STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
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October 8, 2018

Mr. Scott Roberts
Lake Union Partners
2030 Dexter Avenue North, Suite 100
Seattle, WA, 98109

Re: Opinion on Proposed Cleanup of a Property associated with a Site:

- **Site Name:** Columbia City Apartments USPS
- **Property Address:** 3717 South Alaska Street, Seattle, WA 98118
- **Cleanup Site ID:** 13252
- **Facility/Site No.:** 18032
- **VCP Project No.:** NW3131

Dear Mr. Roberts:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of a Property associated with the Columbia City Apartments USPS facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issues Presented and Opinion

1. Upon completion of the proposed cleanup, will further remedial action likely be necessary at the Property to clean up contamination associated with the Site?

   NO. Ecology has determined that no further remedial action will likely be necessary at the Property to clean up contamination associated with the Site.

2. Upon completion of the proposed cleanup, will further remedial action likely still be necessary elsewhere at the Site?

   YES. Ecology has determined that further remedial action will likely still be necessary elsewhere at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Property and the Site

This opinion applies only to the Property and the Site described below. This opinion does not apply to any other sites that may affect the Property. Any such sites, if known, are identified separately below.

1. Description of the Property.

The Property includes the following tax parcels in King County, which were affected by the Site and will be addressed by your cleanup:

- 3929900010
- 3929900020

Enclosure A includes a legal description of the Property. **Enclosure B** includes a diagram of the Site that illustrates the location of the Property within the Site.

2. Description of the Site.

The Site is defined by the nature and extent of contamination associated with the following releases:

- Total petroleum hydrocarbons in the gasoline, diesel, and oil ranges (TPH-G, TPH-D, and TPH-O) into the Soil.
- Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) into the Soil.
- TPH-D and TPH-O into the Ground Water.
- Arsenic into the Ground Water.

Those releases have affected more than one parcel of real property, including the parcels identified above.

Enclosure B includes a detailed description and diagram of the Site, as currently known to Ecology.

3. Identification of Other Sites that may affect the Property.

Please note a parcel of real property can be affected by multiple sites. At this time, we

have no information that the Property is affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Sound Earth Strategies, *Technical Memorandum – Total Organic Carbon in Groundwater and Silica Gel Cleanup*, September 13, 2018.

2. Sound Earth Strategies, *Remedial Investigation, Feasibility Study and Cleanup Action Plan Addendum Letter*, July 18, 2018.

3. Sound Earth Strategies, *Remedial Investigation, Feasibility Study and Cleanup Action Plan*, January 23, 2018.

4. Sound Earth Strategies, *Subsurface Investigation*, March 10, 2017.

These documents are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. You can make an appointment by completing a Request for Public Record form (https://www.ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests) and emailing it to PublicRecordsOfficer@ecy.wa.gov, or contacting the Public Records Officer at 360-407-6040. A number of these documents are accessible in electronic form from the Site web page https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=13252.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

1. Cleanup of the Property located within the Site.

Ecology has concluded that, upon completion of your proposed cleanup, **no further remedial action** will likely be necessary at the Property to clean up contamination associated with the Site. That conclusion is based on the following analysis:

a. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards for the Site and select a cleanup for the Property. The Site is

described above and in **Enclosure B**.

Fill material and creosote-treated wood piling are the most likely sources for contamination encountered on the Property in soil and ground water. Fill material was present beneath the Property and adjacent parcels from the ground surface to depths of 14 to 36 feet.

The TPH-G concentration exceeded the MTCA Method A cleanup level at one boring in location (PB06 at a depth of 10 feet bgs) in the northeast portion of the Property. TPH-O concentrations exceeding MTCA Method A cleanup levels were encountered between depths of 2 to 10 feet in the northeast (boring GA-3), northwest (boring PG01), and southcentral portions of the Property (boring MW06). Two cPAH concentrations exceeding MTCA were encountered at 10 and 20 feet below ground surface (bgs) in boring MW06 and PB05, near the southern boundary of the Property.

There are approximately 138 creosote-treated piles under the existing building. The piles extend from the building slab at an elevation of approximately 65 feet North American Vertical Datum of 1988 (NAVD88) to sandstone bedrock, the top of which ranges from elevation 40 to 23 feet. Creosote-treated piles are known to present the potential for cPAH contamination of soil and ground water, and therefore are a potential source of contamination.

During a May 2018 preliminary assessment, samples were collected from soil adjacent to and between accessible creosote piles located in the crawl space beneath the northwestern portion of the building. Soil samples were collected at 3, 6, and 9 inches from the edge of a pile, and one sample was collected at the midpoint between two piles. The cPAH concentrations were above the MTCA Method A cleanup level in the 3- and 6-inch samples and below in the 9-inch and midpoint samples.

TPH-D and TPH-O were detected in ground water at concentrations that exceeded the MTCA Method A cleanup level in reconnaissance samples collected in May 2015 from boring locations PB05 and PB06. Additional sampling of existing and newly installed permanent ground water monitoring wells on the Property was conducted in 2018 to further assess ground water conditions. TPH-D and TPH-O concentrations in ground water samples collected from monitoring wells MW02 through MW04 exceeded MTCA Method A cleanup level of 500 micrograms per liter (µg/l) (1,120, 1,660, and 1,340 µg/l, respectively), when analyzed without silica gel cleanup, and were below laboratory detection limits when analyzed with silica gel cleanup.

