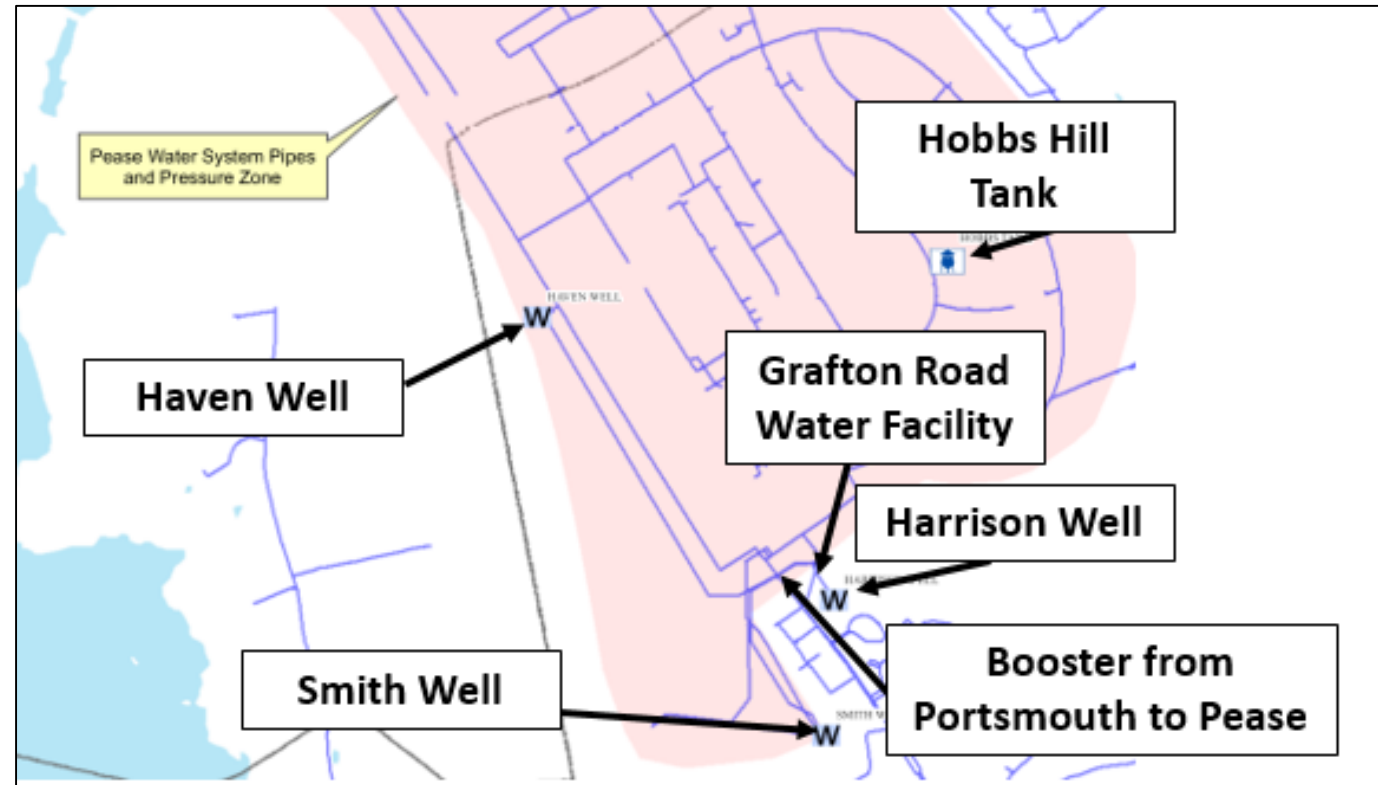


# Pease Tradeport Water Treatment System Update



Pease Restoration Advisory Board  
October 10, 2018

# Current Pease Tradeport Grafton Road Water Facility



# Grafton Road Water Facility Process Schematic Prior to PFAS Contamination

Supply Well Capacities	
Description	Capacity (gpm)
Harrison Well	286
Smith Well	343
Haven Well	534
<b>TOTAL</b>	<b>1,163</b>



