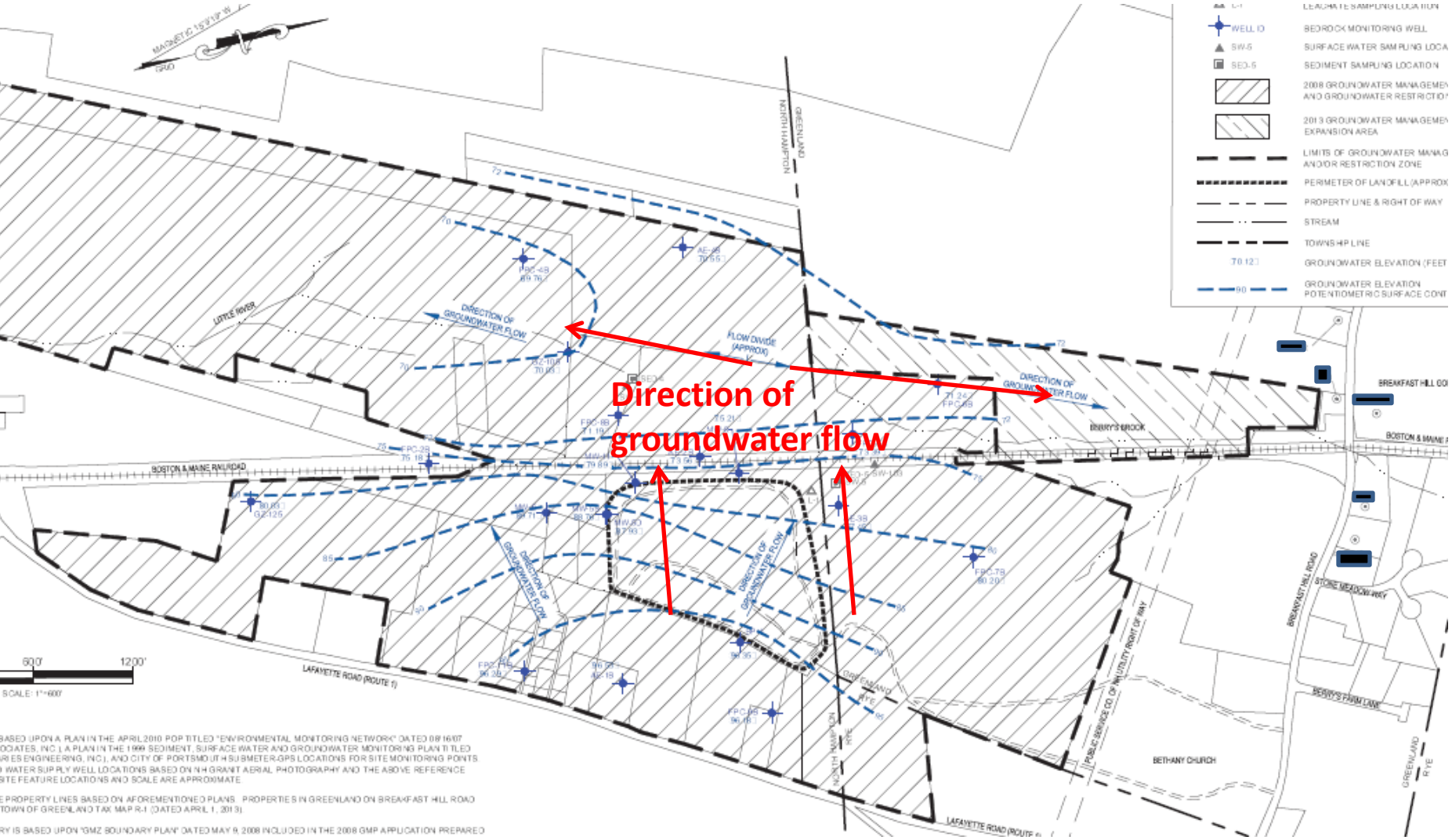
