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November 21, 2024

Sound Transit c/o South County Transit Partners
401 South Jackson Street
Seattle, Washington 98104-2826

Attention: Susan Penoyer

Subject: Revised Remedial Investigation Work Plan – Addendum No. 2
Y Pay Mor Drycleaners Site
Federal Way, Washington
King County Parcel No. 2423200050
VCP Number: NW3265
File No. 4082-039-03

Introduction

This letter documents the proposed supplemental explorations for the Site remedial investigation (RI) as an addendum to the “Remedial Investigation Work Plan, Federal Way Link Extension Parcel FL358, Y Pay Mor Drycleaner Site, 2210 South 320th Street, Federal Way, Washington” dated December 22, 2021 (RI Work Plan) and associated Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP). The Site is identified in Washington State Department of Ecology (Ecology) databases as Facility Site Identification (FSID) No. 2518, and Cleanup Site Identification (CSID) No. 3180. The Y Pay Mor Site is located on King County Parcel No. 2423200050, identified by Sound Transit as Federal Way Link Extension (FWLE) Parcel FL358. The boundary of the former Y Pay Mor Drycleaner (Space A-6) is shown on Figures 1 and 2. The Y Pay Mor Site is defined by the extent of chlorinated volatile organic compounds (CVOCs) in soil and groundwater exceeding Model Toxics Control Act (MTCA) Cleanup Levels. Sound Transit enrolled in Ecology’s Voluntary Cleanup Program (VCP) (No. NW3265) in Spring 2020.

SEPTEMBER 2024 GROUNDWATER MONITORING RESULTS

Eight monitoring wells (FL358-MW15 to FL358-MW22) were installed in September 2024 in accordance with the RI Work Plan Addendum No. 1. The September 2024 quarterly groundwater monitoring event included groundwater monitoring of the eleven original monitoring wells (FL358-MW5A/B to FL358-MW14) plus the eight new monitoring wells (FL358-MW15 to FL358-MW22). Groundwater chemical analytical results are summarized in Table 1. Chemical analytical results within the original eleven monitoring wells (FL358-MW5A/B to FL358-MW14) were either not detected or detected at concentrations generally consistent with prior events. CVOCs were detected in three of the new monitoring wells:

- Tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride were detected in groundwater at concentrations greater than their respective MTCA cleanup levels in the groundwater sample collected from well FL358-MW16.
- Vinyl chloride was detected in the groundwater samples collected from wells FL358-MW17 and FL358-MW20 at concentrations greater than the MTCA Method A groundwater cleanup level.

CVOCs were not detected in the remainder of the groundwater samples collected from the new wells. The CVOC groundwater plume was defined to the south and north based on these results. The CVOC groundwater plume was not defined to the west. Additional monitoring wells are necessary to delineate the western extent of the CVOC groundwater plume.

RI WORK PLAN ADDITIONS

The proposed supplemental RI explorations are intended to address the following Site characterization data gaps:

- Evaluate the western lateral extent of CVOCs in soil and groundwater.
- Collect additional data to evaluate the seasonal variability of groundwater elevations and gradients; trends in the CVOC plume size, location, and orientation over time; and the rate and spatial variability of contaminant natural attenuation in groundwater.

This addendum describes the following:

- Changes to the monitoring well network.
- Revisions to the monitoring well sampling program.
- Revisions to the aquifer testing program.

The proposed modifications are discussed further in the following sections.

Monitoring Well Network

Ten new permanent monitoring wells (FL358-MW23 to FL358-MW32) are planned to be installed west of the currently defined Y Pay Mor groundwater contaminant plume. The well installations are planned to be completed in two mobilizations. Five wells (FL358-MW23 to FL358-MW27) will be installed in December 2024 on the Sound Transit property. Five wells (FL358-MW28 to FL358-MW32) are planned to be installed along the right of way of 21st Avenue South in March 2025 after obtaining the required permits from the City of Federal Way. Monitoring wells FL358-MW28 to FL358-MW32 may not be installed based on the results of the December 2024 sampling event and the groundwater flow direction. Sound Transit will provide an update to Ecology by electronic mail if there are changes in the planned monitoring well network.

The proposed wells, the purpose of each well, and the planned soil sample analyses are presented in Tables 2 and 3. The locations of the proposed new wells are shown on Figure 2. The proposed well locations may be adjusted by approximately 30 feet from the proposed locations due to access restrictions or the presence of new utility lines. The proposed borings will be completed using sonic or hollow stem auger drilling methods and constructed with a 20-foot-long well screen. Each boring will be extended to a depth

corresponding to the top of the confining silt layer. The wells are planned to be installed with the bottom of the well screen positioned at the top of the confining silt layer.

The proposed wells will be installed, developed and surveyed in general accordance with procedures described in the 2021 RI Work Plan SAP and QAPP and 2024 RI Work Plan Addendum No. 1 SAP Update.

Monitoring Program

The revised groundwater monitoring program and associated analytical methods are described in Table 3; proposed changes are summarized below. Groundwater monitoring will be completed in general accordance with procedures described in the 2021 RI Work Plan SAP and QAPP.

- **Remove Well from the Groundwater Monitoring Program.** Monitoring well FL358-MW18 was inadvertently installed in an area that is planned to be decorative paving. The well was sampled and decommissioned in September 2024. The well is unnecessary based on the September 2024 analytical results of groundwater samples collected from wells FL358-MW18, FL358-MW19 and FL358-MW22 (see Table 1).
- **Add New Monitoring Wells to the Groundwater Monitoring Program.** The ten new monitoring wells discussed above will be incorporated into the routine groundwater monitoring program once installed. Chemical analyses planned for groundwater samples from the proposed new wells will be similar to the analytical testing program completed for groundwater samples from the existing wells, as shown in Table 3.
- **Add Monitoring Events.** Quarterly groundwater monitoring has been completed through September 2024 and will continue through June 2025. The groundwater monitoring program may be modified depending on Site characterization data available at that time.