In August 2018, a background sample was collected from monitoring well MW8, located on the south-adjoining upgradient property, to assess the contribution of total organic carbon (TOC) in a well not impacted by petroleum contamination. The TOC concentration in MW8 was 8,720 micrograms per liter, which is much higher than typical values occurring in ground water (*Technical Memorandum – Total Organic Carbon in Groundwater and Silica Gel Cleanup*, 9/13/2018). This demonstration is consistent with Section 7.3 of *Guidance for Remediation of Petroleum Contaminated Sites, Ecology Publication No. 10-09-057*, Revised June 2016. Ecology agrees that the higher naturally occurring organic material is likely biasing the TPH-D and TPH-O results high, and that the use of silica gel cleanup for ground water samples is appropriate for this Site.

Dissolved arsenic was detected in ground water samples collected from boring PB05 (upgradient) and monitoring wells MW02 (upgradient), MW03, MW04, and MW06 (upgradient) at concentrations ranging from 7.07 to 35.1 µg/L, which exceeds the MTCA Method A cleanup level of 5 µg/l. Ecology concurs with the SoundEarth interpretation that elevated levels of arsenic in ground water are attributable to localized ground water conditions in the fill that underlies this area of Seattle.

b. Establishment of cleanup standards for the Site.

The Site is situated in a mixed commercial and residential area. Cleanup levels for soil must therefore be set for unrestricted land use. Cleanup levels for the protection of direct contact and leaching to ground water are needed. Method A cleanup levels for soil are therefore appropriate cleanup levels for this Site.

Cleanup levels protective of terrestrial ecological receptors are not necessary because the Site meets the Terrestrial Ecological Evaluation exclusion criteria in accordance with WAC 173-340-7491(1)(b), barriers to exposure, all contaminated soil, is or will be, covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls will be used to manage remaining contamination.

The standard point of compliance for soil cleanup levels based on the leaching pathway (protection of ground water) is throughout the soil profile, including below the water table.

Ground water is present at depths ranging from 5 to 31.5 feet bgs. The highest beneficial use for ground water is considered to be as a potable source. MTCA

Method A cleanup levels, which are protective of ground water as a potable source, are therefore appropriate cleanup levels for this Site. The standard point of compliance for ground water is throughout the Site, from the uppermost level of the saturated zone extending vertically to the lowest depth that could potentially be affected by the Site.

c. Selection of cleanup for the Property.

Ecology has determined the cleanup you proposed for the Property meets the substantive requirements of MTCA. Your proposed cleanup meets minimum cleanup requirements and will not exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site.

Excavation is the proposed cleanup for contaminated soil encountered at boring locations GA-3, PG01/MW01, PB05, and PB06. Confirmation samples will be collected from all four sidewalls of each excavation and immediately below the area of identified contamination. Each confirmation sample will be analyzed for the contaminant(s) identified that exceeded MTCA Method A cleanup levels. Approximate excavation areas and confirmation sampling locations are illustrated in **Enclosure B, Figure 2**.

Regarding the creosote pilings and associated cPAH-contaminated soil, several remedial technologies that satisfy the minimum threshold requirement outlined in WAC 173-340-360 (2)(b) were screened for effectiveness and implementability to meet the remedial action objectives. Due to the planned redevelopment of the Site, which will include excavation of soil to an elevation of approximately 49 feet, the only two cleanup alternatives considered were complete removal of the pilings below the redevelopment excavation, and partial removal of the pilings to the bottom of the redevelopment excavation.

There are approximately 138 creosote-treated piles, either individual or in clusters, arranged on approximate 10-foot centers under the existing building (see **Enclosure B, Figure 2**). The pilings extend from an approximate elevation of 65 feet to bedrock at elevation 40 feet to 23 feet. Complete removal of the timber piles below the planned development grade elevation of 49 feet was considered and a bid for this action was obtained. Based on the estimated additional cost of approximately $1,200,000 for complete removal of the piles and the potentially impacted soil surrounding each pile, and the added ancillary structural support that leaving the piles in place would provide, the selected alternative is source removal and partial removal of the pilings. Ecology agrees complete removal of the pilings is not cost effective compared to the environmental benefit.

Confirmation soil samples will be collected between each row of remaining piles at final development grade elevation, as well as at the redevelopment excavation sidewalls adjacent to the treated pile area (see **Enclosure B, Figure 2**) and analyzed for cPAHs, to document and estimate the volume of contamination left in place. The new building will be incorporated into an environmental covenant as an engineered control preventing direct contact with soil and limiting leaching to ground water. The covenant will ensure the new building will not be altered or removed in any manner that would expose the pilings or associated contaminated soil, result in a release to the environment of contaminants, or create a new exposure pathway, without prior written approval of Ecology.

Any additional contaminated soil identified in other areas of the Site during excavation activities will be evaluated and a sampling plan will be developed to properly characterize and manage the material in accordance, with all applicable regulations.

A methane gas vapor barrier and passive sub-slab ventilation system will be placed beneath the future building foundation to mitigate potential methane gas impacts from the adjacent former Genesee Landfill. The planned redevelopment includes three levels of subgrade parking. Methane sensors will be installed on all three parking levels. The sensors will be connected to an alert system and will allow active ventilation of the parking garage by building ventilation systems. These measures will be implemented in accordance with *Construction Standards for Methane Control*, Title 10, King County Board of Health Solid Waste Regulations.

Dissolved arsenic has been detected above the MTCA Method A cleanup level at the upgradient southern Property boundary (locations MW06 and PB05). The planned redevelopment excavation will include removal of fill material to a depth of 35 feet bgs. A footing drainage system will be incorporated into the environmental covenant as an engineered control, acting as a hydraulic barrier preventing recontamination of the Property from a potential upgradient source of arsenic. As-built drawings of the footing drainage system, periodic monitoring of the water collected by the system, and a system maintenance and contingency plan will need to be submitted to Ecology prior to issuance of an environmental covenant. The environmental covenant will also limit withdrawal of ground water on the Property.