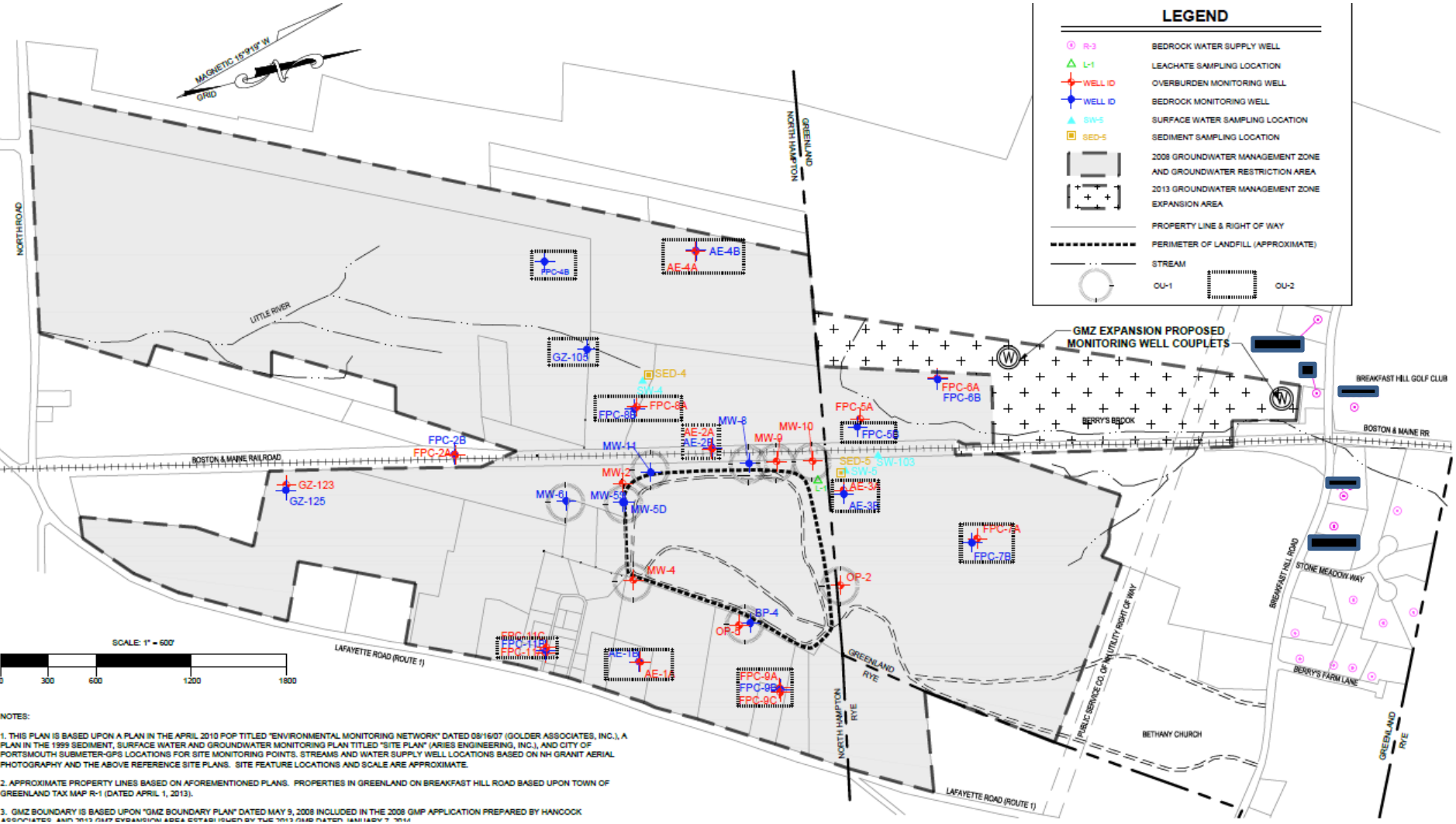
Site Orientation