Aquifer Tests

Three slug tests were planned in 2024 at wells FL358-MW13, FL358-MW18, and FL358-MW22. The slug tests were not completed and are no longer planned at these wells based on the analytical results of the September 2024 sampling event.

Two slug tests will be performed on wells FL358-MW16 and FL358-MW20 in 2025. The slug test locations were selected to evaluate the hydraulic conductivity in the downgradient areas of the CVOC plume and will be completed during the wet season (approximately October through May) to document aquifer conditions during the months with higher relative groundwater levels. The slug tests will be completed in general accordance with procedures described in the 2021 RI Work Plan SAP.

Proposed Development on Parcels 1 and 2

Pending Sound Transit Board of Directors approval, Sound Transit will issue a request for proposal (RFP) to realize transit-oriented development (TOD) on Parcels 1 and 2 in early 2025. The RFP will disclose the Y Pay Mor CVOC groundwater plume and provide available environmental data associated with the plume.

The RFP will also reference requirements to mitigate potential vapor intrusion and manage CVOC-contaminated soil and groundwater in accordance with local, state and federal regulations. Sound Transit and the selected developer will coordinate the future development of TOD Parcels 1 and 2 with Ecology in accordance with existing restrictive covenants.

Closing

We appreciate your continued coordination and technical assistance at the Y Pay Mor Site as Sound Transit pursues cleanup of the Site under the VCP.

Sincerely,
GeoEngineers, Inc.



Brittany Waite, EIT
Environmental Engineer

DK:BRW:TSD:ch:seh

Attachments:

- Table 1. Groundwater Chemical Analytical Results
- Table 2. Summary of Proposed New Monitoring Wells
- Table 3. Summary of Monitoring Well Network and Planned Analyses
- Figure 1. Vicinity Map
- Figure 2. Overall Site Plan
- Figure 3. Proposed Additional Monitoring Wells



Tricia S. DeOme, LHG
Associate Environmental Geologist

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Tables

Table 1
Groundwater Parameters and Chemical Analytical Data
FL358 Y Pay Mor RI Work Plan Addendum No. 2
Federal Way, Washington

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW5A	FL358-MW5A-220630	06/30/2022	91	50	37	1.0 U	1.0 U	2.3	0.22 U	0.79	1,400	9.5
	FL358-MW5A-082522	08/05/2022	24	27	60	0.50	0.40 U	2.0	0.22 U	0.29 U	1,400	1.2 U
	FL358-MW5A-113022	11/30/2022	21	28	55	0.49	0.40 U	4.0	--	--	--	--
	FL358-MW5A-230315	03/15/2023	48	93	160	1.3	0.80 U	14	0.22 U	2.8	610	1.2 U
	FL358-MW5A-230607	06/07/2023	170	140	210	2.0 U	2.0 U	20	0.22 U	4.4	510	1.2 U
	FL358-MW5A-230913	09/13/2023	110	110	110	0.80 U	0.80 U	11	--	0.87	360	1.2 U
	FL358-MW5A-231208	12/08/2023	120	110	100	1.0 U	1.0 U	8.2	0.56 U	0.58	710	3.1 U
	FL358-MW5A-240320	03/20/2024	73	94	68	2.0 U	2.0 U	6.0	0.56 U	0.58 U	320	3.1 U
	FL358-MW5A-240620	06/20/2024	97	91	67	2.0 U	2.0 U	7.2	0.56 U	0.58 U	420	3.1 U
	FL358-MW5A-240919	09/19/2024	82	120	80	2.0 U	2.0 U	6.4	0.56 U	0.58 U	1,600	3.1 U
FL358-MW5B	FL358-MW5B-220630	06/30/2022	3.4	0.83	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	100	1.2 U
	FL358-MW5B-082422	08/24/2022	0.26	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	110	1.2 U
	FL358-MW5B-112822	11/28/2022	0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	--	--
	FL358-MW5B-230315	03/15/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	45	1.2 U
	FL358-MW5B-230607	06/07/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	74	1.2 U
	FL358-MW5B-230913	09/13/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.29 U	110	1.2 U
	FL358-MW5B-231208	12/08/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.56 U	0.58 U	430	3.1 U
	FL358-DUP-231208	12/08/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.56 U	0.58 U	490	3.1 U
	FL358-MW-5B-240320	03/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	560	230
	FL358-MW-5B-240620	06/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	420	3.1 U
	FL358-MW-5B-240919	09/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	420	3.1 U