- Chlorine
- Fluoride
- Orthophosphate

To  
Distribution  
System



# Grafton Road Water Facility Process Schematic

## May 2014 to September 2016

Supply Well Capacities	
Description	Capacity (gpm)
Harrison Well	286
Smith Well	343
<del>Haven Well</del>	<del>504</del>
TOTAL	<del>1,160</del>
	<b>629</b>



Portsmouth  
Water  
System  
Water

- Chlorine
- Fluoride
- Orthophosphate

To  
Distribution  
System



# Pease Well PFOA/PFOS Response – Demonstration Filters in Service Since September 2016



City of  
Portsmouth  
*Department of Public Works*

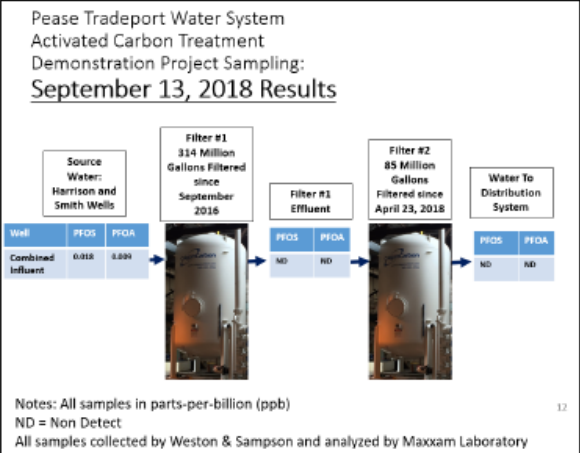


September 28, 2018

## PEASE TRADEPORT WATER SUPPLY UPDATE

### Demonstration Filter Performance

The City's engineering consultant continues to sample the performance of the activated carbon filters based on the amount of water treated. The graphic below shows the most recent source water sampling and treated filter water quality results for the PFOS and PFOA.