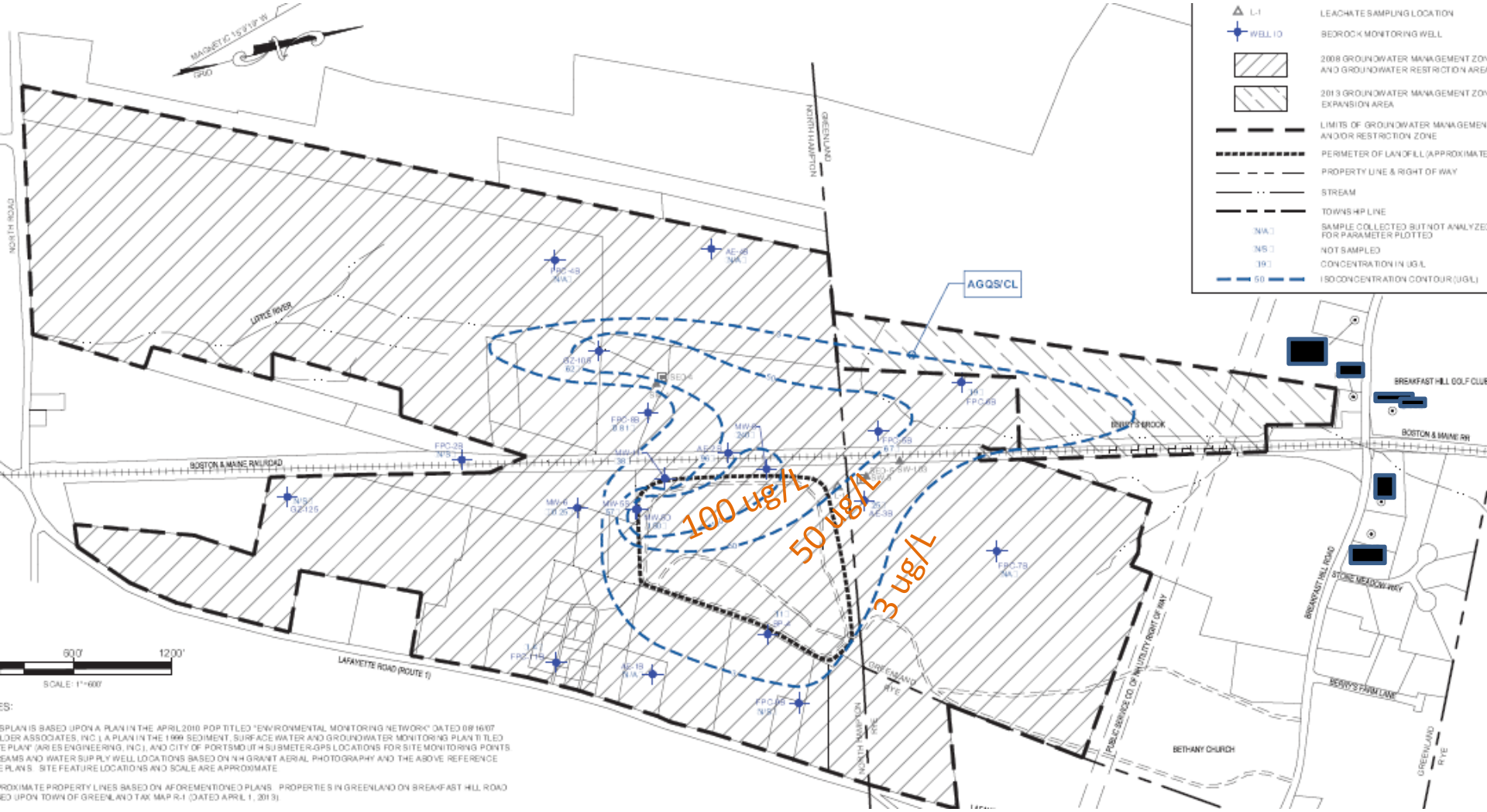
GMZ & Bedrock Groundwater Flow



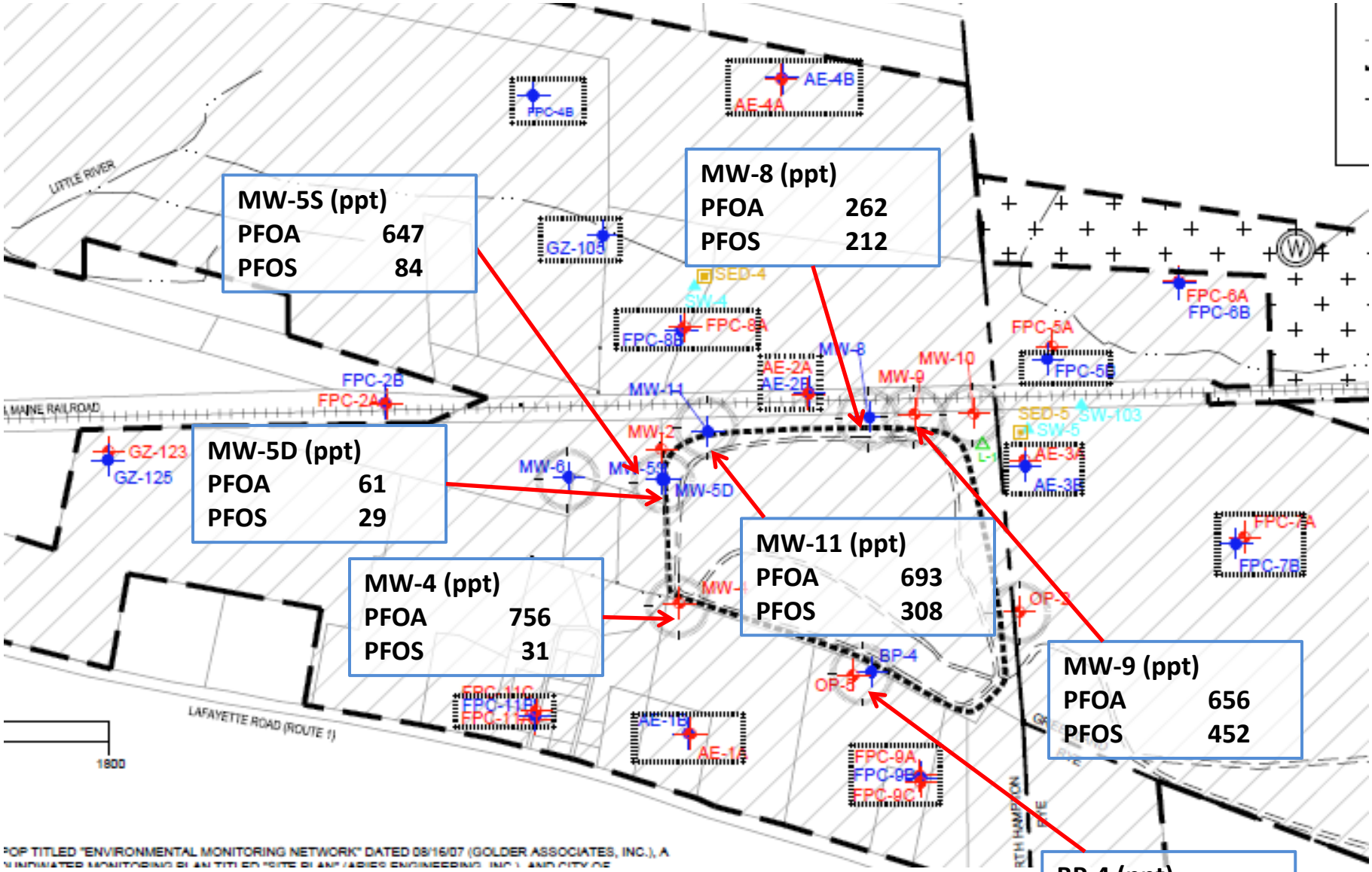
Monitoring Locations
(Groundwater, Surface Water and Sediment)



Extent of Contamination (1,4-Dioxane)



Summary of May 2016 PFC Results from OU-1 Wells



Summary of May 2016 Groundwater Analytical Data
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