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW6	FL358-MW6-220630	06/30/2022	38	100	86	1.0 U	1.0 U	1.5	0.22 U	0.29 U	2,000 JL	8.7
	FL358-MW6-082522	08/05/2022	53	130	110	1.1	0.80 U	1.8	0.22 U	0.29 U	2,100	1.2 U
	FL358-MW6-113022	11/30/2022	32	100	71	0.80 U	0.80 U	1.0	-	--	--	--
	FL358-MW6-230315	03/15/2023	39	150	96	0.88	0.80 U	1.4	0.22 U	0.29 U	1,400	1.2 U
	GW-DUP-230315	03/15/2023	37	140	91	0.85	0.80 U	1.4	0.22 U	0.29 U	1,500	1.2 U
	FL358-MW6-230607	06/07/2023	34	99	64	0.80 U	0.80 U	1.2	0.22 U	0.29 U	970	1.2 U
	FL358-DUP-230607	06/07/2023	36	96	65	0.80 U	0.80 U	1.2	0.22 U	0.29 U	770	1.2 U
	FL358-MW6-230913	09/13/2023	18	110	86	0.80 U	0.80 U	1.3	-	0.29 U	230	1.2 U
	FL358-DUP-230913	09/13/2023	17	100	83	0.80 U	0.80 U	1.3	-	0.29 U	200	1.2 U
	FL358-MW6-231208	12/08/2023	17	96	52	1.0 U	1.0 U	1.0 U	0.56 U	0.58 U	450	3.1 U
	FL358-MW6-240320	03/20/2024	6.1	120	76	2.0 U	2.0 U	0.95	0.56 U	0.58 U	750	3.1 U
	FL358-DUP-240320	03/20/2024	7.4	130	77	2.0 U	2.0 U	0.98	0.56 U	0.58 U	830	3.1 U
	FL358-MW6-240620	06/20/2024	2.7	77	62	2.0 U	2.0 U	0.97	0.56 U	0.58 U	830	3.1 U
	FL358-MWDUP-240620	06/20/2024	2.8	76	62	2.0 U	2.0 U	1.0	0.56 U	0.58 U	830	3.1 U
	FL358-MW6-240919	09/19/2024	2.9	70	76	2.0 U	2.0 U	0.99	0.56 U	0.58 U	830	3.1 U
	FL358-MW-DUP-240919	09/19/2024	2.8	71	77	2.0 U	2.0 U	1.0	0.56 U	0.58 U	1,000	3.1 U
FL358-MW7	FL358-MW7-220629	06/29/2022	0.33 B	0.20 U	6.0	0.20 U	0.20 U	3.7	0.22 U	0.29 U	4,100 JL	1.2 U
	FL358-MW7-082422	08/24/2022	0.28	0.20 U	7.1	0.20 U	0.20 U	4.6	0.22 U	0.29 U	3,100	1.2 U
	FL358-MW7-112922	11/29/2022	0.20 U	0.20 U	5.3	0.20 U	0.20 U	4.9	-	--	--	--
	FL358-MW7-230315	03/15/2023	0.35	0.20 U	4.7	0.20 U	0.20 U	4.0	0.22 U	0.29 U	4,500	1.2 U
	FL358-MW7-230606	06/06/2023	0.25	0.20 U	3.4	0.20 U	0.20 U	3.3	0.22 U	0.29 U	4,900	1.2 U
	FL358-MW7-230912	09/12/2023	0.20 U	0.20 U	9.5	0.20 U	0.20 U	9.2	-	0.73	1,500	1.2 U
	FL358-MW7-231208	12/07/2024	0.40 U	0.40 U	7.4	0.40 U	0.40 U	10	0.56 U	0.58 U	2,400	3.1 U
	FL358-MW7-240319	03/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.1	0.56 U	0.58 U	1,500	3.1 U
	FL358-MW7-240619	06/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.4	0.56 U	0.58 U	3,800	3.1 U
	FL358-MW7-240918	09/18/2024	2.0 U	2.0 U	2.2	2.0 U	2.0 U	2.7	0.56 U	0.58 U	3,600	3.1 U

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW8	FL358-MW8-220628	06/28/2022	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	170	1.2 U
	FL358-MW8-082322	08/23/2022	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	180	1.2 U
	FL358-MW8-112822	11/28/2022	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	--	--	--
	FL358-MW8-230315	03/15/2023	0.20 U	0.25	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	56	1.2 U
	FL358-MW8-230607	06/07/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	71	1.2 U
	FL358-MW8-230913	09/13/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	--	0.29 U	67	1.2 U
	FL358-MW8-231208	12/08/2023	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.56 U	0.58 U	170	3.1 U
	FL358-MW8-240319	03/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	320	3.1 U
	FL358-MW8-240620	06/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	220	3.1 U
	FL358-MW8-240918	09/18/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	250	3.1 U
FL358-MW9	FL358-MW9-220628	06/28/2022	0.87 B	2.6 J	2.6 J	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	6,100 JL	1.2 U
	FL358-MW100-220628	06/28/2022	0.58 B	1.8 J	1.8 J	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	5,300 JL	1.2 U
	FL358-MW9-082322	08/23/2022	1.7	2.9	2.0	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	6,400	1.2 U
	FL358-MW101	08/23/2022	1.6	2.8	2.0	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	6,400	1.2 U
	FL358-MW9-112922	11/29/2022	0.20 U	0.20 U	1.8	0.20 U	0.20 U	0.20 U	--	--	--	--
	FL358-MW9-230315	03/15/2023	0.20 U	0.23	1.8	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	7,600	1.2 U
	FL358-MW9-230607	06/07/2023	0.20 U	0.86	2.7	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	7,900	1.2 U
	FL358-MW9-230913	09/13/2023	0.20 U	0.86	5.6	0.20 U	0.20 U	0.20 U	--	0.29 U	4,900	1.2 U
	FL358-MW9-231208	12/08/2023	0.20 U	1.6	12	0.20 U	0.20 U	0.61	0.56 U	0.58 U	3,600	3.1 U
	FL358-MW9-240321	03/21/2024	2.0 U	2.0 U	6.9	2.0 U	2.0 U	0.32	0.56 U	0.58 U	8,100	3.1 U
	FL358-MW9-240620	06/20/2024	2.0 U	2.0 U	2.9	2.0 U	2.0 U	0.21	0.56 U	0.58 U	4,100	3.1 U
	FL358-MW9-240917	09/17/2024	0.20 U	0.67	6.1	0.20 U	0.20 U	0.25	0.56 U	0.58 U	3,900	3.5

