PES Environmental, Inc.
Engineering & Environmental Services

October 27, 2020

1413.001.02

Washington Department of Ecology
Northwest Regional Office Toxics Control Program
3190 – 160th Avenue SE
Bellevue, Washington 98008-5452
Attn: Ms. Tamara Cardona

BY EMAIL ONLY

REVISED GROUNDWATER AND SOIL VAPOR MONITORING PLAN
AMERICAN LINEN SUPPLY CO-DEXTER AVENUE SITE
AGREED ORDER NO. DE 14302

Dear Ms. Cardona:

On behalf of BMR-Dexter LLC ("BMRD"), PES Environmental, Inc. ("PES"), is submitting this revised plan for monitoring groundwater and soil vapor at the American Linen Supply Co–Dexter Avenue Site (Figure 1). This plan revises the proposed plan submitted to the Washington State Department of Ecology ("Ecology") on October 7, 2020, and it incorporates Ecology's comments provided by email and telephone.

The purpose of the plan is to detail the monitoring to be conducted at the 700 Dexter Avenue North property (the "Property") and outside of the Property (together, the "Site") after emulsified vegetable oil ("EVO") has been injected in the perimeter wells located adjacent to the Property along 8th Avenue North and Roy Street. The monitoring plan covers the period from November 2020 through the issuance by Ecology of the Final Cleanup Action Plan ("CAP") (which is currently anticipated occur in the second half of 2022) and applies to the monitoring points previously monitored pursuant to the Final Interim Action Work Plan ("IAWP"), [1] Final Contingent Action Addendum ("CAA") to the IAWP [2], Final Remedial Investigation/Feasibility Study ("RI/FS") Work Plan,[3] and Final RI/FS Work Plan Addendum.[4] This letter provides a summary of the current sampling program, the rationale for the proposed monitoring plan, and descriptions of the proposed wells to be monitored, the monitoring frequency, and the analytical parameters.

[1] PES. 2018. *Final Interim Action Work Plan, American Linen Supply Co-Dexter Avenue Site, 700 Dexter Avenue North, Seattle, Washington.* August.

[2] PES Environmental, Inc. (PES). 2019. *Final Contingent Action Addendum to the Final Interim Action Work Plan, Former American Linen Supply Co-Dexter Avenue Site, Agreed Order No. DE 14302.* February 14.

[3] PES Environmental, Inc. (PES). 2019. *Final Remedial Investigation/Feasibility Study Work Plan, American Linen Supply Co-Dexter Avenue Site, 700 Dexter Avenue North, Seattle, Washington.* Prepared for BMR-Dexter LLC. December 4.

[4] PES Environmental, Inc. (PES). 2020. *Final Remedial Investigation/Feasibility Study Work Plan Addendum, American Linen Supply Co-Dexter Avenue Site, 700 Dexter Avenue North, Seattle, Washington.* Prepared for BMR-Dexter LLC. June 11.

CURRENT MONITORING PROGRAM

Monitoring Wells

PES has conducted Interim Action ("IA") groundwater monitoring consistent with the IAWP on a quarterly basis from a network of 45 monitoring wells focused on the part of the Site near the Property (Figure 2). Groundwater monitoring has included both measurement of groundwater levels and collection of groundwater samples. All groundwater samples collected from IA monitoring wells have been analyzed for volatile organic compounds ("VOCs") by United States Environmental Protection Agency ("EPA") Method 8260, with samples from 33 wells also analyzed for gasoline-range organics ("GRO") by Ecology Method NWTPH-Gx and a full suite of geochemical parameters.[5] PES has also sampled 24 on-Property CAA monitoring wells quarterly consistent with the Final CAA (Figure 2). All groundwater samples collected from CAA monitoring wells have been analyzed for VOCs, GRO, and the full suite of geochemical parameters. Including both the IA and CAA monitoring wells, the IA monitoring network totals 69 wells.

PES has also conducted groundwater monitoring at the Site as part of the RI, with four quarterly RI groundwater monitoring events completed as of July 2020. Consistent with the Final RI/FS Work Plan and Final RI/FS Work Plan Addendum, the RI monitoring well network has included all of the IA monitoring wells (not including the 24 CAA wells) and 62 additional monitoring wells located in different areas near the Property and farther to the south and east from the Property (Figure 2). In total, the RI well network has included 107 wells. Similar to the IA and CAA groundwater monitoring, all RI groundwater samples have been analyzed for VOCs, with samples from 43 monitoring wells also analyzed for GRO and samples from 101 monitoring wells also analyzed for the full suite of geochemical parameters.

Soil Vapor Probes

Soil vapor probes SV01, SV02, and SV03 have been monitored quarterly since late 2018, except at times when the probe screens were submerged. The SV02 screen was temporarily submerged in January and April 2020, and the SV03 screen has been submerged since April 2019. Soil vapor probes installed as part of the RI (SV-04 through SV-28) have been sampled once in July 2020. All samples were analyzed for VOCs by EPA Method TO-15.

PROPOSED MONITORING LOCATIONS AND SAMPLING FREQUENCY

The overall objectives for monitoring between November 2020 and when the CAP is finalized are to provide sufficient data to evaluate the performance of the IA, monitor CVOC concentration time trends in groundwater throughout the Site, provide confirmation of the CVOC concentrations in soil vapor, and provide data for use during preparation of the FS and CAP.

Monitoring Wells

Of the 131 monitoring wells sampled per the IA, CAA, and RI work plans, PES proposes sampling all but 7 of the wells (Table 1 and Figure 2). All 69 of the wells monitored per the IA

[5] The full suite of geochemical parameters includes alkalinity, chloride, nitrate, sulfate, total organic carbon, ferrous and ferric iron, total manganese, and dissolved gases (methane, ethane, and ethene).

and CAA programs (shown as IA/CAA performance monitoring wells in Table 1) would continue to be monitored. PES proposes eliminating 7 of the 62 former RI monitoring wells (shown as plume monitoring wells in Table 1), including 6 shallow wells (FMW-143, MW-8, MW-214, SCL-MW105, SCS-2, and SMW-3) and Intermediate A well GEI-1. All of these wells are well beyond the edges of the plumes that they are monitoring, with closer wells that define the edge of the plume or a nearby well with easier access. Figures 3 through 6 show the wells to be monitored in the Shallow, Intermediate A, Intermediate B, and Deep Zones, respectively. The CAA wells, which were screened according to IA treatment zones, are shown on Figures 3 through 6 in the stratigraphic zone most applicable to their screen depths, with Treatment Zone A wells in the Intermediate A Zone, Treatment Zones B and C wells in the Intermediate B Zone, and Treatment Zone D wells in the Deep Zone. PES will continue to incorporate into the Site database data collected by others on properties in and around the Site, including data collected at Seattle DOT Mercer Parcels, Seattle DOT Dexter Parcel, and 701 Dexter Parcel (Figures 3 through 6).

