment Design

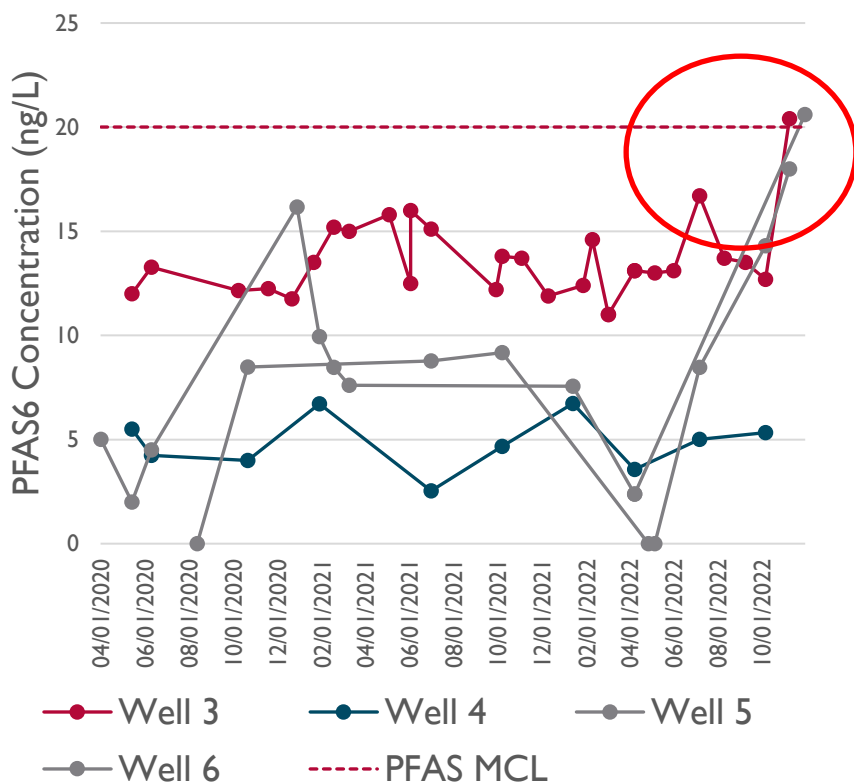
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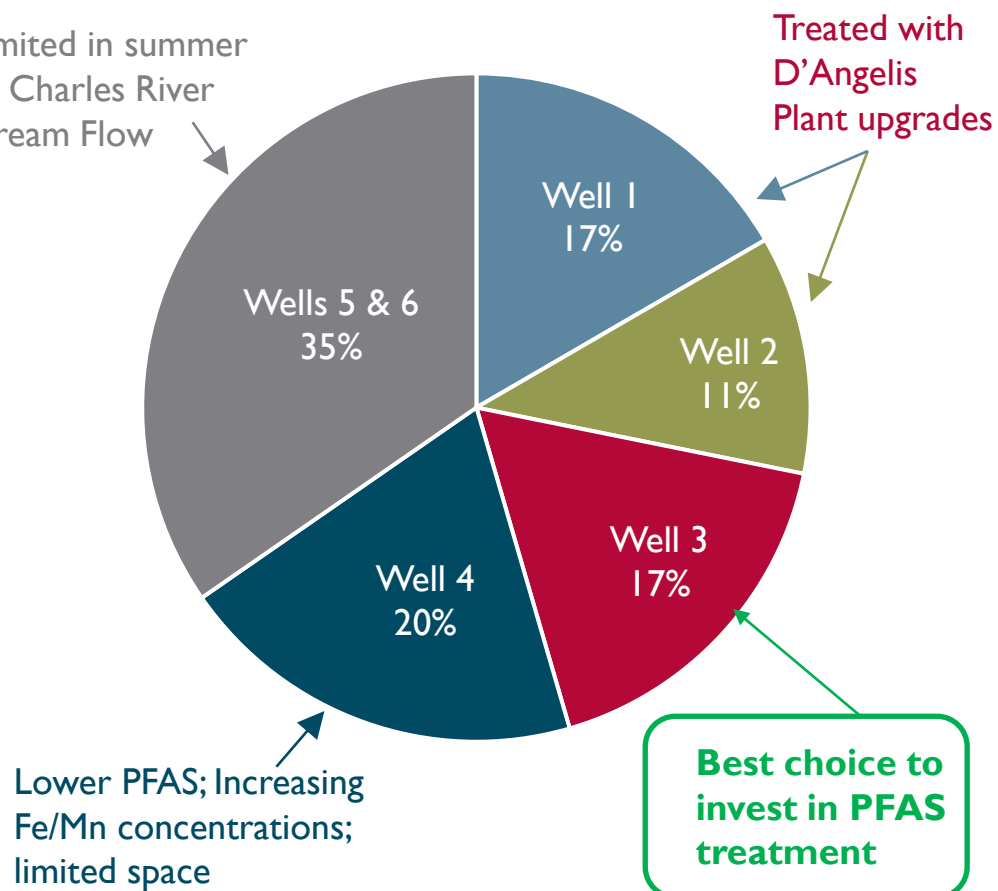
Well 3 Chosen for PFAS Treatment:

PFAS6 (2020 – 2022)

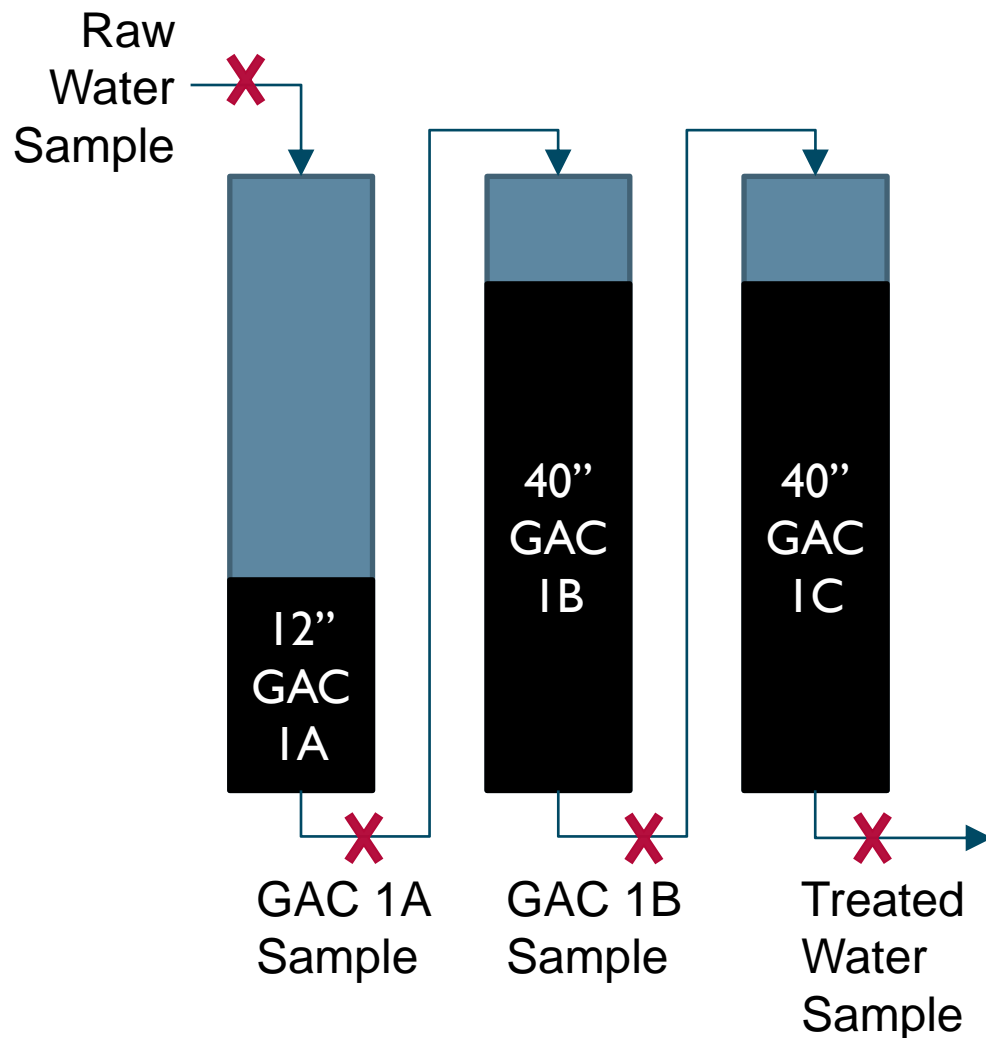


Limited in summer
by Charles River
Stream Flow

Permitted Volumes by Source
Total = 4.33 MGD

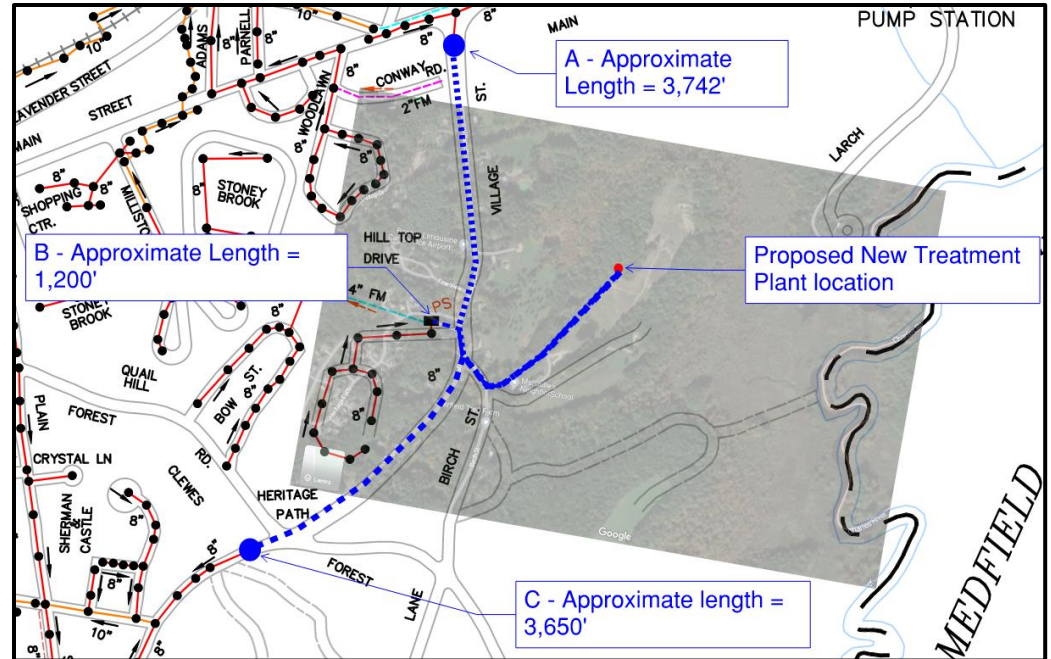


Pilot Testing

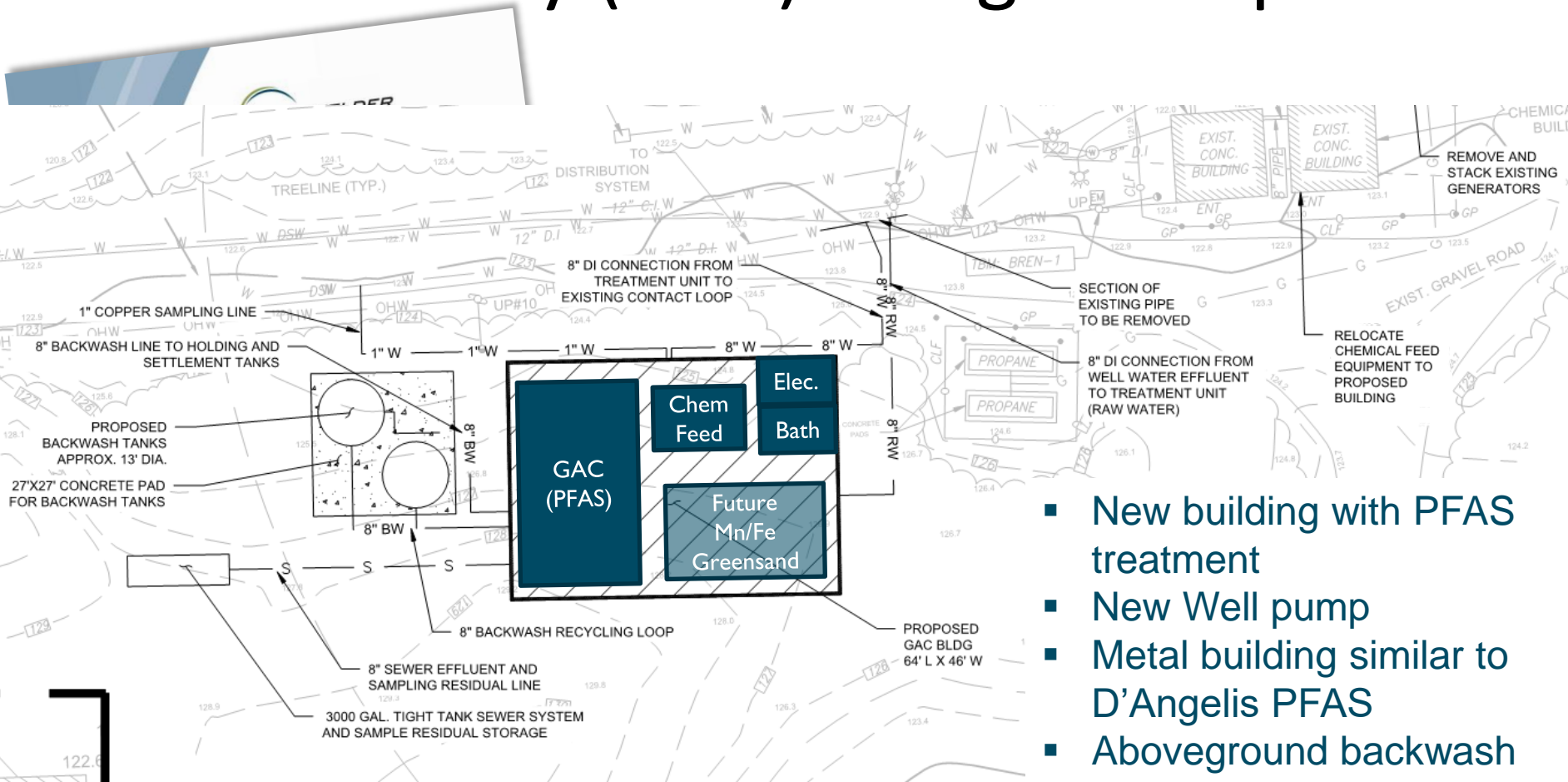


*Pilot testing confirmed the
GAC media will treat PFAS to
Non-detectable*

Existing Conditions



Preliminary (30%) Design Complete



Funding Sources & Opinion of Probable Capital Cost

- OPCC: \$6.88 M (*includes 30% contingency*)
- ✓ EPA State Assistance Grant
 - **\$3.5M** awarded for the project
 - 20% Town match required (\$700,000)
 - Federal funds subject to AIS requirements
 - BABA requirements waived for this project