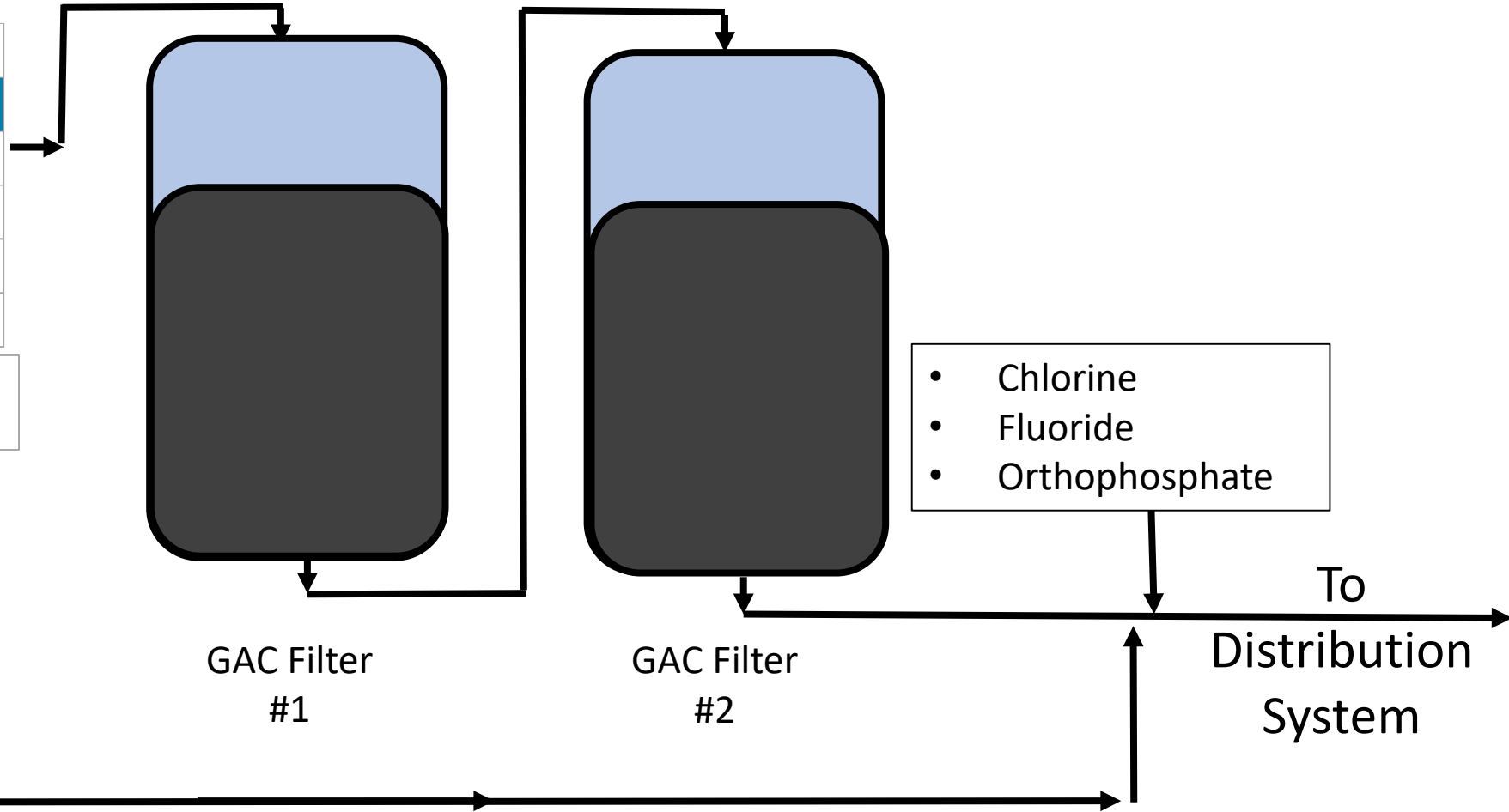
# Grafton Road Water Facility Process Schematic

## Granular Activated Carbon Demonstration Filters

Supply Well Capacities	
Description	Capacity (gpm)
Harrison Well	286
Smith Well	343
<del>Haven Well</del>	<del>504</del>
TOTAL	<del>1,160</del>