An attempt will be made to preserve existing monitoring wells MW01 through MW06 on the Property. If replacement wells are necessary following Property redevelopment, replacement wells will be installed as close as possible to the

original locations and screened at the same depth intervals as the wells they are replacing. Compliance ground water monitoring will be conducted at all six wells following Property redevelopment for a minimum of four consecutive quarters, to demonstrate that ground water is in compliance with MTCA cleanup levels established for the Site. Ground water analysis will include TPH-D, TPH-O, cPAHs, and dissolved arsenic.

Ecology expects the removal of a significant amount of fill during the redevelopment will reduce contaminant concentrations in ground water. Prior to obtaining a No Further Action determination for the Property it must be demonstrated that all ground water monitoring wells are in compliance with cleanup levels established for the Site. Ecology may require an additional four quarters of ground water sampling prior to issuing a No Further Action opinion letter for the Property.

2. Cleanup of the Site as a whole.

Ecology has concluded that **further remedial action** will still be necessary elsewhere at the Site upon completion of your proposed cleanup. In other words, while your proposed cleanup may constitute the final action for the Property, it will constitute only an **"interim action"** for the Site as a whole.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or

Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. Opinion is limited to proposed cleanup.

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Property upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the VCP.

4. State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up your Property under the Voluntary Cleanup Program (VCP). As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. While I am on leave until December 17, 2018, if you have any questions about this opinion, please contact my fellow VCP site manager Mike Warfel by phone at 425-649-7257 or by e-mail at michael.warfel@ecy.wa.gov.

Sincerely,

Louise Bardy for Diane Escobedo

Diane Escobedo, Site Manager
NWRO Toxics Cleanup Program

Enclosures (2): A – Legal Description of the Property
B – Description and Diagrams of the Site (including the Property)

cc: John Funderburk, SoundEarth Strategies
Sonia Fernandez, Ecology VCP Coordination, NWRO

Enclosure A

Legal Description of the Property

Parcel 392990-0010

KRAMER HEIGHTS REPLAT TR A LESS POR LY S OF S LN OF LOT 6 BLK 2 SD ADD EXTD W & LOTS 1 THRU 6 SD BLK 1 LESS S 35 FT OF 4 & LOT 5 EX S 25 FT & POR NW 1/4 OF NW 1/4 STR 22-24-4 LY NELY OF RAINIER AVE LESS N 144 FT LESS POR LY S OF S LN OF LOT 6 SD BLK 1 EXTD W
PLat Block: 1 &
Plat Lot: A

Parcel 392990-0020

KRAMER HEIGHTS REPLAT S 35 FT OF LOT 4 & LOT 5 LESS S 25 FT
PLat Block: 1
Plat Lot: 4 - 5

Enclosure B

Description and Diagrams of the Site (Including the Property)

Site Description

This section provides Ecology's understanding and interpretation of Site conditions, and is the basis for the opinions expressed in the body of the letter.

Site: The Site is defined by the release of polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons in the gasoline- and oil-range (TPH-G and TPH-O) to soil and TPH-O and arsenic to ground water associated with uncontrolled fill material. The Site is located at 3717 South Alaska Street in Seattle, Washington (Property).

Area and Property Description: The Property corresponds to King County parcel numbers 3929900010 and 3929900020 which total 1.71 acres in size. The Property is occupied by a 1967-vintage, multi-story office building. The Property is bounded by South Alaska Street and Rainier Playfield (City of Seattle park) to the north, 38th Avenue South and single family residences to the east, a childcare center and apartment building to the south and Rainier Avenue South, and a City of Seattle park and library to the west (**Figure 1**). Land use surrounding the Site includes commercial and residential.

The eastern portion of the Property is zoned Neighborhood Commercial (NC2-65) and the western portion of the Property is zoned as Neighborhood Commercial – Pedestrian Designated (NCP2-40). The former Genesee Landfill operated northwest of the Property from 1942 until 1968. The landfill area was formerly the Wetmore Slough. Filling in of the slough began in approximately 1890. The Landfill was subsequently capped and redeveloped as the City of Seattle Genesee Park and Playfield.

Property History and Current Use: The northwestern portion of the Property was partially occupied by the Valley Fuel Company, which was primarily located on the west-adjacent property, from approximately 1915 to 1940. The business appeared to store wood and coal. By 1950, the Property was vacant. The existing 1967-vintage, multi-story office building is located on the central portion of the Property and is currently occupied by a post office and office space. Surrounding the post office building is an asphalt-paved parking lot, rockery retaining walls, and landscaped areas.

Contaminant Source and History: Uncontrolled fill and creosote-treated wood piles appear to be the sources of contamination. An estimated 138 piles are arranged under the existing building (**Figure 2**). The piles extend from the building slab to the bedrock and may contain PAHs. Proximity to the historical Genesee landfill is a potential source for methane gas beneath the Property.

Physiographic Setting: The Property and vicinity lie within the Puget Sound Lowland, a broad, low-lying region situated between the Cascade Range to the east and the Olympic Mountains and Willapa Hills to the west. The land surface elevation above the NAVD88 vertical datum ranges from 85 feet on the southwest corner to approximately 49 feet on the northeast corner of the Property. The topography of the area has changed significantly since 1910 due to fill placement

in pre-existing natural drainage depressions. The Property is terraced such that the parking on the south end of the Property is three terraces above the parking lot on the north end of the Property.