- Drinking Water State Revolving Fund Loan
 - 0% for design, construction, and start-up
 - Prelim Application Aug 2023; Decision ~ Jan 2024

Final Design Contract

Task 1 Design

- 60%: finalize major equipment & layout; requirements, drawings. 60% cost estimate. Review & address American Iron & Steel requirements
- 90%; 100%: Final drawings & specifications for Ch. 149 bidding.

Task 2 Permitting

- Federal reviews & approvals: NEPA/ESA/EA documentation
- State permit / approvals (MHC; DEP System modifications)
- Local permit / approvals (wetlands, BOH, Planning, Building)

Task 3 Funding Support

- EPA Grant reporting / administration/ coordination
- SRF Application

Anticipated Schedule

Task	Estimated Start Date	Estimated End Date
Design Contract Executed / Notice to Proceed	Jul 14, 2023	--
<i>Submit SRF Statement of Interest for 0% Loan</i>	<i>Jul 14</i>	<i>Aug 11</i>
Final Design & Permitting; 100% Cost	Jul 2023	Nov 2023
<i>Fall Town Meeting – Appropriate Construction Cost; Bidding & Construction Phase Engineering</i>	<i>Jul 2023</i>	<i>Nov 2023</i>
Bidding	Dec 2023	Jan 2024
<i>SRF Decision Expected</i>	<i>Jan '24</i>	<i>Mar '24</i>
<i>SRF Loan Application</i>	<i>Mar '24</i>	<i>April '24</i>
Construction Contract Award & Execution*	Spring 2024	
Construction* <i>*(depends on equipment lead times and SRF funding timeline)</i>	Spring 2024	Summer 2025
DEP Acceptance, Start up Testing	Summer 2025	Summer 2025