



PRINCETON PFAS ASSESSMENT

Private Well Sampling Project

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PFAS SAMPLING & RESULTS

- **Project Overview**

- PFAS detected in Town Hall Supply Well – September 2019
- Following MassDEP notification, establish 500-foot radius around the Town Hall well, sample 14 private wells in December 2019
- Results indicate all homes sampled have some level of PFAS impact
- Five wells are <20 ppt, five wells are >20 ppt and four wells are >100 ppt
- Homeowners notified of results within 24 hours of receipt of data from the laboratory and all homes with detections immediately provided bottled water
- Five POETs installed in December 2019-January 2020
- Second radius established 500 feet from all wells with detections, 22 wells identified within the radius, 19 wells sampled in January 2020

PFAS SAMPLING & RESULTS

- **Project overview (cont.)**

- Results indicate seven homes are non-detect, five homes have PFAS <20 ppt, two homes have PFAS at >20 ppt and one home has PFAS >100 ppt
- Presence of several non-detects and lower concentrations suggest limits of contamination are nearing definition in some areas
- Additional POETs to be installed ASAP on Round 2 homes >20 ppt (three locations)
- Third radius established, coordinating sampling now

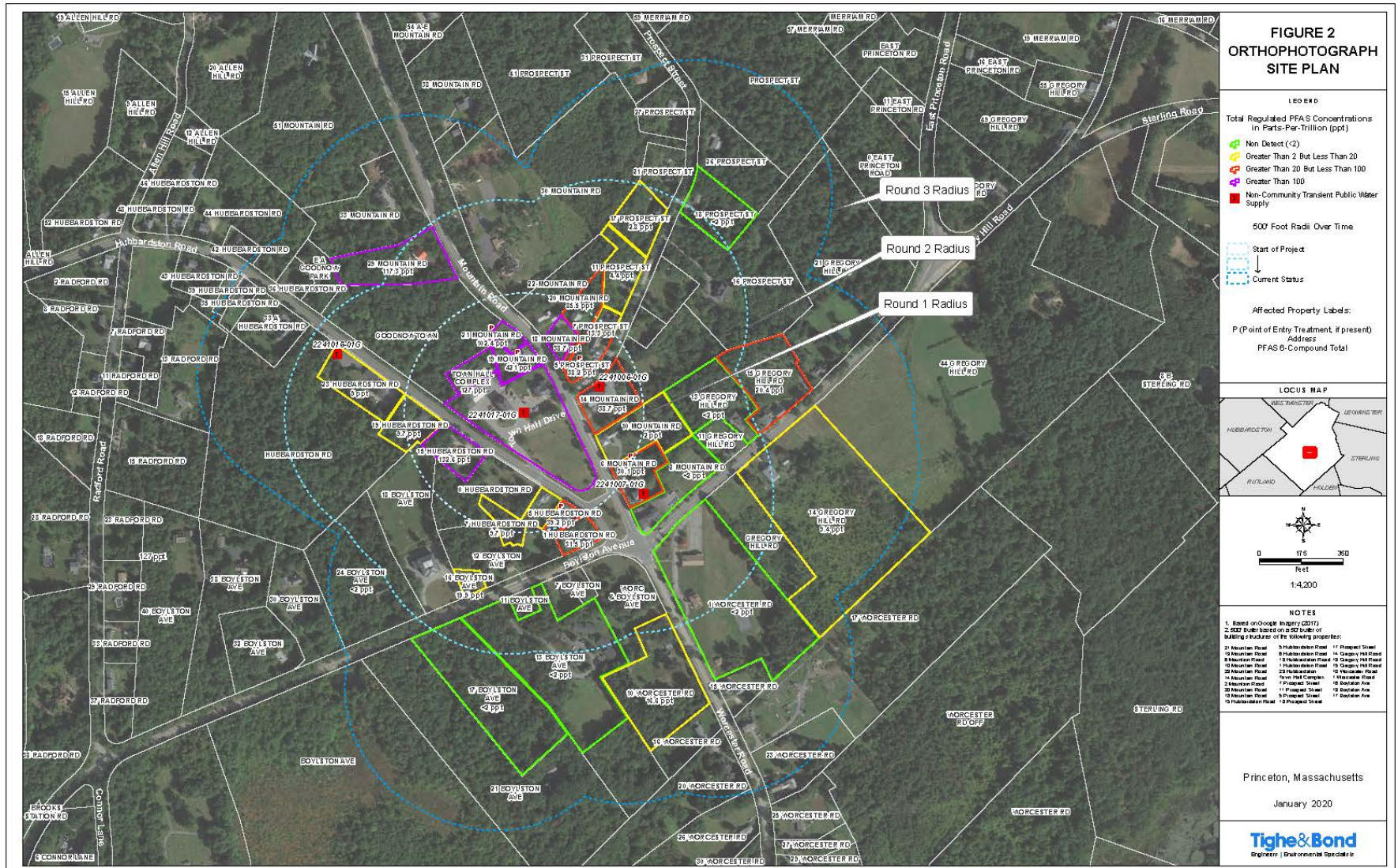
PFAS SAMPLING & RESULTS (GROUNDWATER)