Surface/Storm Water System: The nearest surface water is Lake Washington located approximately 1 mile to the east. Storm water is diverted into storm water catch basins located throughout the parking area of the Property.

Ecological Setting: The Property is currently covered primarily by asphalt, concrete, and buildings. Rainier Playfield (7.8 acres) is located across the South Alaska Street to the north of the Property. Genesee Park and Playfields (57.7 acres) are located to the northeast, across South Alaska Street. Columbia Park (2.0 acres) is located across Rainier Avenue South to the west. All three parks are primarily composed of landscaped grassy areas with trees and shrubs, with the exception of the Genesee Playfields, which are covered with artificial turf.

Geology: Subsurface soil beneath the Site consists primarily of soft to stiff silt or clay-rich deposits, locally containing anthropogenic material (i.e., concrete, brick, glass, metal) and organic material that extends to depths of approximately 15 to 36 feet below ground surface (bgs). These soils are interpreted to be fill material.

In the eastern part of the Site, the fill deposits are underlain by silt and clay-rich strata interpreted to be Vashon recessional lacustrine deposits, which extend to depths of approximately 30 to 35 feet bgs and overlies bedrock (Blakely Formation). This formation consists of fresh to highly weathered, medium-grained sandstone, coarse-grained sandstone, conglomerate, and minor siltstone. In borings in the southern and western portion of the Property, the Blakely Formation was encountered underlying the fill and extending to the maximum depth explored (**Figure 3**).

Ground Water: Wet soil conditions and discontinuous perched water were observed in Site borings at depths ranging from 5 to 31.5 feet bgs, with a static ground water level of approximately 20 feet bgs in monitoring wells MW01 and MW02. Ground water flows generally to the north with a gradient of 0.086 feet per foot (**Figure 4**). This is consistent with ground water flow at a site located approximately 50 feet to the south, where ground water flow direction has generally been to the north-northeast to north-northwest.

Water Supply: Potable water is provided to the Property by the City of Seattle, which obtains water from the Cedar River and South Fork Tolt River watersheds (70% and 30%, respectively), located in the western foothills of the Cascade Mountains. According to Ecology's well log database, there are no drinking water wells within 1 mile of the Site.

Release and Extent of Soil and Ground Water Contamination: Petroleum hydrocarbon contamination (TPH-G and TPH-O) was generally observed in soil between 2 and 10 feet bgs in the northeast, northwest, and south-central portions of the Property. CPAH concentrations exceeding the MTCA Method A cleanup level were observed at approximately 10 feet and 20 feet bgs along the southern Property boundary, as well as within an approximate 6-inch radius of

the creosote pilings.

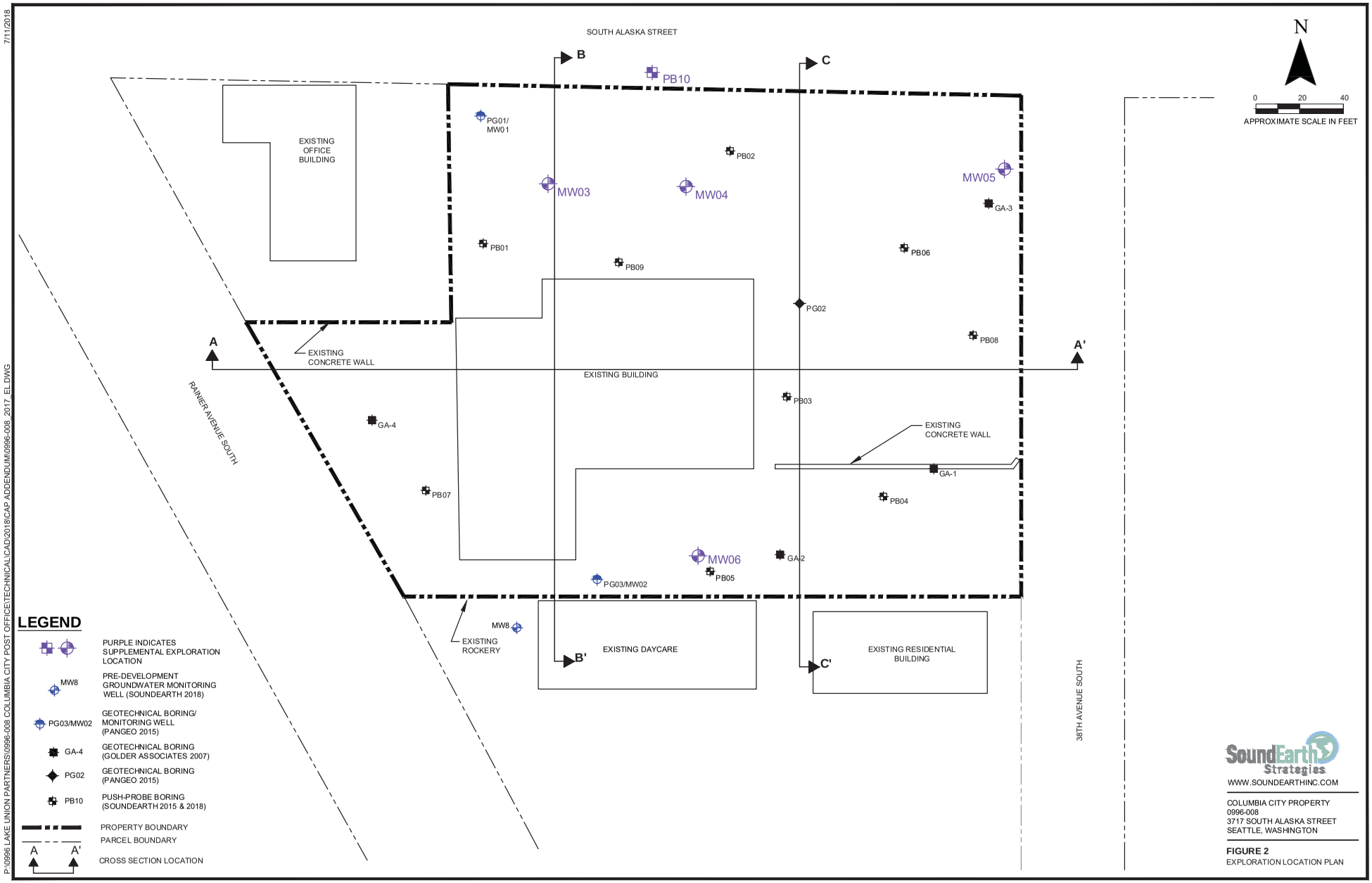
TPH-D and TPH-O were detected in ground water samples at the western portion of the Property at concentrations exceeding the MTCA Method A cleanup level. However, based on an assessment of total organic carbon in ground water collected from a well not impacted by petroleum contamination (well MW8), naturally occurring organic matter is likely biasing the TPH results. Therefore, Ecology agrees that inclusion of silica gel cleanup for TPH-D and TPH-O analysis is more representative of conditions. TPH-D and TPH-O concentrations were not detected above laboratory detection limits when analysis included silica gel cleanup.