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	--	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW10	FL358-MW10-220627	06/27/2022	0.20 U	0.36	7.6	0.20 U	0.20 U	0.22	0.22 U	0.29 U	2,700	1.2 U
	FL358-MW10-082322	08/23/2022	0.20 U	0.36	9.0	0.20 U	0.20 U	0.36	0.22 U	0.29 U	5,000	1.2 U
	FL358-MW10-112922	11/29/2022	0.20 U	0.28	6.2	0.20 U	0.20 U	0.31	--	--	--	--
	FL358-MW101-112922	11/29/2022	0.20 U	0.29	6.2	0.20 U	0.20 U	0.33	--	--	--	--
	FL358-MW10-230314	03/14/2023	0.20 U	0.25	6.4	0.20 U	0.20 U	0.52	0.22 U	0.29 U	3,500	1.2 U
	FL358-MW10-230607	06/07/2023	0.20 U	0.20 U	4.9	0.20 U	0.20 U	0.46	0.22 U	0.29 U	3,800	1.2 U
	FL358-MW10-230912	09/12/2023	0.20 U	0.20 U	1.0	0.20 U	0.20 U	0.20 U	--	0.29 U	3,500	1.2 U
	FL358-MW10-231208	12/08/2023	0.20 U	0.20 U	0.44	0.20 U	0.20 U	0.20 U	0.56 U	0.58 U	3,000	3.1 U
	FL358-MW10-240320	03/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	4,600	3.1 U
	FL358-MW10-240620	06/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.28	0.56 U	0.58 U	2,600	3.1 U
	FL358-MW10-240917	09/17/2024	0.20 U	0.20 U	2.5	0.20 U	0.20 U	0.54	0.56 U	0.58 U	1,700	3.1 U
FL358-MW11	FL358-MW11-220627	06/27/2022	0.20 U	0.20 U	7.7	0.20 U	0.20 U	4.8	0.22 U	0.29 U	2,900	1.2 U
	FL358-MW11-082422	08/24/2022	0.20 U	0.20 U	8.8	0.20 U	0.20 U	5.5	0.22 U	0.29 U	2,700	1.2 U
	FL358-MW11-113022	11/30/2022	0.20 U	0.20 U	6.1	0.20 U	0.20 U	4.1	--	--	--	--
	FL358-MW11-230315	03/15/2023	0.20 U	0.20 U	6.1	0.20 U	0.20 U	5.0	0.22 U	0.29 U	3,700	1.2 U
	FL358-MW11-230607	06/07/2023	0.20 U	0.20 U	4.2	0.20 U	0.20 U	3.3	0.22 U	0.29 U	4,100	1.2 U
	FL358-MW11-230912	09/12/2023	0.20 U	0.20 U	5.1	0.20 U	0.20 U	4.5	--	0.29 U	1,600	1.2 U
	FL358-MW11-231208	12/11/2023	0.20 U	0.20 U	4.9	0.20 U	0.20 U	5.1	0.56 U	0.58 U	3,000	3.1 U
	FL358-MW11-240321	03/21/2024	2.0 U	2.0 U	4.0	2.0 U	2.0 U	1.7	0.56 U	0.58 U	570	3.1 U
	FL358-MW11-240619	06/19/2024	2.0 U	2.0 U	2.1	2.0 U	2.0 U	2.2	0.56 U	0.58 U	2,200	3.1 U
	FL358-MW11-240919	09/19/2024	2.0 U	2.0 U	2.4	2.0 U	2.0 U	0.85	0.56 U	0.58 U	580	3.1 U

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW12	FL358-MW12-220629	06/29/2022	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	3,100	1.2 U
	FL358-MW12-082322	08/23/2022	0.20 U	0.20 U	0.32	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	5,500	1.2 U
	FL358-MW12-112822	11/28/2022	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	-	--	--	--
	FL358-MW12-230315	03/15/2023	0.20 U	0.20 U	0.29	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	5,600	1.2 U
	FL358-MW12-230606	06/06/2023	0.20 U	0.20 U	0.25	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	5,700	1.2 U
	FL358-MW12-230912	09/12/2023	0.20 U	0.23	0.52	0.20 U	0.20 U	0.20 U	-	0.29 U	1,800	1.2 U
	FL358-MW12-231208	12/07/2024	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.29	0.56 U	0.58 U	1,700	3.1 U
	FL358-MW12-240319	03/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.61	0.56 U	0.58 U	2,700	3.1 U
	FL358-MW12-240619	06/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	3,200	3.1 U
	FL358-MW12-240918	09/18/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	3,100	3.1 U
FL358-MW13	FL358-MW13-220628	06/28/2022	8.0	2.9	4.3	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	41	1.2 U
	FL358-MW13-082522	08/05/2022	5.1	2.5	4.2	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	140	1.2 U
	FL358-MW13-113022	11/30/2022	1.1	0.56	0.79	0.20 U	0.20 U	0.20 U	-	--	--	--
	FL358-MW13-230315	03/15/2023	5.7	2.6	4.9	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	270	1.2 U
	FL358-MW13-230606	06/06/2023	4.0	1.8	3.5	0.20 U	0.20 U	0.20 U	0.22 U	0.29 U	250	1.2 U
	FL358-MW13-230913	09/13/2023	3.0	1.5	2.8	0.20 U	0.20 U	0.20 U	-	0.29 U	170	1.2 U
	FL358-MW13-231208	12/07/2024	3.2	1.5	3.3	0.20 U	0.20 U	0.20 U	0.56 U	0.58 U	51	3.1 U
	FL358-MW13-240319	03/19/2024	4.4	2.0 U	3.2	2.0 U	2.0 U	0.24	0.56 U	0.58 U	250	3.1 U
	FL358-MW13-240619	06/19/2024	3.5	2.0 U	2.5	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	330	3.1 U
	FL358-MW13-240918	09/18/2024	3.0	2.0 U	2.2	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	240	3.1 U
FL358-MW14	FL358-MW14-220629	06/29/2022	0.20 U	0.35	16	0.20 U	0.20 U	2.5	0.22 U	0.29 U	510	1.2 U
	FL358-MW14-082422	08/24/2022	0.20 U	0.20 U	4.9	0.20 U	0.20 U	1.1	0.22 U	0.29 U	910	1.2 U
	FL358-MW14-112922	11/29/2022	0.20 U	0.20 U	7.1	0.20 U	0.20 U	1.5	-	--	--	--
	FL358-MW14-230314	03/14/2023	0.20 U	0.20	9.7	0.20 U	0.20 U	2.3	0.22 U	0.29 U	430	1.2 U
	FL358-MW14-230607	06/07/2023	0.20 U	0.20 U	9.2	0.20 U	0.20 U	2.5	0.22 U	0.29 U	450	1.2 U
	FL358-MW14-230912	09/12/2023	0.20 U	0.20 U	9.1	0.20 U	0.20 U	1.8	-	0.29 U	100	1.2 U
	FL358-MW14-231208	12/07/2024	0.40 U	0.40 U	8.2	0.40 U	0.40 U	1.9	0.56 U	0.58 U	320	3.1 U
	FL358-MW14-240320	03/20/2024	2.0 U	2.0 U	7.9	2.0 U	2.0 U	1.5	0.56 U	0.58 U	630	3.1 U
	FL358-MW14-240620	06/20/2024	2.0 U	2.0 U	6.7	2.0 U	2.0 U	1.9	0.56 U	0.58 U	340	3.1 U
	FL358-MW14-240918	09/18/2024	2.0 U	2.0 U	7.8	2.0 U	2.0 U	2.4	0.56 U	0.58 U	440	3.1 U