OPERABLE UNIT 1 (OU-1)													
Sampling Point ID			**MW-4**	**MW-4-DUP**	**MW-5D**	**MW-5S**	**MW-8**	**MW-9**	**MW-11**	**BP-4**	**GW-EB-Waterlevel**	**FB-DI-Water**	**GW-EB-Bailer**
Monitored Zone / Unit			Till	Till	DBR	SBR	SBR	Outwash	SBR	OBH-BR	Blank	Blank	Blank
Screened Interval (ft from measuring point)			30.1-40.1	30.1-40.1	141.3-161.3	53.0-83.0	47.5-67.5	8.0-13.0	33.8-53.8	36.4-101.8			
Depth of Well (measured August 2015)			39.2	39.2	161.7	83.5	67.6	12.5	54.7	101.8			
Date of Sample Collection	**HA**	**AGQS**	5/24/16	5/24/16	5/25/16	5/24/16	5/24/16	5/24/16	5/25/16	5/24/16	5/24/16	5/24/16	5/24/16
PERFLUORINATED CHEMICALS BY MODIFIED 537 - (ng/L)	**EPA**	**NHDES**											
Perfluorobutanesulfonic acid (PFBS)	---	---	5.06J	4.96J	27.5	10.1	30.8	3.53J	10.8	2.72J	<7.71U	<7.86U	<7.89U
Perfluoroheptanoic acid (PFHpA)	---	---	440	441	44.8	468	179	345	423	26.2	<7.71U	<7.86U	<7.89U
Perfluorohexanesulfonic acid (PFHxS)	---	---	40.4	32.8	42.9	58.6	93.6	17.9	60.2	12.1	<7.71U	<7.86U	<7.89U
Perfluorooctanoic acid (PFOA)	70	70	**756**	**728**	61.2	**647**	**262**	**656**	**693**	57.6	<7.71U	<7.86U	<7.89U
Perfluorononanoic acid (PFNA)	---	---	19.3	19.4	<8.05U	62.6	5.36J	169	84.9	1.55J	<7.71U	<7.86U	<7.89U
Perfluorooctanesulfonic (PFOS)	70	70	30.8	31	29.3	**84**	**212**	**452**	**308**	13.3	<7.71U	<7.86U	<7.89U
Combination of PFOA and PFOS	---	70	**786.8**	**759**	**90.5**	**731**	**474**	**1108**	**1001**	**70.9**	ND	ND	ND
FIELD PARAMETERS													
Dissolved Oxygen (mg/l)	---	---	N/A	N/A	1.2	1.4	1	1.8	0.9	0.9	N/A	N/A	N/A
Oxidation Reduction Potential (mV)	---	---	N/A	N/A	-148	-109	-141	23	-131	-171	N/A	N/A	N/A
pH (standard units)	---	---	N/A	N/A	7.2	7	7.6	6.4	7.1	7.5	N/A	N/A	N/A
Specific Conductance (us/cm)	---	---	N/A	N/A	1392	854	1198	283	615	736	N/A	N/A	N/A
Temperature (degrees Celcius)	---	---	N/A	N/A	12	11	10	9	11	10	N/A	N/A	N/A
Turbidity (NTU)	---	---	N/A	N/A	<5	<5	6	18	<5	<5	N/A	N/A	N/A