For consistency with the sampling frequency specified in the IAWP, PES proposes continuing the quarterly sampling frequency for the 69 monitoring wells sampled per the IA and CAA work plans. This will allow both continued monitoring of the effects of the Property injections and the initial monitoring of the effects of the perimeter injections. To provide periodic plume monitoring data during the period of RI and FS report preparation, PES proposes sampling 45 of the 55 plume monitoring wells on a semiannual basis, with the first sampling event in November 2020. Seven of the plume monitoring wells will be sampled on a quarterly basis to monitor the southeast edge of the plume (MW-325, MW-335, FMW-131, FMW-137, GEI-2, MW-326, and MW-336). One of the plume monitoring wells (MW-301) will be sampled quarterly since it has never been sampled due to dewatering drawdown. Finally, two of the plume monitoring wells, shallow monitoring wells MW-337 and MW-339 located at the southern tip of Lake Union, will be sampled annually as confirmation of the currently non-detect to very low CVOC concentrations near the lake.

PES will monitor all 131 monitoring wells at the Site for groundwater levels on a quarterly basis between November 2020 and finalization of the CAP. Additionally, the PES will maintain the pressure transducers that are currently deployed in 24 monitoring wells at the Site (Table 1).

Soil Vapor Probes

PES proposes to continue soil vapor sampling from all 28 soil vapor probes on a quarterly basis, since PES has not yet collected data from the complete soil vapor monitoring network over a monitoring year. After a full year of data have been collected, PES will reassess monitoring of the soil vapor monitoring network and discuss any modifications with Ecology.

PROPOSED ANALYTICAL TESTING FREQUENCY

Table 1 summarizes the proposed analytical testing frequency and test methods.

IA/CAA Monitoring Wells

All groundwater samples collected from each IA/CAA monitoring well will be analyzed for VOCs, and all groundwater samples collected from four Shallow Zone IA/CAA monitoring

wells located near former USTs on the northern half of the Property (MW-9, MW121, MW125, and R-MW5) will also be analyzed for GRO. All groundwater samples collected from wells outside of the Property used for IA performance monitoring will be analyzed quarterly for a limited suite of geochemical parameters and annually for the full suite of geochemical parameters. The limited geochemical parameter suite, which includes sulfate, total organic carbon ("TOC"), total metals (total iron and manganese), and dissolved gases (methane, ethane, and ethene), will be tested quarterly since those are the primary parameters used to evaluate the effects of the injections on groundwater near the Property. The full suite of geochemical parameters will be analyzed annually to provide periodic documentation of all of the geochemical parameters. For the CAA wells monitoring the conditions at the Property, groundwater samples collected from wells with significant concentrations of chlorinated VOCs ("CVOCs") will be analyzed for the limited geochemical parameter suite on an annual basis and the full geochemical parameter suite on an annual basis. Groundwater samples collected from CAA wells with non-detect to very low level concentrations of CVOCs will be analyzed for the full geochemical parameter suite on an annual basis. These geochemical parameter analysis frequencies will be adequate to monitor the conditions until issuance of the final CAP.

Plume Monitoring Wells

All groundwater samples collected from the 55 plume monitoring wells (former RI wells that were not part of the IA monitoring network) will be analyzed for VOCs, and all groundwater samples collected from MW-301, located near former USTs on the northern half of the Property, will also be analyzed for GRO. Due to the number of previous samples analyzed for geochemical parameters and the consistency of the results, samples from 54 of the plume monitoring wells will be analyzed for the full suite of geochemical parameters on an annual basis. The full suite of geochemical parameters includes alkalinity, chloride, nitrate, sulfate, TOC, total metals (total iron, ferrous iron, and manganese), and dissolved gases (methane, ethane, and ethene). Groundwater samples from MW-301, which has yet to be sampled due to dewatering drawdown, will be tested for the full suite of geochemical parameters quarterly.

Soil Vapor Probes

All collected soil vapor samples will be analyzed for VOCs.

FUTURE SAMPLING SCHEDULE

The next sampling event is planned for November 2020, with quarterly events after that (i.e., February, May, August, November, etc.). PES will conduct semiannual sampling in November and May and annual sampling in November. For geochemical testing not conducted during every sampling event, semiannual analyses will occur in November and May, and annual analyses will occur in November, with analysis of the full geochemical suite beginning in November 2021. If analytical results prior to the issuance of the final CAP indicate a need for a change in the monitoring plan (e.g., during FS implementation), proposed changes will be submitted for Ecology approval.

If you have any questions regarding this letter, please do not hesitate to call either of us at (206) 529-3980. Thank you for assistance. Please call if you have any questions or comments regarding this request.

Sincerely,
PES ENVIRONMENTAL, INC.

Daniel A. Balbiani, P.E.
Principal Engineer

William R. Haldeman, LHG, R.G.
Associate Hydrogeologist

Attachments: Table 1 – Monitoring After Perimeter Injection
Figure 1 – Property Location
Figure 2 – Existing CAA, IA, and RI Monitoring Network
Figure 3 – Proposed Shallow Zone Monitoring Network
Figure 4 – Proposed Intermediate A Zone Monitoring Network
Figure 5 – Proposed Intermediate B Zone Monitoring Network
Figure 6 – Proposed Deep Zone Monitoring Network

cc: John Moshy, BMRD
Drew Graham, OAC

Table 1

Monitoring After Perimeter Injection
American Linen Supply Co.–Dexter Avenue Site
700 Dexter Avenue North, Seattle, Washington