Dissolved arsenic was detected at concentrations above the MTCA Method A cleanup level in monitoring wells upgradient of the Property and within the Property. The available data indicated that elevated levels of arsenic in ground water are likely attributable to localized ground water conditions in the fill that underlies this area of Seattle.

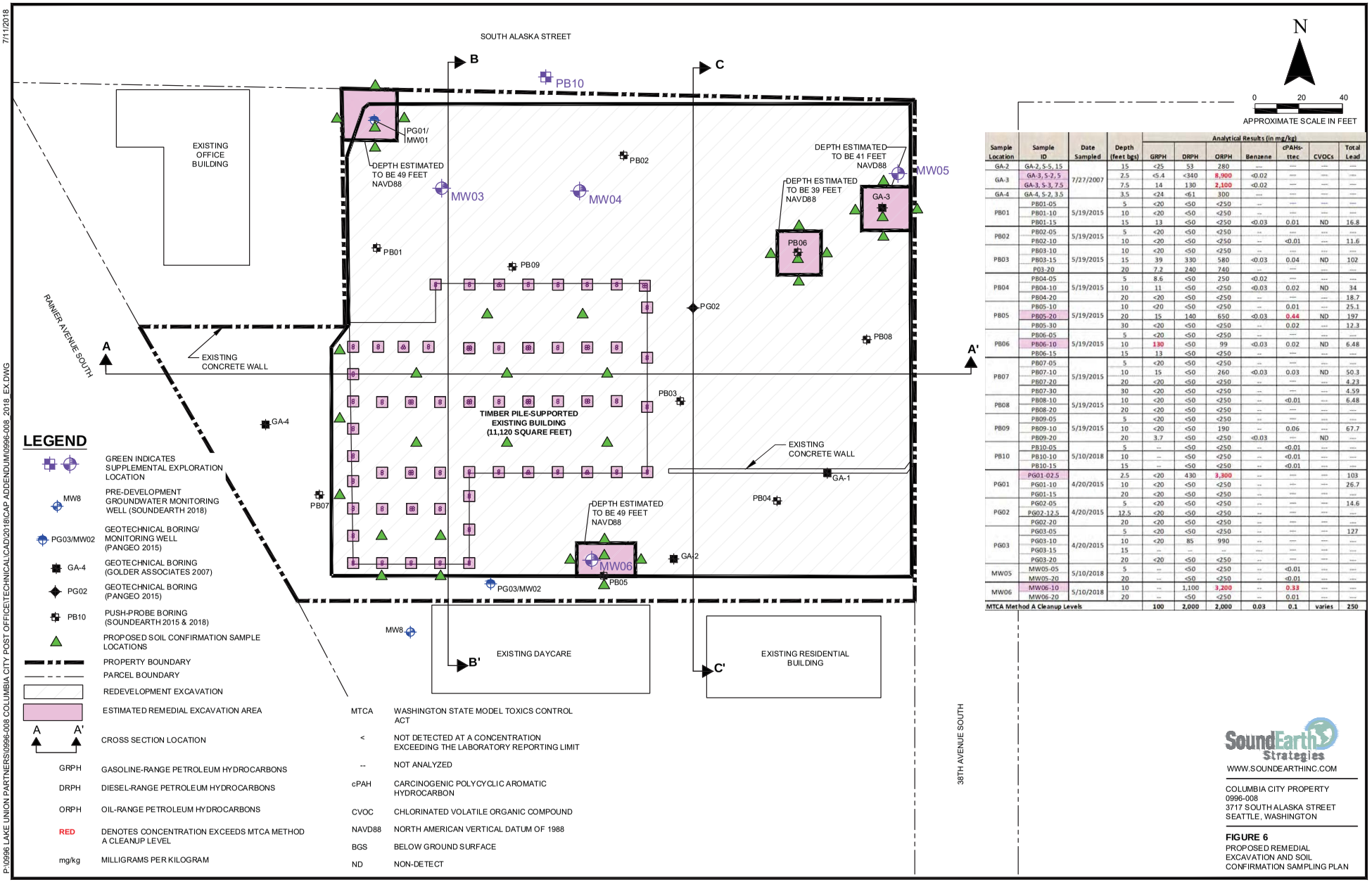
Proposed Property Redevelopment and Remediation: The Property will be redeveloped as a multi-story residential building with three levels of underground parking. The depth of the redevelopment excavation is approximately 11 to 35 feet below ground surface (bgs). The proposed remedial excavation and soil confirmation sampling plan is shown on **Figure 2**.