**400**  
(maximum filter rate)

Portsmouth  
Water  
System  
Water

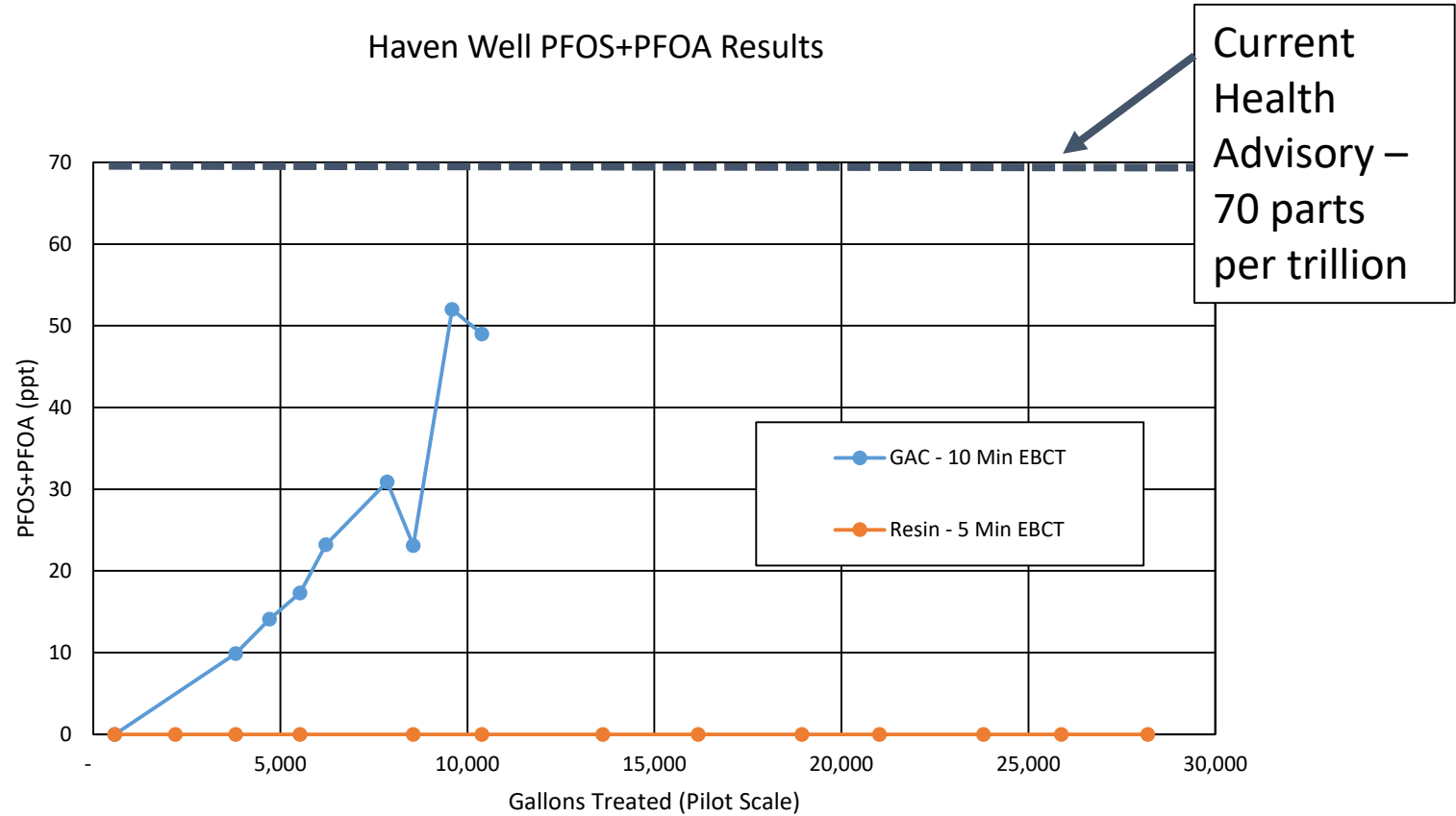




# Activated Carbon and Resin Piloting – Haven Well

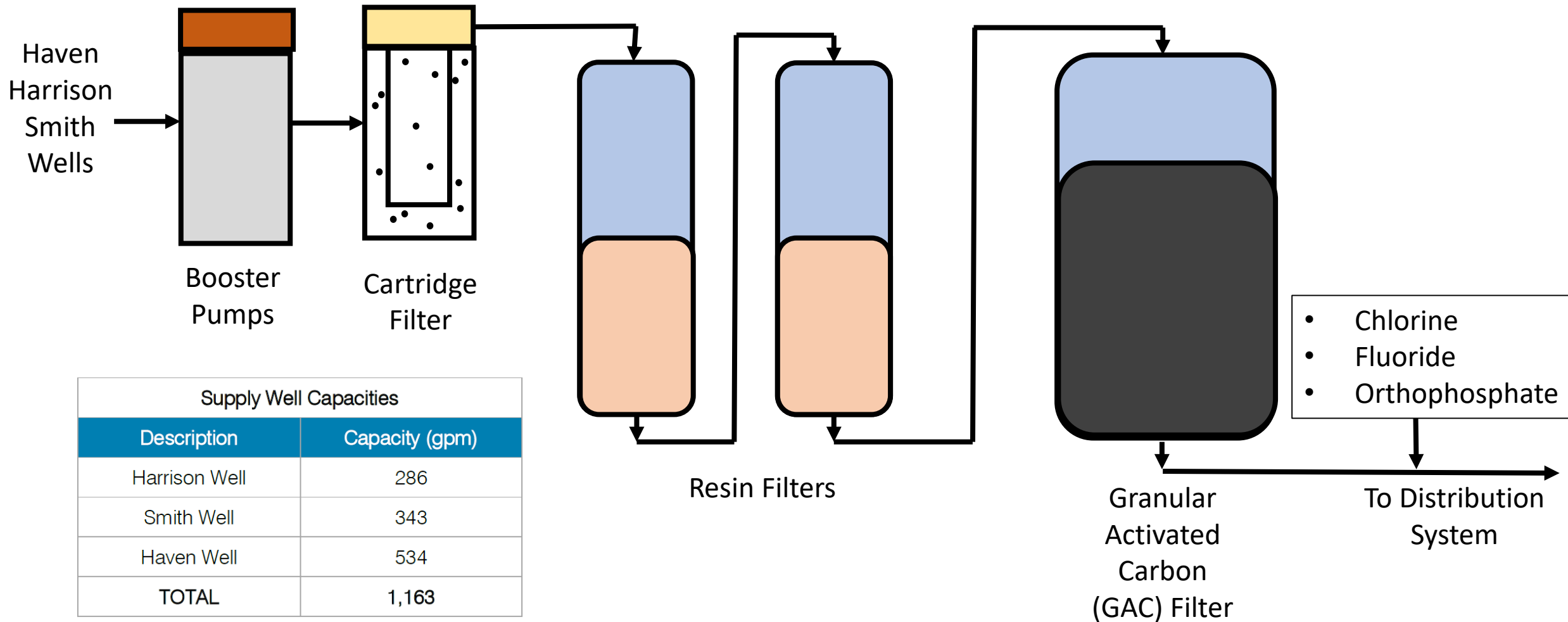


Haven Well PFOS+PFOA Results



# Grafton Road Water Facility Process Schematic

## Current Treatment System Design



Description	Capacity (gpm)
Harrison Well	286
Smith Well	343
Haven Well	534
<b>TOTAL</b>	<b>1,163</b>



# Current Rendering – Grafton Road Water Treatment Facility



# Anticipated Construction Schedule

Activity	Duration	Start	Finish	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	
Bidding	61	11/15/2018	1/15/2019	█	█																														
Contract Award	56	1/15/2019	3/12/2019			█	█	█																											
Notice to Proceed	0	3/12/2019	3/12/2019					★																											
Submittals	181	3/13/2019	9/10/2019					█	█	█	█	█	█	█																					
Equipment Procurement	224	6/4/2019	1/14/2020									█	█	█	█	█	█	█	█																
Phase 1 - Building Addition & GAC Filters	379	6/10/2019	6/23/2020									█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
GAC Filters On-Line with Smith & Harrison	27	5/27/2020	6/23/2020																			█	█	█	█	█	█	█	█	█	█	█	█	█	█
Phase 2 - Resin Skid, Cartridge Filters, Booster Pumps	279	5/29/2020	3/4/2021																																
Full System Start-Up with Smith & Harrison	48	1/15/2021	3/4/2021																																
Phase 3 - Admin Area, Site Work, Haven Well Online	200	10/15/2020	5/3/2021																																
Full System Start-Up with Haven	42	3/4/2021	4/15/2021																																
Final Completion	4	4/29/2021	5/3/2021																																★

## Milestones:

- Spring 2019 – Begin Construction
- June 2020 – New GAC Filters (switchover of Harrison/Smith Wells)
- Spring 2021 – Startup with Resin/GAC filters (Harrison/Smith Wells)
- Summer 2021 – Haven Well Startup

# Future Water Quality Monitoring of Haven Well and Pease Tradeport Aquifer

- Ongoing discussions with Air Force and regulators about developing a comprehensive water quality monitoring programs for:
  - Required Compliance Monitoring
  - Filter Performance Monitoring
  - Aquifer Monitoring

# Thank You



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