Sampling Location Number	Well Location	Screen Completion		Monitoring Purpose				Proposed Sampling Frequency through CAP Issuance				Analytical Testing Frequency						
												Current			Proposed			
																	Geochem Parameters	
		Depth (ft bgs)	Elevation (ft)	IA/CAA Performance Sampling	Plume Sampling	Quarterly Groundwater Levels	Soil Vapor Sampling	Quarterly	Semi-Annually	Annually	Eliminate From Network	VOCs	GRO	Geocheml Parameters (Full Suite)	VOCs	GRO	Full Suite	Limited Suite
Shallow Zone Monitoring Wells																		
FMW-143	9th Ave N ROW	23 to 28	10 to 5	–	–	X	–	–	–	–	X	Q	–	Q	–	–	–	–
MW-8	800 Aloha St Parcel	4.5 to 19	28.7 to 14.2	–	–	X	–	–	–	–	X	Q	–	–	–	–	–	–
MW-9	8th Ave N ROW	7 to 22	34.1 to 19.1	X	–	X	–	X	–	–	–	Q	Q	Q	Q	Q	A	Q
MW121	8th Ave N ROW	15 to 25	26.7 to 16.7	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	Q	A	Q
MW125	Valley Street ROW	15 to 30	28.6 to 13.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	Q	A	Q
MW-154	Roy Street ROW	25 to 35	28.1 to 18.1	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-155	Roy Street ROW	20 to 30	24.4 to 14.4	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-159	8th Ave N ROW	20.4 to 30.4	22.9 to 12.9	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-214	Valley St E of Westlake Ave N	7 to 17	20.8 to 10.8	–	–	X	–	–	–	–	X	Q	–	–	–	–	–	–
MW-301	Valley Street ROW near MW102	18.3 to 28.3	35.6 to 25.6	–	X	X	–	X	–	–	–	Dry	Dry	Dry	Q	Q	Q	–
MW-305	Dexter Ave N ROW, S of Roy St	22.8 to 32.8	37.4 to 27.4	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-310	Alley near MW108	13.8 to 23.8	19.2 to 9.2	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-312	Alley near MW103	15.8 to 25.8	19.9 to 9.9	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-313	Alley near MW110	19.5 to 29.5	20.4 to 10.4	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-320	9th Ave N, near MW113	15.5 to 25.5	18.6 to 8.6	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-332	N sidewalk of Roy St, E of MW-313	20.3 to 30.3	16.0 to 6.0	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-337	Near Lake Union, east of MW123	9.7 to 19.7	18.1 to 8.1	–	X	X	–	–	–	X	–	Q	–	Q	A	–	A	–
MW-339	Near Lake Union, near MW-327	10.1 to 20.1	18.2 to 8.2	–	X	X	–	–	–	X	–	Q	–	Q	A	–	A	–
R-MW5	Dexter Ave N ROW	15 to 30	42.4 to 27.4	X	–	X	–	X	–	–	–	Q	Q	Q	Q	Q	A	Q
R-MW6	8th Ave N ROW	12 to 22	33.3 to 23.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
SCL-MW101	Alley near MW-309	5 to 15	25.5 to 15.5	–	X	X	–	–	X	–	–	Q	–	–	SA	–	A	–
SCL-MW105	Alley near MW126	20 to 30	11.3 to 1.3	–	–	X	–	–	–	–	X	Q	–	–	–	–	–	–
SCS-2	800 Aloha St Parcel	11 to 21	28.2 to 18.2	–	–	X	–	–	–	–	X	Q	–	–	–	–	–	–
SMW-3	Valley St E of Westlake Ave N	10 to 20	17.1 to 7.1	–	–	X	–	–	–	–	X	Q	–	–	–	–	–	–
Intermediate A Zone Monitoring Wells																		
BB-8	Roy Street ROW	30 to 40	14.0 to 4.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
FMW-142	9th Ave N ROW	37.5 to 42.5	-4.6 to -9.6	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
GEI-1	630 Westlake Ave N	26.8 to 36.8	1.2 to -8.8	–	–	X	–	–	–	–	X	Q	–	Q	–	–	–	–
GEI-MW-1	9th Ave N ROW, N of MW-317	39.8 to 59.8	-9.7 to -29.7	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW107	8th Ave N ROW	35 to 45	8.8 to -1.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW108	Alley between 8th & 9th Ave	40 to 50	-7.2 to -17.2	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW109	Alley between 8th & 9th Ave	35 to 45	-0.0 to -10.0	X	–	X (t)	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW110	Alley between 8th & 9th Ave	35 to 45	4.7 to -5.3	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW115	9th Ave N ROW	35 to 45	-0.6 to -10.6	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW116	9th Ave N ROW	35 to 45	-3.0 to -13.0	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW119	9th Ave N ROW S of Roy St	35 to 45	2.7 to -7.3	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW120	8th Ave N ROW	40 to 50	-0.0 to -10.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-127	8th Ave N ROW	40 to 50	-1.0 to -11.0	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-142	8th Ave N ROW	40 to 50	2.4 to -7.6	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-144R	8th Ave N ROW	40.1 to 50.1	2.8 to -7.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-146	Roy Street ROW	39.8 to 49.8	12.9 to 2.9	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-156	8th Ave N ROW	39.6 to 49.6	2.0 to -8.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-189	Valley Street ROW, next to MW102	48.8 to 58.8	-1.2 to -11.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q

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American Linen Supply Co.–Dexter Avenue Site
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Sampling Location Number	Well Location	Screen Completion		Monitoring Purpose				Proposed Sampling Frequency through CAP Issuance				Analytical Testing Frequency						
												Current			Proposed			
		Depth (ft bgs)	Elevation (ft)	IA/CAA Performance Sampling	Plume Sampling	Quarterly Groundwater Levels	Soil Vapor Sampling	Quarterly	Semi-Annually	Annually	Eliminate From Network	VOCs	GRO	Geocheml Parameters (Full Suite)	VOCs	GRO	Geochem Parameters	
																	Full Suite	Limited Suite
MW-302	Dexter Ave N ROW, W of MW-151	54.3 to 64.3	3.0 to -7.0	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-306	Dexter Ave N ROW, S of Roy St	42.8 to 52.8	17.2 to 7.2	–	X	X (t)	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-308	Alley north of MW122	35.1 to 45.1	-4.7 to -14.7	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-315	Mercer St ROW, S of the Property	37.5 to 47.4	12.2 to 2.3	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-317	9th Ave N, north of MW116	28.2 to 38.2	3.4 to -6.6	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-325	Mercer St ROW, W of 9th Ave N	34.5 to 44.5	7.0 to -3.0	–	X	X (t)	–	X	–	–	–	Q	–	Q	Q	–	A	–
MW-327	E of Westlake Ave N near lake	24.8 to 34.8	3.6 to -6.3	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-330	Across Valley St from MW-301	52.1 to 62.1	-0.1 to -10.1	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-331	North end of alley near MW126	35.5 to 45.5	-4.3 to -14.3	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-333	N side of Roy St near FMW-140	33.2 to 43.2	-1.5 to -11.5	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
Intermediate B Zone Monitoring Wells																		
FMW-141	Alley Between 8th & 9th Ave	47.5 to 57.5	-12.1 to -22.1	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW111	Alley Between 8th & 9th Ave	70 to 80	-33.5 to -43.5	X	–	X (t)	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW112	Dexter Ave N ROW	75 to 85	-17.2 to -27.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW126	Alley Between 8th & 9th Ave	85 to 95	-54.1 to -64.1	X	–	X (t)	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW-143	8th Ave N ROW east of Property	70.1 to 80	-27.7 to -37.6	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-145R	8th Ave N ROW east of Property	70.2 to 80.2	-27.5 to -37.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-147	Roy Street ROW south of Property	70 to 80	-17.6 to -27.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-148	Roy Street ROW SE of Property	70 to 80	-25.7 to -35.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-157	8th Ave N ROW east of Property	69.9 to 79.8	-28.3 to -38.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-190	Valley Street ROW, next to MW102	78.8 to 88.8	-30.2 to -40.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-303	Dexter Ave N ROW, NW of MW130	71.4 to 81.4	-13.8 to -23.8	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-307	Dexter Ave N ROW, S of Roy St	72.8 to 82.8	-12.4 to -22.4	–	X	X (t)	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-309	Alley north of MW122	62.4 to 72.4	-32.0 to -42.0	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-311	Alley near MW108	62.2 to 72.2	-29.1 to -39.1	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-314	Alley near MW110	67.8 to 77.8	-28.0 to -38.0	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-316	Mercer St ROW, S of the Property	59.8 to 69.8	-10.0 to -20.0	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-318	9th Ave N, north of MW116	54.8 to 64.8	-23.1 to -33.1	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-322	9th Ave N, adjacent to MW113	54.7 to 64.7	-21.3 to -31.3	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-334	N side of Roy St near FMW-140	53.0 to 63.0	-21.7 to -31.7	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-335	N side of Mercer St, E of MW-326	60.8 to 70.8	-25.6 to -35.6	–	X	X	–	X	–	–	–	Q	–	Q	Q	–	A	–
MW-338	Across Valley St from MW-301	44.4 to 54.4	-16.6 to -26.6	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-340	Near Lake Union, next to MW-327	44.4 to 54.4	-16.1 to -26.1	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
W-MW-01	8th Ave N ROW east of Property	70 to 80	-25.1 to -35.1	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
W-MW-02	8th Ave N ROW east of Property	70 to 80	-26.3 to -36.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
Deep Zone Monitoring Wells																		
FMW-129	SDOT property S of Roy St	84.2 to 89.2	-45.6 to -50.6	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
FMW-131	630 Westlake Ave N	62.5 to -72.5	-34.7 to -44.7	–	X	X	–	X	–	–	–	Q	–	Q	Q	–	A	–
FMW-137	Mercer St N of 520 Westlake Ave N	70 to 85	-39.9 to -54.9	–	X	X	–	X	–	–	–	Q	–	Q	Q	–	A	–
FMW-140	900 Roy Street	70 to 80	-38.0 to -48.0	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
GEI-2	630 Westlake Ave N	50.5 to 60.5	-21.1 to -31.1	–	X	X	–	X	–	–	–	Q	–	Q	Q	–	A	–
MW102	Valley Street ROW	115 to 125	-65.8 to -75.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW103	Alley Between 8th & 9th Ave	103.5-113.5	-67.6 to -77.6	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW104	8th Ave N ROW	119 to 129	-76.3 to -86.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q