Enclosure B

Site Diagrams



Enclosure B, Figure 1



LEGEND

- GREEN INDICATES SUPPLEMENTAL EXPLORATION LOCATION
- MW8 — PRE-DEVELOPMENT GROUNDWATER MONITORING WELL (SOUNDEARTH 2018)
- PG03/MW02 — GEOTECHNICAL BORING/ MONITORING WELL (PANGEO 2015)
- GA-4 — GEOTECHNICAL BORING (GOLDER ASSOCIATES 2007)
- PG02 — GEOTECHNICAL BORING (PANGEO 2015)
- PB10 — PUSH-PROBE BORING (SOUNDEARTH 2015 & 2018)
- PROPOSED SOIL CONFIRMATION SAMPLE LOCATIONS
- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- REDEVELOPMENT EXCAVATION
- ESTIMATED REMEDIAL EXCAVATION AREA
- A A' — CROSS SECTION LOCATION

GRPH	GASOLINE-RANGE PETROLEUM HYDROCARBONS
DRPH	DIESEL-RANGE PETROLEUM HYDROCARBONS
ORPH	OIL-RANGE PETROLEUM HYDROCARBONS
RED	DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
mg/kg	MILLIGRAMS PER KILOGRAM

MTCA	WASHINGTON STATE MODEL TOXICS CONTROL ACT
<	NOT DETECTED AT A CONCENTRATION EXCEEDING THE LABORATORY REPORTING LIMIT
--	NOT ANALYZED
cPAH	CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBON
CVOC	CHLORINATED VOLATILE ORGANIC COMPOUND
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
BGS	BELOW GROUND SURFACE
ND	NON-DETECT

Sample Location	Sample ID	Date Sampled	Depth (feet bgs)	Analytical Results (in mg/kg) GRPH	DRPH	ORPH	Benzene	cPAHs-ttec	CVOCs	Total Lead
GA-2	GA-2, S-5, 15	7/27/2007	15	<25	53	280	---	---	---	---
GA-3	GA-3, S-2, 5		2.5	<5.4	<340	8,900	<0.02	---	---	---
	GA-3, S-3, 7.5		7.5	14	130	2,100	<0.02	---	---	---
GA-4	GA-4, S-2, 3.5		3.5	<24	<61	300	---	---	---	---
PB01	PB01-05	5/19/2015	5	<20	<50	<250	--	---	---	---
	PB01-10		10	<20	<50	<250	--	---	---	---
	PB01-15		15	13	<50	<250	<0.03	0.01	ND	16.8
PB02	PB02-05	5/19/2015	5	<20	<50	<250	--	---	---	---
	PB02-10		10	<20	<50	<250	--	<0.01	---	11.6
PB03	PB03-10	5/19/2015	10	<20	<50	<250	--	---	---	---
	PB03-15		15	39	330	580	<0.03	0.04	ND	102
	P03-20		20	7.2	240	740	--	---	---	---
PB04	PB04-05	5/19/2015	5	8.6	<50	250	<0.02	---	---	---
	PB04-10		10	11	<50	<250	<0.03	0.02	ND	34
	PB04-20		20	<20	<50	<250	--	---	---	18.7
PB05	PB05-10	5/19/2015	10	<20	<50	<250	--	0.01	---	25.1
	PB05-20		20	15	140	650	<0.03	0.44	ND	197
	PB05-30		30	<20	<50	<250	--	0.02	---	12.3
PB06	PB06-05	5/19/2015	5	<20	<50	<250	--	---	---	---
	PB06-10		10	130	<50	99	<0.03	0.02	ND	6.48
	PB06-15		15	13	<50	<250	--	---	---	---
PB07	PB07-05	5/19/2015	5	<20	<50	<250	--	---	---	---
	PB07-10		10	15	<50	260	<0.03	0.03	ND	50.3
	PB07-20		20	<20	<50	<250	--	---	---	4.23
	PB07-30		30	<20	<50	<250	--	---	---	4.59
PB08	PB08-10	5/19/2015	10	<20	<50	<250	--	<0.01	---	6.48
	PB08-20		20	<20	<50	<250	--	---	---	---
PB09	PB09-05	5/19/2015	5	<20	<50	<250	--	---	---	---
	PB09-10		10	<20	<50	190	--	0.06	---	67.7
	PB09-20		20	3.7	<50	<250	<0.03	---	ND	---
PB10	PB10-05	5/10/2018	5	--	<50	<250	--	<0.01	---	---
	PB10-10		10	--	<50	<250	--	<0.01	---	---
	PB10-15		15	--	<50	<250	--	<0.01	---	---
PG01	PG01-02.5	4/20/2015	2.5	<20	430	3,300	--	---	---	103
	PG01-10		10	<20	<50	<250	--	---	---	26.7
	PG01-15		20	<20	<50	<250	--	---	---	---
PG02	PG02-05	4/20/2015	5	<20	<50	<250	--	---	---	14.6
	PG02-12.5		12.5	<20	<50	<250	--	---	---	---
	PG02-20		20	<20	<50	<250	--	---	---	---
PG03	PG03-05	4/20/2015	5	<20	<50	<250	--	---	---	127
	PG03-10		10	<20	85	990	--	---	---	---
	PG03-15		15	--	--	--	---	---	---	---
	PG03-20		20	<20	<50	<250	--	---	---	---
MW05	MW05-05	5/10/2018	5	--	<50	<250	--	<0.01	---	---
	MW05-20		20	--	<50	<250	--	<0.01	---	---
MW06	MW06-10	5/10/2018	10	--	1,100	3,200	--	0.33	---	---
	MW06-20		20	--	<50	<250	--	0.01	---	---
MTCA Method A Cleanup Levels				100	2,000	2,000	0.03	0.1	varies	250