Location ID ¹	Sample ID	Sample Date	VOCs ² (µg/L)						Dissolved Gases ³ (µg/L)			
			Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Ethane	Ethene	Methane	Acetylene
		Groundwater Preliminary Cleanup Level ⁴ (µg/L)	5	5	70	100	7	0.2	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Commercial Use ⁴ (µg/L)	120	12	1,600	650	1,100	1.6	-	--	--	--
		Protection of Indoor Air/Vapor Intrusion Residential Use ⁴ (µg/L)	25	1.4	180	77	130	0.33	--	--	--	--
FL358-MW15	FL358-MW15-240919	9/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	920	3.1 U
FL358-MW16	FL358-MW16-240918	9/18/2024	39	43	130	2.0 U	2.0 U	5.8	0.56 U	0.58 U	1,800	3.1 U
FL358-MW17	FL358-MW17-240918	9/18/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.52	0.56 U	0.58 U	2,800	3.1 U
FL358-MW18	FL358-MW18-240919	9/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.81	5,800	3.1 U
FL358-MW19	FL358-MW19-240919	9/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.64	2,300	3.1 U
FL358-MW20	FL358-MW20-240920	9/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.96	0.56 U	0.58 U	1,300	3.1 U
FL358-MW21	FL358-MW21-240920	9/20/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	3,800	3.1 U
FL358-MW22	FL358-MW22-240919	9/19/2024	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.20 U	0.56 U	0.58 U	3,900	3.1 U

Notes:

¹ Sample locations are shown on Figure 2.

² Volatile organic compounds (VOCs) analyzed by United States Environmental Protection Agency (EPA) Method 8260.

³ Dissolved gases analyzed by Method RSK 175.

⁴ Groundwater screening level protective of indoor air.

B = Result is shown as estimated because laboratory quality control testing did not meet standards. The concentration presented is biased high due to potential cross contamination indicated by low-level PCE detections in the rinsate samples. Flag applied by Shannon & Wilson.

µmhos/cm = micromhos per centimeter

DHC = dehalococciodes

C = Celsius

g/L = grams per liter

J = Estimated result due to quality control failures. Flag applied by Shannon & Wilson for the 2022 events. Flag applied by GeoEngineers for 2023 events.

JL = Estimated result, biased low, due to quality control failures. Flag applied by Shannon & Wilson.

mg/L = milligrams per liter

mV = millivolts

N = Nitrogen

N/A = not applicable

NTU = Nephelometric Turbidity Unit

U = analyte was not detected above the Practical Quantitation Limit (PQL)

µg/L = micrograms per liter

- = not analyzed

Bold indicates analyte was detected above the Practical Quantitation Limit (PQL).

 Shading indicates analyte was detected at a concentration greater than the preliminary cleanup level.

 Shading indicates the analyte was not detected but the laboratory reporting limit is greater than the cleanup level.

Table 2
Summary of Proposed New Monitoring Wells
FL358 Y Pay Mor RI Work Plan Addendum No. 2
Federal Way, Washington

Proposed Monitoring Well Identification	Diameter of Well	Purpose	Anticipated Boring Depth ¹ (feet bgs)
FL358-MW23	2-inch	Evaluate groundwater conditions and western extent of CVOCs in groundwater (FL358-MW16)	40 to 50
FL358-MW24	2-inch	Evaluate the northwestern extent of CVOCs in groundwater (FL358-MW16)	40 to 50
FL358-MW25	2-inch	Evaluate groundwater conditions and western extent of CVOCs in groundwater (FL358-MW16 and FL358-MW20)	40 to 50
FL358-MW26	2-inch	Evaluate groundwater conditions and western extent of vinyl chloride in groundwater (FL358-MW20)	40 to 50
FL358-MW27	2-inch	Evaluate groundwater conditions and western extent of vinyl chloride in groundwater (FL358-MW20)	40 to 50
FL358-MW28	2-inch	Evaluate if the western extent of vinyl chloride in groundwater extends beyond the Sound Transit property	40 to 50
FL358-MW29	2-inch	Evaluate if the western extent of vinyl chloride in groundwater extends beyond the Sound Transit property	40 to 50
FL358-MW30	2-inch	Evaluate if the western extent of vinyl chloride in groundwater extends beyond the Sound Transit property	40 to 50
FL358-MW31	2-inch	Evaluate if the western extent of vinyl chloride in groundwater extends beyond the Sound Transit property	40 to 50
FL358-MW32	2-inch	Evaluate if the western extent of vinyl chloride in groundwater extends beyond the Sound Transit property	40 to 50

Notes:

¹ Each boring will be extended to a depth corresponding to the top of the confining silt layer. The wells are planned to be installed with a 20-foot-long well screen with the bottom of the well screen positioned at the top of confining silt layer. The depths shown are anticipated based on surrounding conditions.