Table 1

Monitoring After Perimeter Injection
American Linen Supply Co.–Dexter Avenue Site
700 Dexter Avenue North, Seattle, Washington

Sampling Location Number	Well Location	Screen Completion		Monitoring Purpose				Proposed Sampling Frequency through CAP Issuance				Analytical Testing Frequency						
												Current			Proposed			
																	Geochem Parameters	
		Depth (ft bgs)	Elevation (ft)	IA/CAA Performance Sampling	Plume Sampling	Quarterly Groundwater Levels	Soil Vapor Sampling	Quarterly	Semi-Annually	Annually	Eliminate From Network	VOCs	GRO	Geocheml Parameters (Full Suite)	VOCs	GRO	Full Suite	Limited Suite
MW105	Roy Street ROW	130 to 140	-85.3 to -95.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW106	West of Roy St	130 to 140	-78.0 to -88.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW113	9th Ave N ROW	70 to 80	-36.8 to -46.8	X	–	X	–	X	–	–	–	Q	–	Q	Q	–	A	Q
MW122	Alley Between 8th & 9th Ave	105 to 115	-75.0 to -85.0	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW123	Westlake Ave N ROW	70 to 80	-42.5 to -52.5	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW124	Valley Street ROW	110 to 120	-53.8 to -63.8	–	X	X (t)	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW128	Westlake Ave N ROW	60 to 70	-30.8 to -40.8	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-138	Dexter Ave N ROW	105 to 115	-47.6 to -57.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-153	Roy St ROW W of MW106	120 to 130	-65.3 to -75.3	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-158A	8th Ave N, near MW-9	89.7 to 100.0	-48.2 to -58.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-160	8th Ave N, N of MW104	118 to 128	-75.4 to -85.4	X	–	X (t)	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-161	8th Ave N, S of MW107	130 to 140	-85.6 to -95.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	Q
MW-304	Dexter Ave N ROW, NW of MW130	105.2 to 115.2	-47.6 to -57.6	–	X	X	–	–	X	–	–	Q	Q	Q	SA	–	A	–
MW-319	9th Ave N, north of MW116	74.5 to 84.5	-42.8 to -52.8	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-323	9th Ave N, adjacent to MW113	100 to 110	-65.4 to -75.4	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-324	9th Ave N, adjacent to MW115	66.3 to 76.3	-32.1 to -42.1	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-326	Mercer St ROW, W of 9th Ave N	90 to 100	-48.7 to -58.7	–	X	X (t)	–	X	–	–	–	Q	–	Q	Q	–	A	–
MW-328	E of Westlake Ave N near lake	64.5 to 74.5	-36.1 to -46.1	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-329	Westlake Ave N ROW, near MW128	98.3 to 108.3	-69.0 to -79.0	–	X	X (t)	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-336	N side of Mercer St, E of MW-326	85.3 to 95.3	-51.6 to -61.6	–	X	X	–	X	–	–	–	Q	–	Q	Q	–	A	–
MW-341	Near Lake Union, next to MW-327	95.2 to 105.2	-66.8 to -76.8	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-342	S side of Valley St, E of MW-214	60.1 to 70.1	-32.4 to -42.4	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
MW-343	S side of Valley St, E of MW-214	97.7 to 107.7	-71.5 to -81.5	–	X	X	–	–	X	–	–	Q	–	Q	SA	–	A	–
Treatment Zone A Monitoring Wells																		
MW-165	NE quadrant of the Property near 8th Ave N	12.7 to 22.7	1.2 to -8.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-169	Near the center of the Property	12.7 to 22.7	1.2 to -8.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-173	SE quadrant of the Property near 8th Ave N	11.7 to 21.7	2.2 to -7.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-177	SW quadrant of the Property near Dexter Ave N	11.6 to 21.6	2.3 to -7.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-181	SW quadrant of the Property near Roy St	12.4 to 22.4	1.5 to -8.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-185	SE quadrant of the Property near Roy St	12.6 to 22.6	1.4 to -8.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
Treatment Zone B Monitoring Wells																		
MW-166	NE quadrant of the Property near 8th Ave N	26.5 to 36.5	-12.6 to -22.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-170	Near the center of the Property	26.7 to 36.7	-12.8 to -22.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-174	SE quadrant of the Property near 8th Ave N	26.2 to 36.2	-12.3 to -22.3	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-178	SW quadrant of the Property near Dexter Ave N	25.6 to 35.6	-11.7 to -21.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-182	SW quadrant of the Property near Roy St	26.2 to 36.4	-12.5 to -22.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-186	SE quadrant of the Property near Roy St	26.6 to 36.6	-12.7 to -22.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
Treatment Zone C Monitoring Wells																		
MW-167	NE quadrant of the Property near 8th Ave N	41.8 to 51.8	-27.9 to -37.9	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-171	Near the center of the Property	41.5 to 51.5	-27.6 to -37.6	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-175	SE quadrant of the Property near 8th Ave N	41.7 to 51.7	-27.8 to -37.8	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-179	SW quadrant of the Property near Dexter Ave N	41.1 to 51.1	-27.2 to -37.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-183	SW quadrant of the Property near Roy St	41.3 to 51.3	-27.4 to -37.4	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-187	SE quadrant of the Property near Roy St	40.9 to 50.9	-27.0 to -37.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–