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FIGURE 6
PROPOSED REMEDIAL EXCAVATION AND SOIL CONFIRMATION SAMPLING PLAN

7/11/2018

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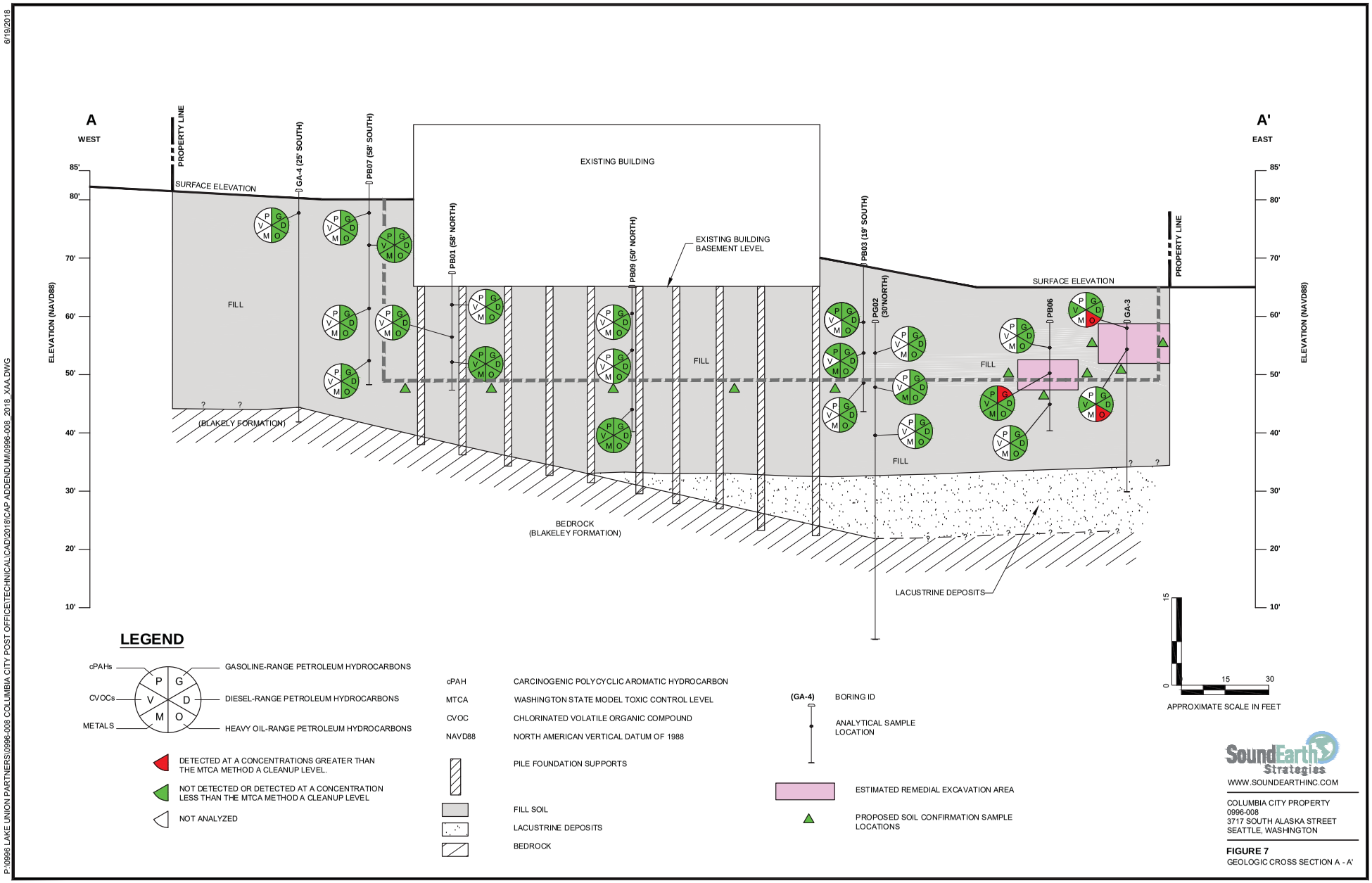
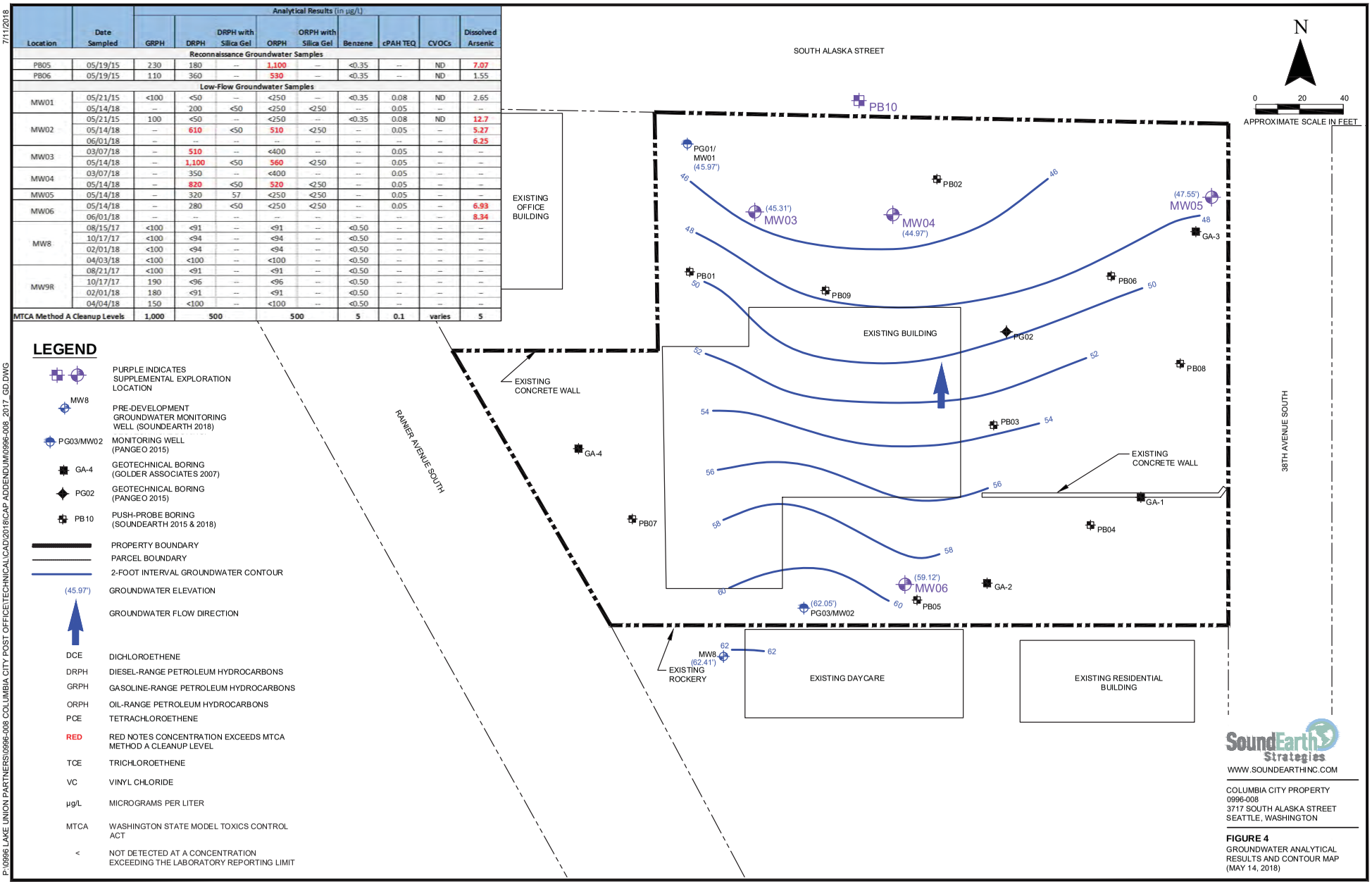
Enclosure B, Figure 2