Elevation datum is NAVD88

bgs = below ground surface

CVOCs = chlorinated volatile organic compounds

Table 3
Summary of Monitoring Well Network and Planned Analyses
FL358 Y Pay Mor RI Work Plan Addendum No. 2
Federal Way, Washington

Location Identification ¹	Installation Date	Exploratory Method	Soil Analysis ²		Groundwater Analysis ³			Slug Test
			VOCs ⁴	VOCs ⁴	Dissolved Gases ⁵	MNA Parameters ⁶		
Existing Remedial Investigation Wells (Shannon & Wilson 2022)								
FL358-MW5A	06/22/2022	Sonic	Completed in 2022	Quarterly			Completed in 2022	
FL358-MW5B	06/21/2022		Completed in 2022				Completed in 2022	
FL358-MW6	06/21/2022		Completed in 2022				Completed in 2022	
FL358-MW7	06/20/2022		--				--	
FL358-MW8	06/15/2022		Completed in 2022				--	
FL358-MW9	06/16/2022		Completed in 2022				--	
FL358-MW10	06/13/2022		--				--	
FL358-MW11	06/14/2022		--				--	
FL358-MW12	06/20/2022		--				--	
FL358-MW13	06/14/2022		--				No Longer Planned	
FL358-MW14	06/15/2022		Completed in 2022				Completed in 2022	
Existing Remedial Investigation Wells (GeoEngineers 2024)								
FL358-MW15	09/12/2024	Hollow Stem Auger	Completed in September 2024	Quarterly			--	
FL358-MW16	09/10/2024		--				Planned in 2025	
FL358-MW17	09/10/2024		Completed in September 2024				--	
FL358-MW18	09/12/2024		Completed in September 2024				No Longer Planned	
FL358-MW19	09/11/2024		--				--	
FL358-MW20	09/16/2024		--				Planned in 2025	
FL358-MW21	09/13/2024		--				--	
FL358-MW22	09/13/2024		--				No Longer Planned	
Proposed Additional Remedial Investigation Wells								
FL358-MW23	Anticipated December 2024	Sonic	Sample at Depths: Every 10 feet Starting at the Groundwater Table (~20 feet bgs)	Quarterly			--	
FL358-MW24							--	
FL358-MW25							--	
FL358-MW26							--	
FL358-MW27							--	
FL358-MW28	Anticipated March 2025	Sonic or Hollow Stem Auger	Quarterly if Installed				--	
FL358-MW29							--	
FL358-MW30							--	
FL358-MW31							--	
FL358-MW32							--	

Notes:

¹ Approximate monitoring well locations are shown on Figures 2 and 3.

² Quality control and quality assurance procedures will be in accordance with the Quality Assurance Project Plan in the 2021 Remedial Investigation Work Plan.

³ Groundwater analysis was completed quarterly from June 2022 through September 2024. Groundwater analysis is planned in December 2024 with additional analyses in the first two quarters of 2025. Quality control and quality assurance procedures will be in accordance with the Quality Assurance Project Plan in the 2021 Remedial Investigation Work Plan.

⁴ The volatile organic compounds (VOCs) that will be analyzed in soil and groundwater include tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride. VOCs will be analyzed by United States Environmental Protection Agency (EPA) method 8260.

⁵ Dissolved gases analysis includes ethene, ethane, methane, and acetylene by RSK-175.

⁶ Monitored natural attenuation (MNA) parameters that will be analyzed include total organic carbon by SM 5310B, total iron by EPA method 6010D, ammonia by SM 4500-NH3, nitrate by EPA 353.2, nitrite by EPA 353.2, sulfate by ASTM D516, chloride by SM 4500, and biochemical oxygen demand (BOD) by SM 5210B during each sampling event.