- Existing monitoring wells at Town Hall property from historical petroleum releases, five wells located near Fire Department building
- Four monitoring wells sampled for PFAS (other well had an obstruction and could not be sampled)
- PFAS detected in all four well samples, concentrations (6-compound sums) were 29, 33, 78 and 350 ppt
- Highest concentrations in monitoring well MW-14, located at eastern end of annex building, closest to 19 Mountain Road

PROJECT PLAN

- Current focus is on preventing private well exposures
- Radius sampling to continue until bounds of well impacts is defined
- Homes with POET systems will be sampled monthly to determine when primary carbon vessel has PFAS breakthrough
- Other homes to be sampled quarterly to evaluate plume migration and develop contaminant trends over time
- Once private well impacts have been defined, will look at evaluation of soil impacts at and downhill of 30 Mountain Road
- Data will be used to develop a “Conceptual Site Model” or CSM
- CSM defines the source, migration and possible exposure pathways, sensitive receptors, etc. and guides “next steps” as investigation moves forward through the MCP process

SITE PLAN WITH DATA



**FIGURE 2
ORTHOGRAPHIC
SITE PLAN**

LEADER

Total Regulated PFAS Concentrations in Parts-Per-Trillion (ppt)

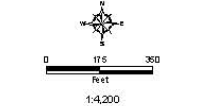
- Non Detect (<2)
- Greater Than 2 But Less Than 20
- Greater Than 20 But Less Than 100
- Greater Than 100
- Non-Community Transient Public Water Supply

500' Foot Radii Over Time

- Start of Project
- Current Status

Affected Property Labels:
P (Point of Entry Treatment if present)
Address
PFAS Compound Total

LOCUS MAP



- NOTES**
1. Based on on-site imagery (GDTI)
 2. GDTI data based on a 50' buffer of building perimeter of the following properties:
- | | | |
|---------------------|----------------------|---------------------|
| 1. Hubbardston Road | 11. Hubbardston Road | 17. Prospect Street |
| 2. Mountain Road | 12. Mountain Road | 18. Mountain Road |
| 3. Mountain Road | 13. Mountain Road | 19. Mountain Road |
| 4. Mountain Road | 14. Mountain Road | 20. Mountain Road |
| 5. Mountain Road | 15. Mountain Road | 21. Mountain Road |
| 6. Mountain Road | 16. Mountain Road | 22. Mountain Road |
| 7. Mountain Road | 17. Mountain Road | 23. Mountain Road |
| 8. Mountain Road | 18. Mountain Road | 24. Mountain Road |
| 9. Mountain Road | 19. Mountain Road | 25. Mountain Road |
| 10. Mountain Road | 20. Mountain Road | 26. Mountain Road |

Princeton, Massachusetts
January 2020

Tighe & Bond
Engineers | Environmental Specialists



Tighe&Bond

Engineers | Environmental Specialists