Table 1

Monitoring After Perimeter Injection
American Linen Supply Co.–Dexter Avenue Site
700 Dexter Avenue North, Seattle, Washington

Sampling Location Number	Well Location	Screen Completion		Monitoring Purpose				Proposed Sampling Frequency through CAP Issuance				Analytical Testing Frequency						
												Current			Proposed			
																	Geochem Parameters	
		Depth (ft bgs)	Elevation (ft)	IA/CAA Performance Sampling	Plume Sampling	Quarterly Groundwater Levels	Soil Vapor Sampling	Quarterly	Semi-Annually	Annually	Eliminate From Network	VOCs	GRO	Geocheml Parameters (Full Suite)	VOCs	GRO	Full Suite	Limited Suite
Treatment Zone D Monitoring Wells																		
MW-168	NE quadrant of the Property near 8th Ave N	56.9 to 66.9	-43.0 to -53.0	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-172	Near the center of the Property	56.4 to 66.4	-42.5 to -52.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-176	SE quadrant of the Property near 8th Ave N	56.6 to 66.6	-42.7 to -52.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
MW-180	SW quadrant of the Property near Dexter Ave N	56.6 to 66.6	-42.7 to -52.7	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-184	SW quadrant of the Property near Roy St	56.4 to 66.4	-42.5 to -52.5	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	A
MW-188	SE quadrant of the Property near Roy St	56.1 to 66.1	-42.2 to -52.2	X	–	X	–	X	–	–	–	Q	Q	Q	Q	–	A	–
Groundwater Totals				**69**	**55**	**107**	**0**	**77**	**45**	**2**	**7**	**130**	**67**	**124**	**124**	**5**	**124**	**59**
Soil Vapor Probes																		
SV01	E sidewalk of 8th Ave N ROW	11.8 to 12.3	30.4 to 29.9	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV02	E sidewalk of 8th Ave N ROW	11.3 to 11.8	32.1 to 31.6	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV03	E sidewalk of 8th Ave N ROW	12.3 to 12.8	31.8 to 31.3	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-04	S side of the Roy St ROW, near MW-148	5.5 to 6	38.6 to 38.1	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-05	S side of the Roy St ROW, near MW-148	12.5 to 13	31.6 to 31.1	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-06	S side of the Roy St ROW, near MW-146	5.5 to 6	47.9 to 47.4	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-07	S side of the Roy St ROW, near MW-146	14.5 to 15	38.9 to 38.4	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-08	W side of 9th Ave N ROW, S of MW-320	9.5 to 10	31.4 to 30.9	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-09	W side of 9th Ave N ROW, S of MW-320	5.5 to 6	35.3 to 34.8	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-10	N side of Valley St ROW, E of MW-330	5.5 to 6	46.3 to 45.8	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-11	N side of Valley St ROW, E of MW-330	14.3 to 14.8	37.4 to 36.9	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-12	N side of Valley St ROW, W of MW125	5.5 to 6	39.1 to 38.6	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-13	N side of Valley St ROW, W of MW125	11.5 to 12	32.9 to 32.4	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-14	N sidewalk of Roy St, near the alley	5.5 to 6	35.4 to 34.9	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-15	N sidewalk of Roy St, near the alley	12.5 to 13	28.5 to 28.0	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-16	E side of 8th Ave N ROW, near MW-144R	5.5 to 6	37.5 to 37.0	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-17	E side of 8th Ave N ROW, near SV02	5.5 to 6	36.6 to 36.1	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-18	E side of 8th Ave N ROW, near MW121	5.5 to 6	36.6 to 36.1	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-19	W sidewalk of 9th Ave N, near MW115	5.5 to 6	29.7 to 29.2	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-20	W sidewalk of 9th Ave N, near MW115	9.5 to 10	25.7 to 25.2	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-21	Alley E of 800 Aloha Street, near FMW-141	5.5 to 6	29.8 to 29.3	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-22	Alley E of 800 Aloha Street, near FMW-141	9.5 to 10	25.7 to 25.2	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-23	Alley E of 800 Aloha Street, near MW-311	5.5 to 6	27.9 to 27.4	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-24	Alley E of 800 Aloha Street, near MW-311	9.5 to 10	23.8 to 23.3	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-25	Sidewalk next to 801 Dexter Ave N	5.5 to 6	52.7 to 52.2	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-26	Sidewalk next to 801 Dexter Ave N	11.5 to 12	46.7 to 46.2	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-27	Sidewalk next to 717 Dexter Ave N	14.5 to 15	44.1 to 43.6	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–
SV-28	Sidewalk next to 717 Dexter Ave N	5.5 to 6	53.1 to 52.6	–	–	–	X	X	–	–	–	Q	–	–	Q	–	–	–

Notes:

1. IA = interim action, including the contingent action
2. CAA = contingent action addendum to the IA
3. VOCs = volatile organic compounds by EPA Method 8260 (water) or TO-15 (soil vapor)
4. GRO = gasoline-range organics by Ecology Method NWTPH-Gx
5. Geochem = geochemical
6. X = yes for purpose and sampling frequency
7. – = not specified for sampling or not applicable
8. (t) = pressure transducer deployed in well
9. Q = analyzed quarterly; SA = analyzed semiannually; A = analyzed annually
10. Full geochemical suite includes alkalinity (Method 2320 B); chloride, nitrate, and sulfate (Method 9056A); total organic carbon (TOC; Method 9060A); total iron and manganese (Method 6020B); total ferrous iron (Hach Kit); and dissolved gases (methane, ethane, and ethene; Method RSK175)
11. Limited geochemical suite includes sulfate, TOC, total metals (total iron and manganese), and dissolved gases (methane, ethane, and ethene)