VOCs = volatile organic compounds

EPA = United States Environmental Protection Agency

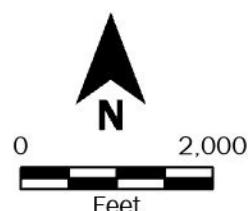
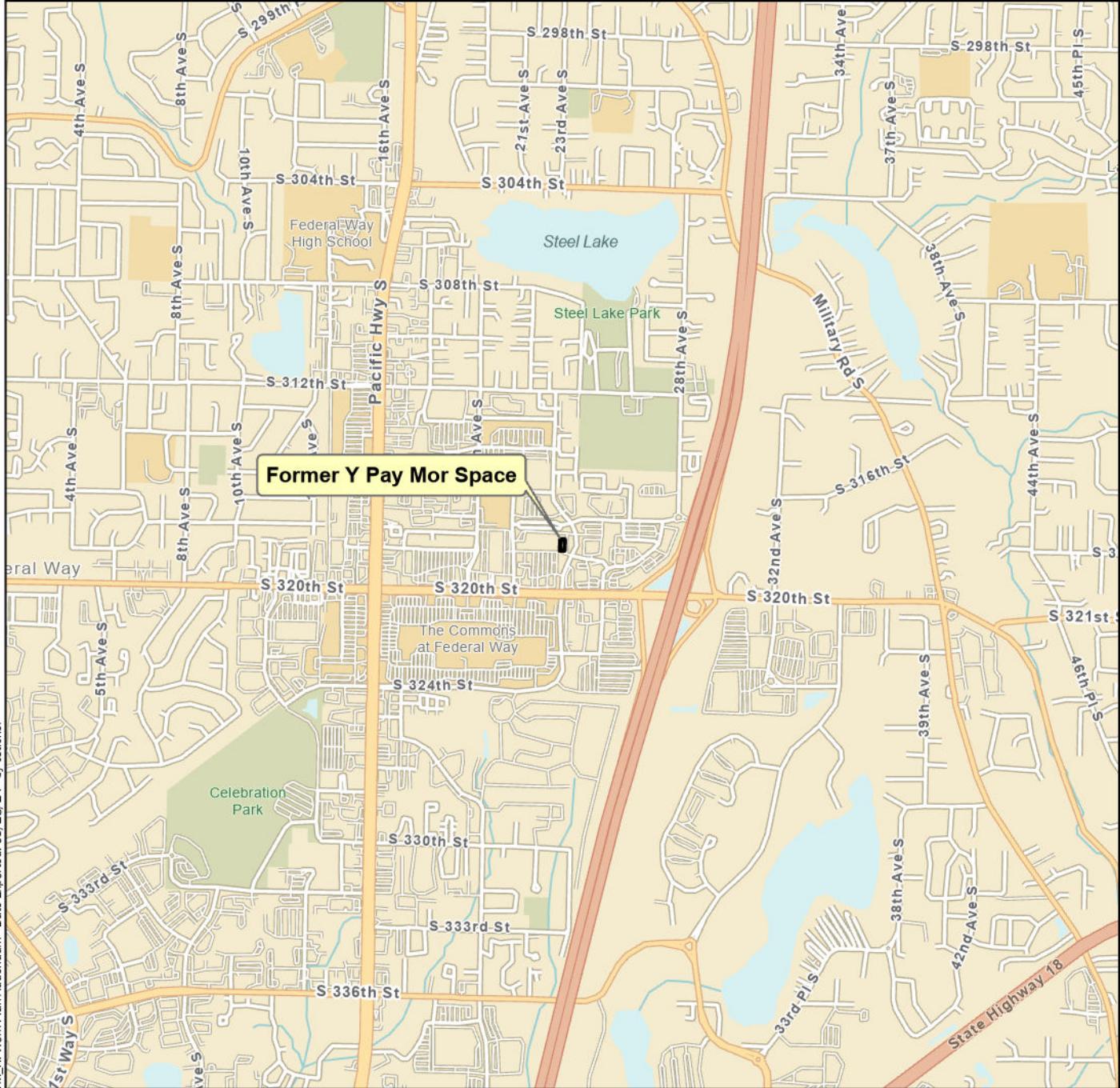
bgs = below ground surface