Enclosure B, Figure 3

Location	Date Sampled	Analytical Results (in µg/L) GRPH	DRPH	DRPH with Silica Gel	ORPH	ORPH with Silica Gel	Benzene	cPAH TEQ	CVOCs	Dissolved Arsenic
Reconnaissance Groundwater Samples										
PB05	05/19/15	230	180	--	1,100	--	<0.35	--	ND	7.07
PB06	05/19/15	110	360	--	530	--	<0.35	--	ND	1.55
Low-Flow Groundwater Samples										
MW01	05/21/15	<100	<50	--	<250	--	<0.35	0.08	ND	2.65
	05/14/18	--	200	<50	<250	<250	--	0.05	--	--
MW02	05/21/15	100	<50	--	<250	--	<0.35	0.08	ND	12.7
	05/14/18	--	610	<50	510	<250	--	0.05	--	5.27
	06/01/18	--	--	--	--	--	--	--	--	6.25
MW03	03/07/18	--	510	--	<400	--	--	0.05	--	--
	05/14/18	--	1,100	<50	560	<250	--	0.05	--	--
MW04	03/07/18	--	350	--	<400	--	--	0.05	--	--
	05/14/18	--	820	<50	520	<250	--	0.05	--	--
MW05	05/14/18	--	320	57	<250	<250	--	0.05	--	--
MW06	05/14/18	--	280	<50	<250	<250	--	0.05	--	6.93
	06/01/18	--	--	--	--	--	--	--	--	8.34
MW8	08/15/17	<100	<91	--	<91	--	<0.50	--	--	--
	10/17/17	<100	<94	--	<94	--	<0.50	--	--	--
	02/01/18	<100	<94	--	<94	--	<0.50	--	--	--
	04/03/18	<100	<100	--	<100	--	<0.50	--	--	--
MW9R	08/21/17	<100	<91	--	<91	--	<0.50	--	--	--
	10/17/17	190	<96	--	<96	--	<0.50	--	--	--
	02/01/18	180	<91	--	<91	--	<0.50	--	--	--
	04/04/18	150	<100	--	<100	--	<0.50	--	--	--
MTCA Method A Cleanup Levels		1,000	500		500		5	0.1	varies	5



Enclosure B, Figure 4