PES Environmental, Inc.
Engineering & Environmental Services

Property Location
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
1

1413.001.02.501H	141300102501H_MP_1	WRH	10/20
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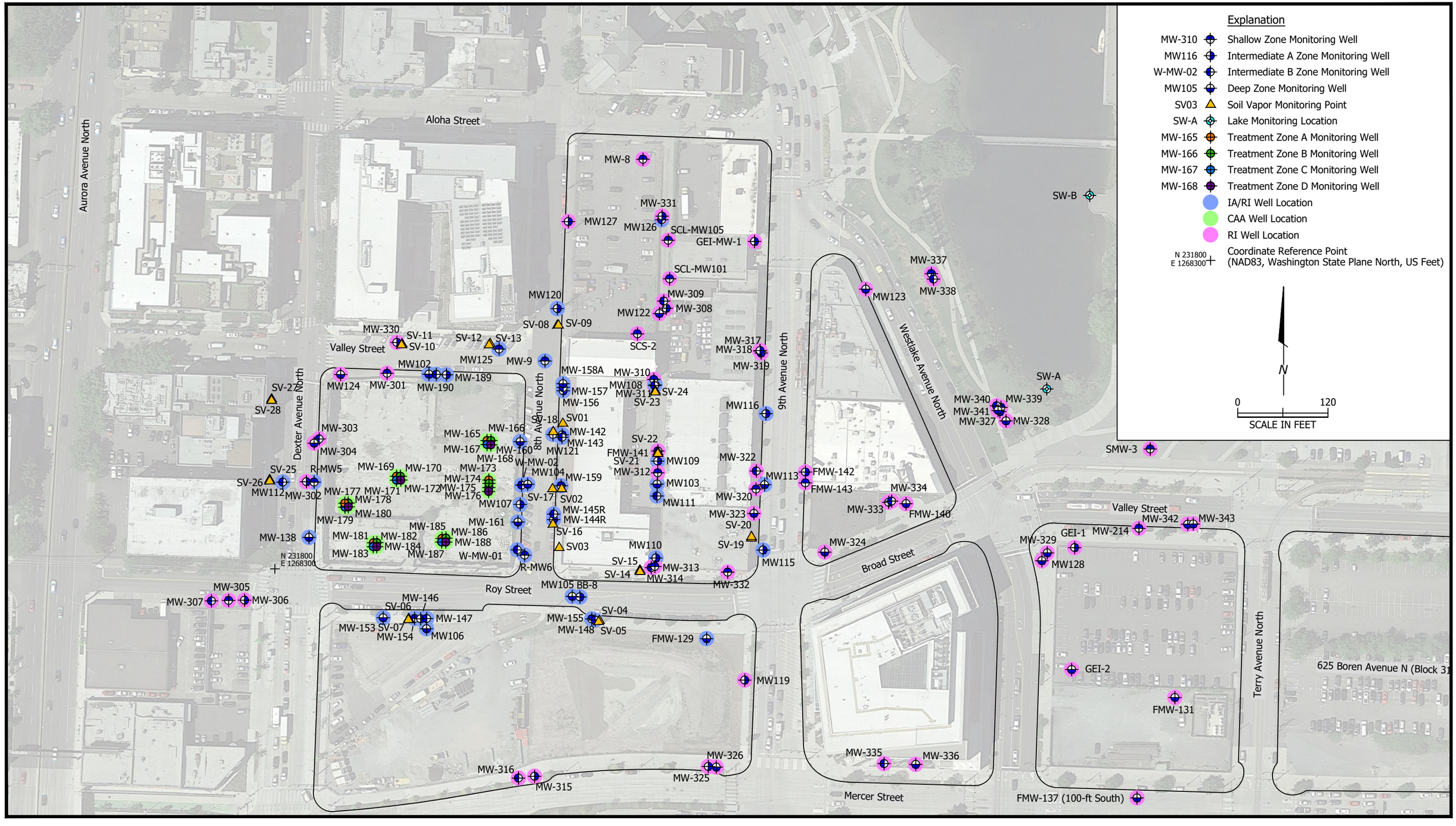

PES Environmental, Inc.
Engineering & Environmental Services

Existing CAA, IA, and RI Monitoring Network
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
2

1413.001.02.501H	141300102501H_MP_2	*WRH*	10/20
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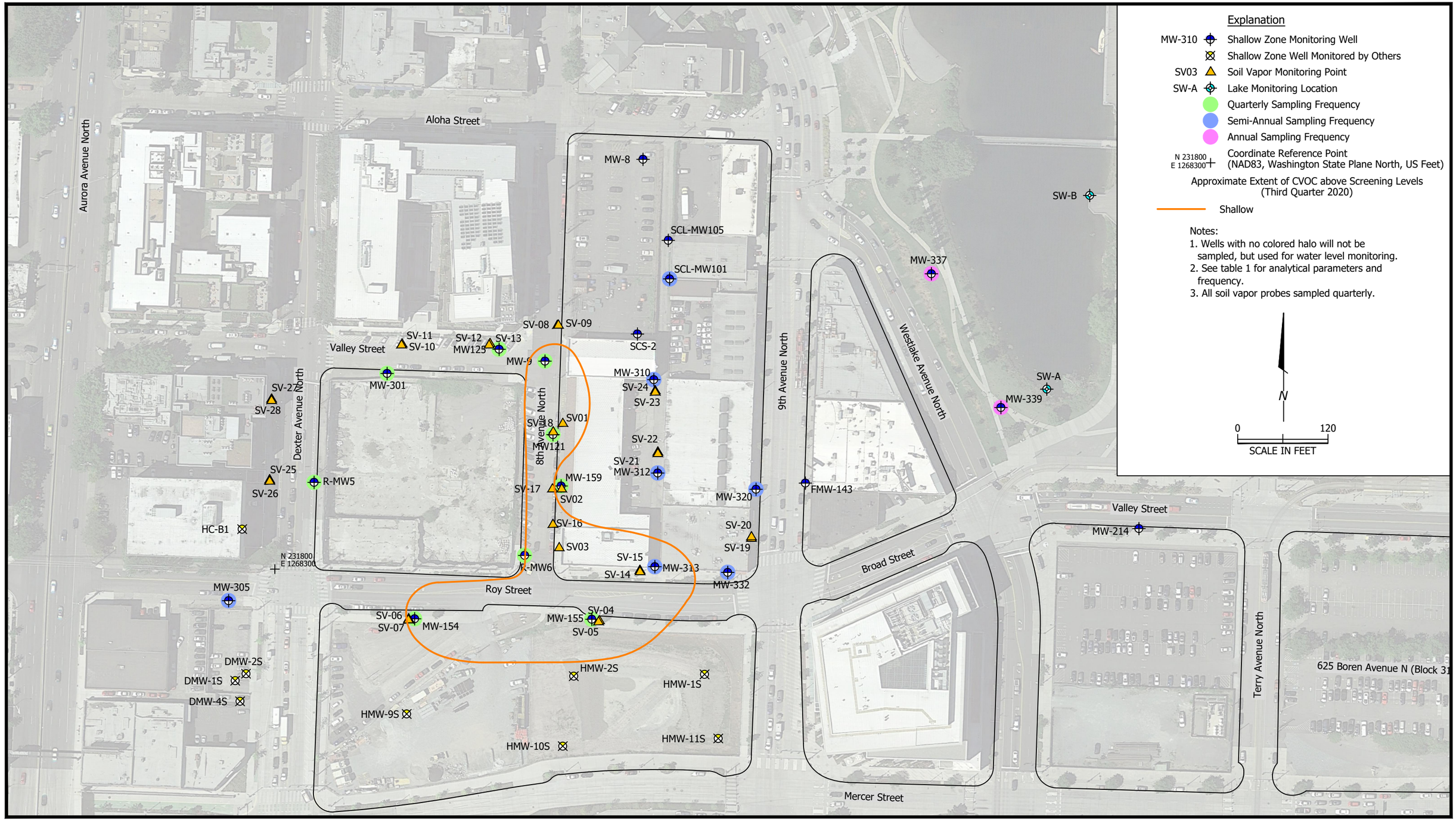