MNA = monitored natural attenuation

-- = no analysis planned

SM = Standard Method

Figures



Vicinity Map

Y Pay Mor
Federal Way, Washington

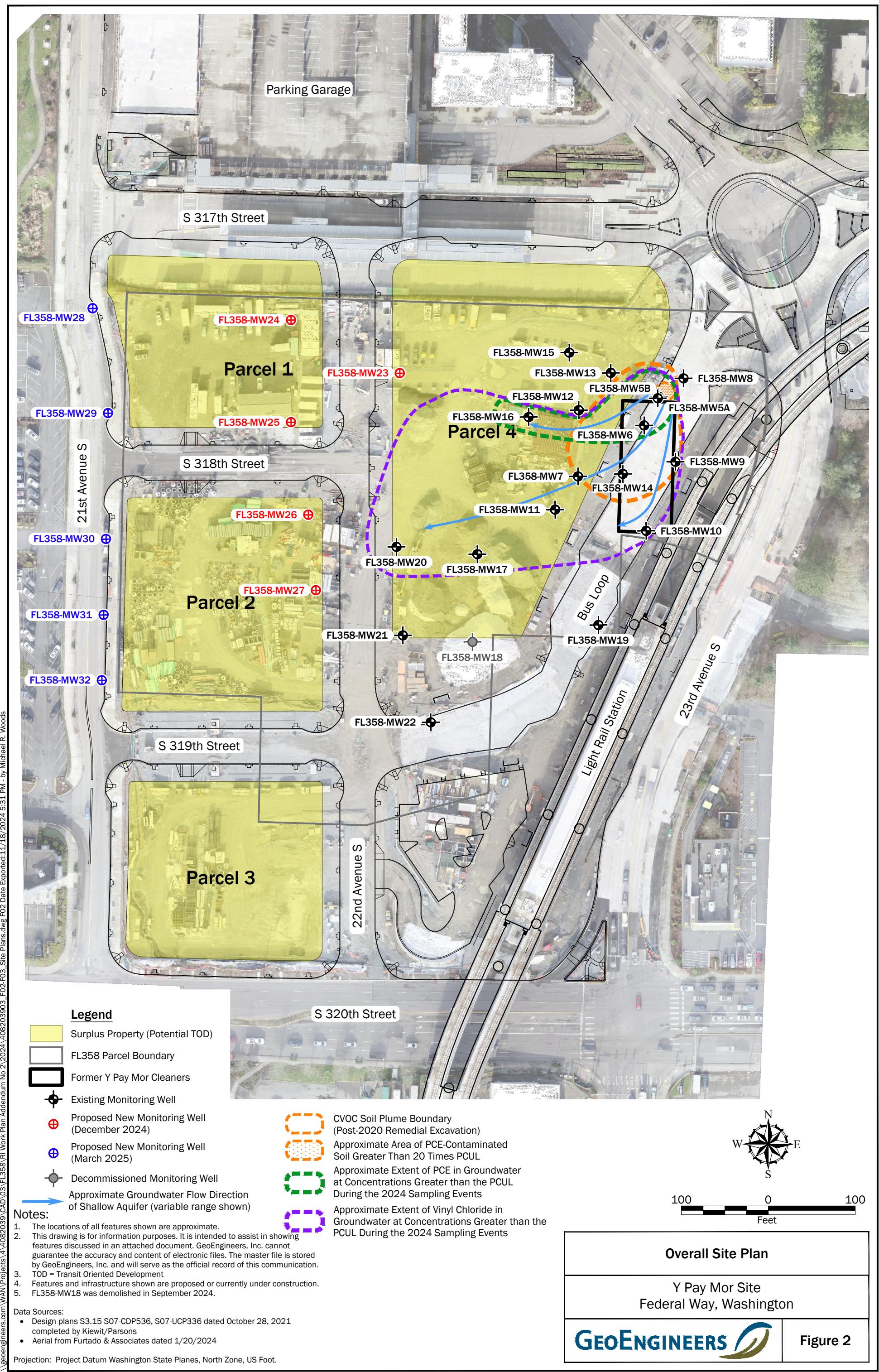
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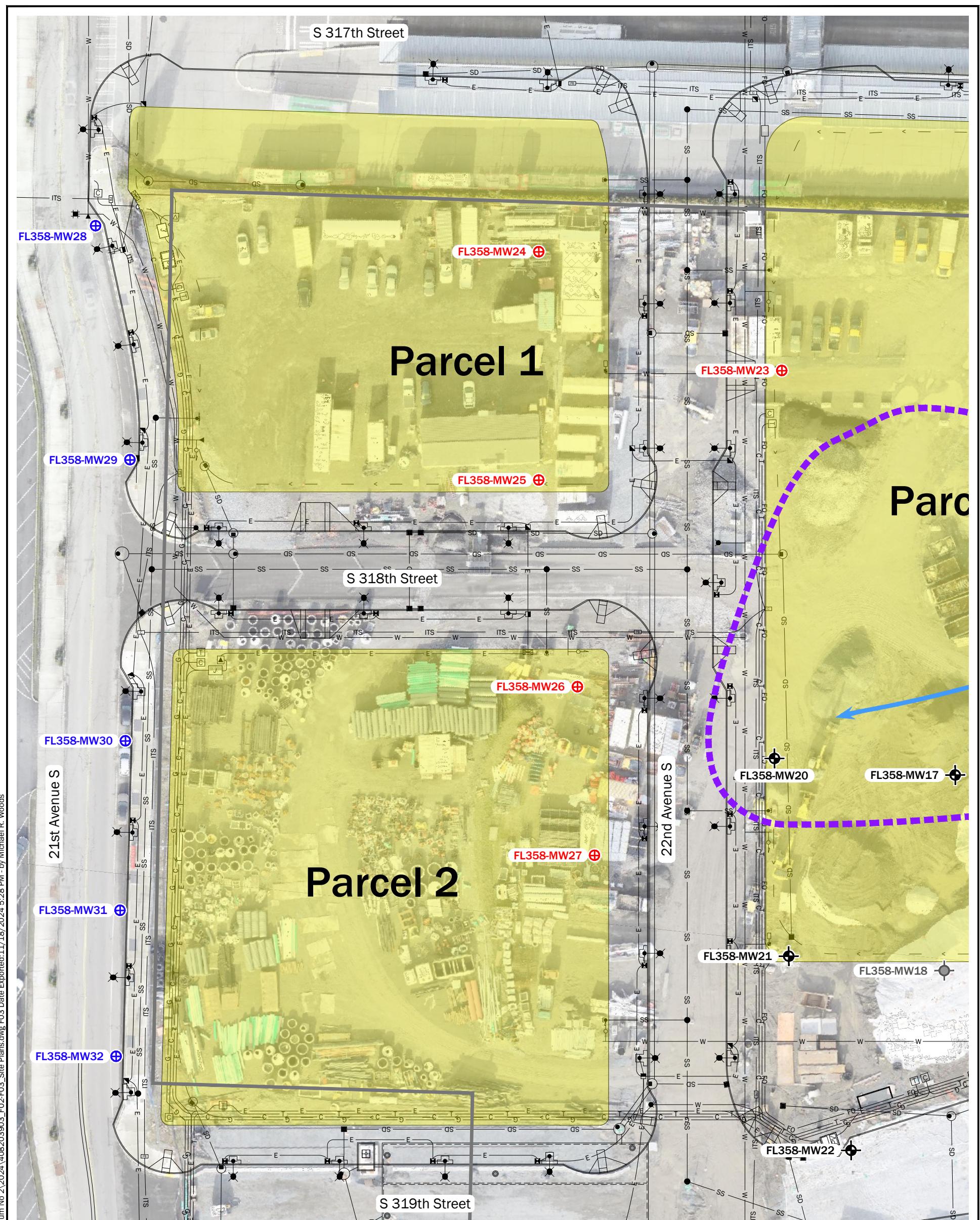
Figure 1

Source(s):
• ESRI

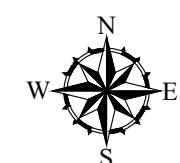
Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet

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- Existing Monitoring Well
- Proposed New Monitoring Well (December 2024)
- Proposed New Monitoring Well (March 2025)
- Decommissioned Monitoring Well



50 0 50
Feet

Proposed Additional Monitoring Wells

Y Pay Mor Site
Federal Way, Washington

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Figure 3