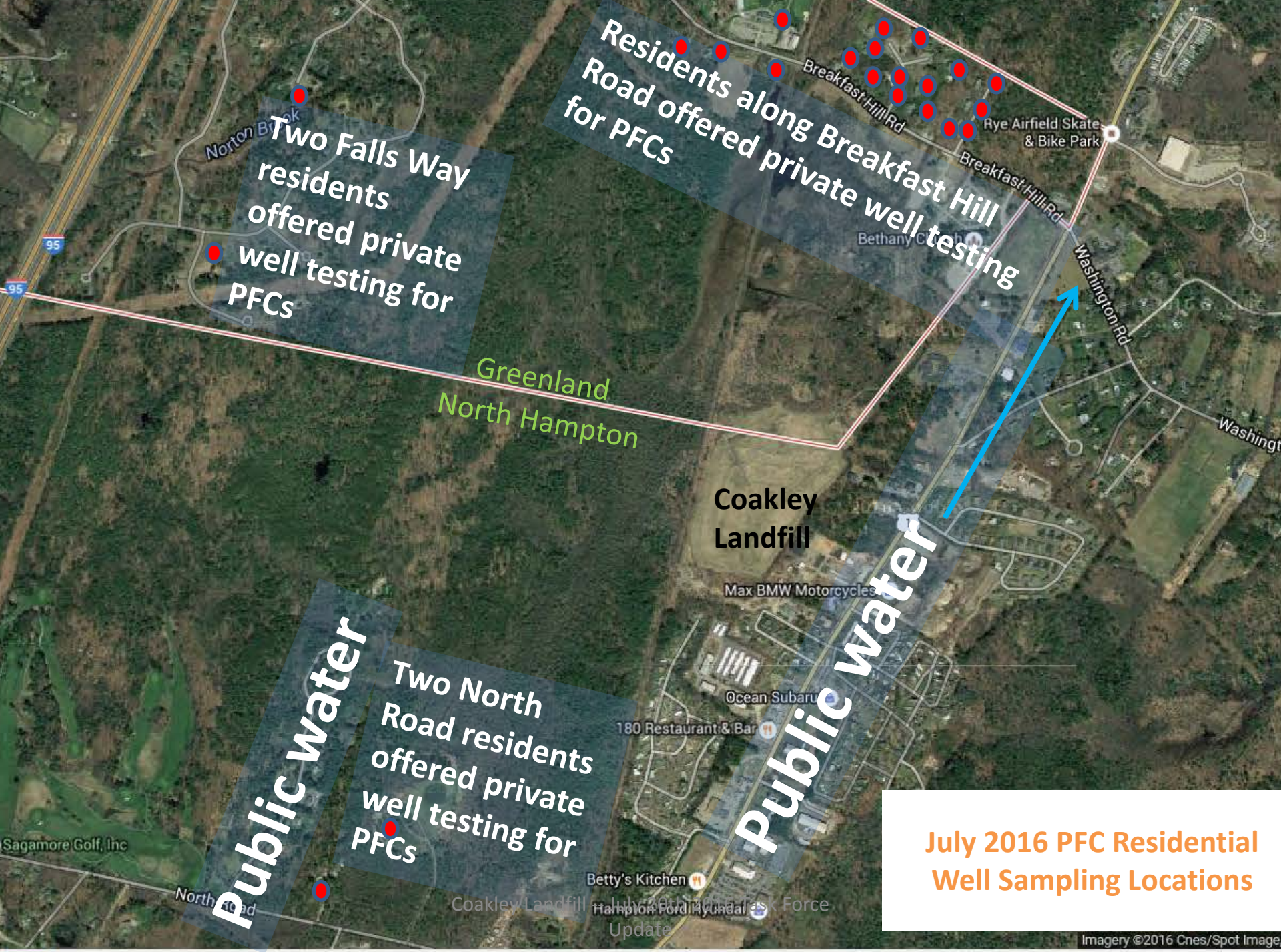
Notes:

1. Monitored Zone / Unit identifies the hydrogeological unit within the screened/open interval. The hydrogeology of the site is comprised of four principle geological units including bedrock, glacial till, marine sediments consisting predominately of silt and clay, and sandy outwash. Bedrock well screened intervals vary as follows: "OBH-BR" wells are standard 6-inch diameter wells with steel casing set in bedrock and open boreholes (typical water supply well construction). "SBR" indicates the screen interval is the upper most section of bedrock. "DBR" is used to differentiate a screened interval that is below the uppermost section of bedrock (i.e.; MW-5S versus MW-5D).

2. **Bolded** and shaded values denote concentration exceeding the EPA Lifetime Health Advisory (HA).
3. Results for groundwater primary/duplicate samples are provided in this table: MW-4/MW-4-DUP.
4. GW-EB-Waterlevel. Equipment blank for water level meter completed on a decomtaminated depth to water level meter after MW-8 was sampled.
5. FB-DI-Water. Field blank is laboratory-provided PFC free water that was used for decontamination purposes, poured directly from the lab supplied container into sampling containers.
6. GW-EB-Bailer. Equipment blank for bailer used for sampling MW-4. PFC free water supplied by the lab was poured directly onto a new bailer and collected in the sampling containers.

ABBREVIATIONS

N/A	Sample was not analyzed/measured for indicated parameter
ND	Not detected
PFC	Perfluorinated Chemicals
#.## U	Not Detected at the reporting detection limit indicated
EPA	US Environmental Protection Agency
NHDES AGQS	New Hampshire Department of Environmental Services Ambient Groundwater Quality Standard
HA	Health Advisory
uS/cm	microsiemens per centimeter
ng/L	nanograms per liter, parts per trillion
mg/L	milligram per liter, parts per million
NTU	nephelometric turbidity unit
mV	millivolt
---	Health Advisory standard not established.
J	Concentration is detected below the Lower Calibration Limit of the instrument.



July 2016 PFC Residential Well Sampling Locations

PFC Sampling Summary

- Results for PFCs in residential wells are expected at any moment.
- Results for PFCs at OU-2 monitoring wells are expected during the first week of August.
- The public will be informed of all results as soon as possible.
- The entire data set will be considered to determine next steps.

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