PES Environmental, Inc.
Engineering & Environmental Services

Proposed Shallow Zone Monitoring Network
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
3

1413.001.02.501H	141300102501H_MP_3	*WRH*	10/20
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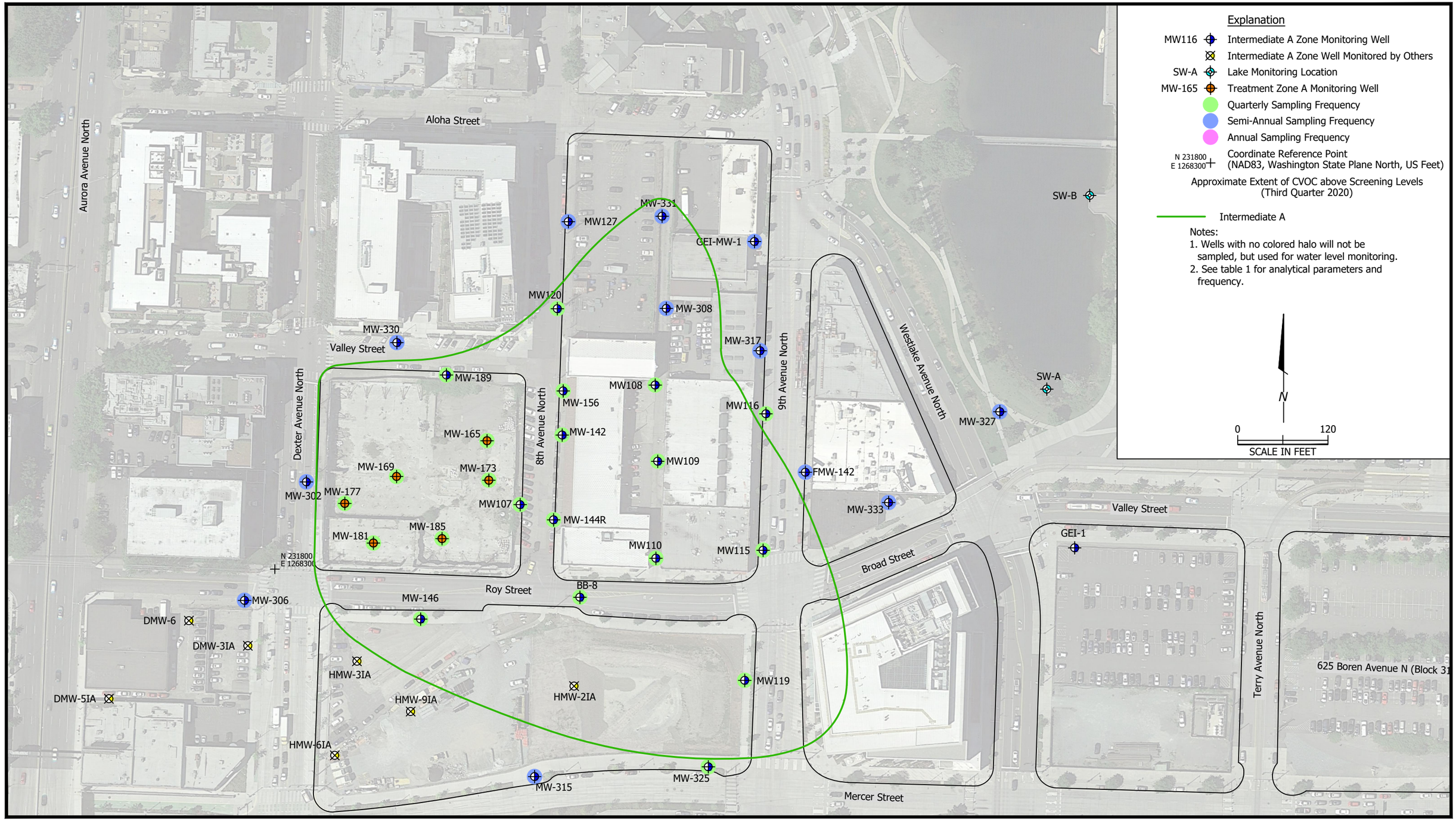

PES Environmental, Inc.
Engineering & Environmental Services

Proposed Intermediate A Zone Monitoring Network
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
4

1413.001.02.501H	141300102501H_MP_4	WRH	10/20
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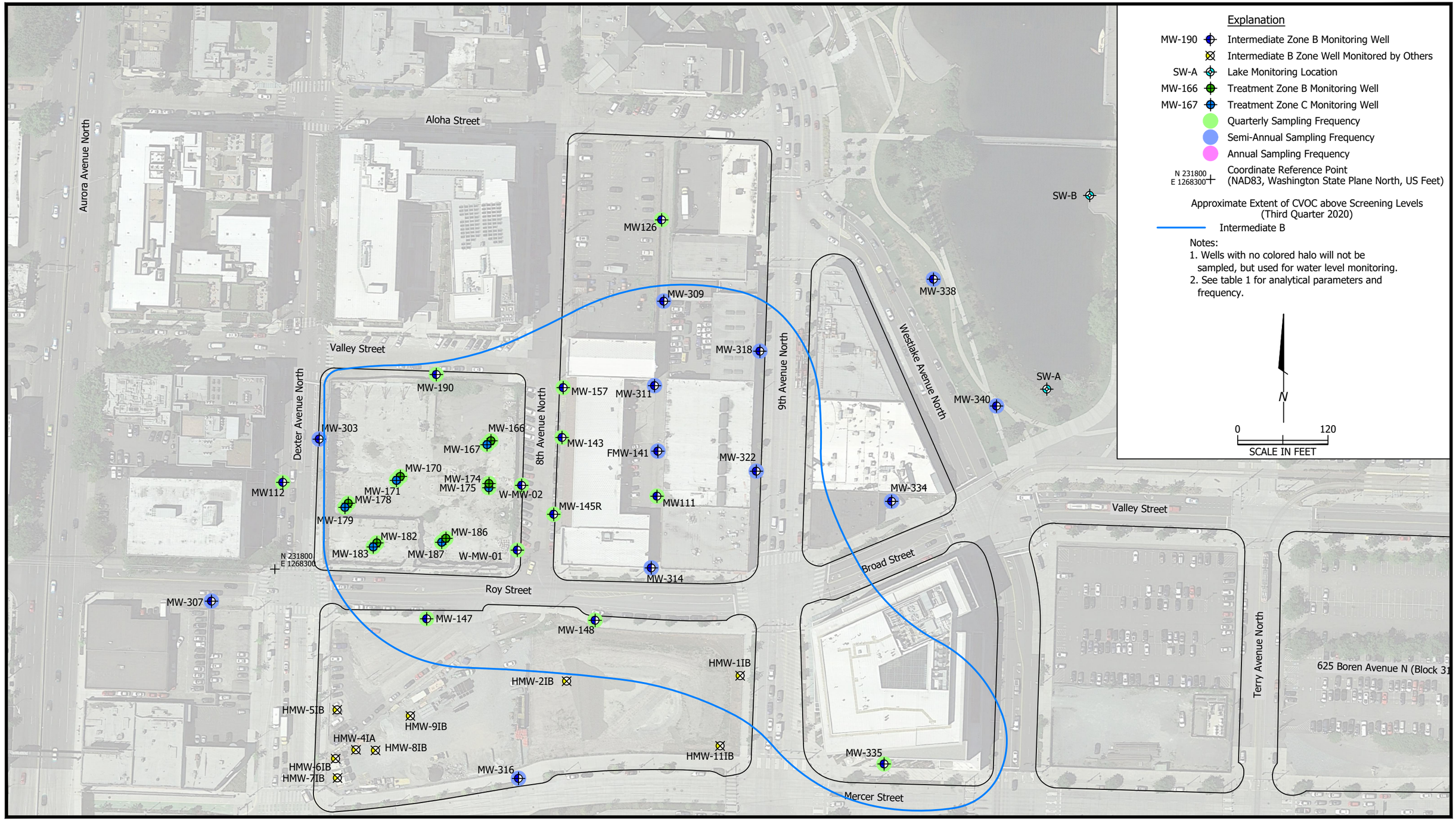

PES Environmental, Inc.
Engineering & Environmental Services

Proposed Intermediate B Zone Monitoring Network
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
5

1413.001.02.501H	141300102501H_MP_5	WRH	10/20
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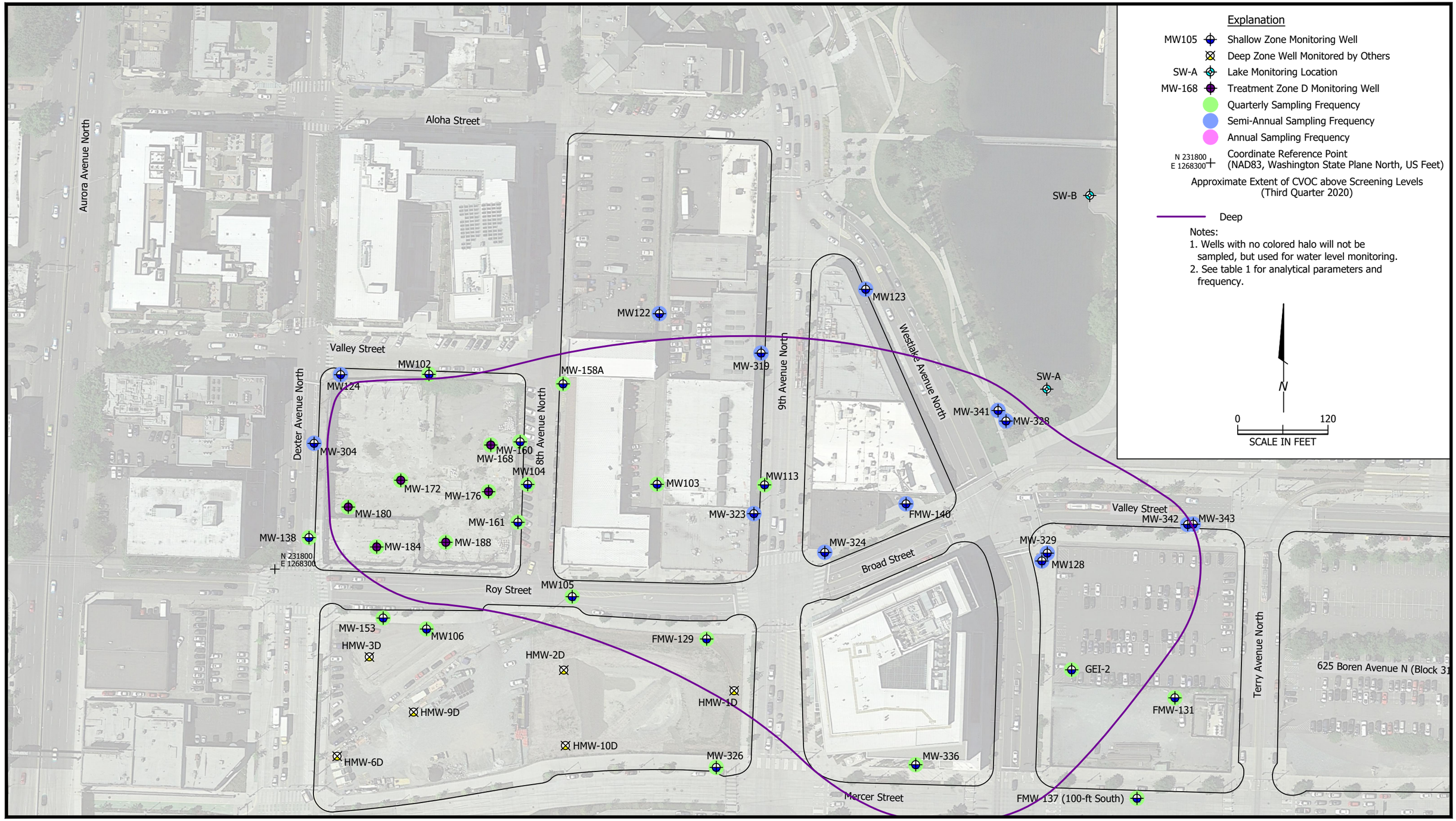

PES Environmental, Inc.
Engineering & Environmental Services

Proposed Deep Zone Monitoring Network
American Linen Supply Co. - Dexter Ave Site
700 Dexter Avenue North
Seattle, Washington

FIGURE
6

1413.001.02.501H	141300102501H_MP_6	WRH	10/20
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE