



Electronic Copy

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

Northwest Region Office  
PO Box 330316, Shoreline, WA 98133-9716 • 206-594-0000

January 6, 2023

Joel Haack  
Haack Brothers Homes  
3922 87th Avenue NE,  
Marysville, WA 98270  
([joel@haackbrothers.com](mailto:joel@haackbrothers.com))

**RE: No Further Action opinion for the following Property associated with a contaminated Site**

**Site name:** Legion Memorial Golf Course  
**Property address:** 413 Rockefeller Avenue, Everett, Washington  
**Facility/Site ID:** 9311679  
**Cleanup Site ID:** 1653  
**VCP Project No.:** NW3268

Dear Joel Haack:

The Washington State Department of Ecology (Ecology) received your request on June 15, 2022 for an opinion regarding the sufficiency of the Property cleanup associated with the Legion Memorial Golf Course (LMGC; Site) under the Voluntary Cleanup Program (VCP).<sup>1</sup> We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter [70A.305](#) RCW.<sup>2</sup>

## Opinion

Ecology has determined that no further remedial action is necessary at the Property to clean up contamination associated with the Site. However, further remedial action remains necessary elsewhere at the Site to clean up contamination.

This opinion depends on the continued performance and effectiveness of the post-cleanup controls and monitoring specified in this letter and in the environmental covenant in **Enclosure A**.

---

<sup>1</sup> <https://ecology.wa.gov/Spills-Cleanup/Contamination-cleanup/Voluntary-Cleanup-Program>

<sup>2</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305>

Ecology bases this opinion on an analysis of whether the remedial action meets the substantive requirements of MTCA and its implementing regulations, which are specified in Chapter 70A.305 RCW and Chapter [173-340](#) WAC<sup>3</sup> (collectively called “MTCA”).

## Property Description

This opinion applies only to the Property described in this section, which was affected by release(s) at the Site and addressed by your cleanup. The Property includes the following parcel of real property in Snohomish County:

- 00438610400600

**Enclosure B** includes a legal description of the Property. **Enclosure C** includes a detailed description and diagrams of the Site and the Property.

## Site Description

This opinion applies to only the Site described in this section. The Site is defined by the nature and extent of contamination associated with the following release:

- Arsenic, lead, and cadmium into the Soil.

**Enclosure C** includes the Site description, history, and diagrams.

Please note that releases from multiple sites can affect a parcel of real property. This Property is located within the boundary of the Everett Smelter site (Ecology facility 2744). This opinion does not apply to the Everett Smelter site or any other sites that may affect the Property.

## Basis for the Opinion

This opinion is based on the information contained in the documents listed in **Enclosure D**. A number of these documents are accessible in electronic form from the [Site web page](#)<sup>4</sup>. The complete records are kept in the Central Files of the Northwest Regional Office of Ecology (NWRO) for review by appointment only. Visit our [Public Records Request Page](#)<sup>5</sup> to submit a public records request or get more information about the process. If you require assistance with this process, you may contact the Public Records Officer at [publicrecordsofficer@ecy.wa.gov](mailto:publicrecordsofficer@ecy.wa.gov) or 360-407-6040.

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

---

<sup>3</sup> <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>

<sup>4</sup> <https://apps.ecology.wa.gov/cleanupsearch/site/1653>

<sup>5</sup> <https://ecology.wa.gov/Footer/Public-records-requests>

## **Analysis of the Cleanup**

Ecology has concluded that no further remedial action is necessary at the Property to clean up contamination associated with the Site. However, Ecology has also concluded that further remedial action is still necessary to clean up contamination elsewhere at the Site. Ecology bases its conclusions on the following analysis:

### **Characterizing the Site**

Ecology has determined your completed Site characterization is sufficient for setting cleanup standards for the Site and selecting a cleanup action for the Property. **Enclosure C** describes the Site.

- **Soil.**

From 1894 to 1912, operations at the Asarco Everett Smelter resulted in the release of arsenic, lead, and cadmium to shallow soils. Particulate matter from smokestack emissions containing high amounts of these metals settled onto the surrounding area, resulting in contamination to shallow soils. The Property is located approximately 0.5 miles west of the location of the former smelter, within the known extent of arsenic, lead, and cadmium contamination.

Characterization activities conducted at the Site in 1995 and 2008 indicated that soil contaminated with arsenic above the Method A cleanup level was present at the Property. Further soil characterization activities conducted in January 2021 at the Property confirmed arsenic, lead, and cadmium were present on the Property at depths from 0.5 to 5 feet below ground surface (bgs). Performance soil samples collected during remedial excavations conducted at the Site in October 2021 defined the lateral and vertical extent of soil contamination on the Property, and confirmed that all contaminated soils within the Property boundary were removed from the Property.

- **Groundwater.**

Based on the results of previous investigations conducted at the Site, groundwater is not expected to be impacted by soil contamination. Groundwater was not encountered in any borings or excavations on the Property. Based on the results of previous investigations, groundwater is located more than 50 feet bgs in this portion of the Site.

### **Setting cleanup standards for the Site**

Ecology has determined the cleanup levels and points of compliance you set for the Site meet the substantive requirements of MTCA.

- **Soil**

MTCA Method A soil cleanup levels for unrestricted uses (WAC 173-340-740(2); Table 740-1) with the standard point of compliance throughout the Site to a depth of 15 feet bgs (WAC 173-340-740(6)(d)) are appropriate.

A Terrestrial Ecological Evaluation (TEE) has already been completed for this Site in previous investigations. The standard Method A soil cleanup levels and point of compliance as discussed above are appropriate at the Site.

### **Selecting the cleanup action for the Property**

Ecology has determined the cleanup action you selected for the Property meets the substantive requirements of MTCA. The cleanup meets the minimum cleanup requirements and does not preclude reasonable cleanup alternatives elsewhere at the Site per WAC 173-340-360(2).

The cleanup action selected in the *Cleanup Action Report, Legion Lots Haack Parcels, 413 and 419 Rockefeller Avenue, Everett Washington*, dated May 2, 2022 (2022 CAR), includes the excavation and off-Property disposal of soils containing arsenic, lead, and cadmium above the Method A cleanup levels. This cleanup action is protective of exposure pathways at the Property and does not disturb the existing cleanup at the remainder of the Site.

### **Implementing the cleanup action**

Ecology has determined your cleanup of the Property meets the cleanup standards set for the Site. The cleanup involved the removal of contaminated soil from the Site, described in detail in **Enclosure C**. A total of approximately 805 tons of soils contaminated with arsenic, lead, and cadmium were excavated from 6 excavation areas on the Property. Performance soil samples collected from the final limits of each excavation confirmed that the remedial excavations were successful in removing all soil containing arsenic, lead, and cadmium above the Method A cleanup levels from the Property.

One soil sample collected from the eastern sidewall of Excavation 3 contained arsenic above the Method A cleanup level (**Enclosure C, Figure 7**). This sample was collected along the eastern Property boundary with LMGC and is representative of conditions on that parcel. Due to the complete removal of all soils containing arsenic, lead, and cadmium above cleanup levels from the Property, no further action is needed to ensure cleanup standards are met on the Property.

## **Post-Cleanup Controls and Monitoring**

Post-cleanup controls and monitoring are remedial actions performed to ensure compliance with cleanup standards. Ecology is issuing this No Further Action opinion based on the continued performance and effectiveness of the following post-cleanup remedial actions at the Property. Ecology may rescind this opinion if these remedial actions are not performed or are not effective in maintaining cleanup standards.

### **Compliance with institutional controls**

Institutional controls prohibit or limit activities that may interfere with the integrity of engineered controls or result in exposure to contamination. The following site-specific institutional controls were recorded at the LMGC Site:

- Environmental Covenant 200812050469, recorded 12/5/2008.

To implement the controls, an environmental covenant was recorded on the following parcels of real property in Snohomish County:

- 29050800200300
- 29050800300100
- 00438610400600 (Property)
- 29051700201700

Ecology approved the recorded environmental covenant, but was not a signatory on the covenant itself (see **Enclosure A**). Based on Ecology's analysis of your cleanup, the Environmental Covenant recorded for the LMGC Site is no longer needed at the Property. Ecology will work with you to record an amendment to the existing Environmental Covenant which releases the Property from the restrictions of the covenant.

Following the issuance of this letter, Ecology will follow the general procedure in [Toxics Cleanup Program Procedure 440C: Releasing Environmental Covenants Under the Model Toxics Control Act](#)<sup>6</sup>, revised December 2016. Since the existing environmental covenant will remain in place and an amendment be recorded to release the Property from its requirements, the exact steps of the Procedure may differ.

---

<sup>6</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/1509057.html>

### **Operation and maintenance of engineered controls**

Engineered controls prevent or limit movement of, or exposure to, contamination. Based on Ecology's analysis of the 2022 CAR, engineered controls are no longer necessary on the Property. The continued performance of existing engineered controls at the remainder of the Site remains necessary (see **Enclosure A**).

### **Listing of the Site**

Based on this opinion, Ecology will update the Site status on its contaminated site database. However, because further remedial action is still necessary elsewhere at the Site, Ecology will not remove the Site from its lists of contaminated sites. Furthermore, the Property will remain listed as part of the Site because the Property cleanup does not change Site boundaries.

### **Limitations of the Opinion**

#### **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 [70A.305.040](#)(4).<sup>7</sup>

#### **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 performed is substantially equivalent. Courts make that determination. See RCW [70A.305.080](#)<sup>8</sup> and WAC [173-340-545](#).<sup>9</sup>

---

<sup>7</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040>

<sup>8</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080>

<sup>9</sup> <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545>

### **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 [70A.305.170](#)(6).<sup>10</sup>

### **Termination of Agreement**

Thank you for cleaning up the Property under the Standard VCP process. This opinion terminates the VCP Agreement governing VCP Project No. NW3268. If you should decide to clean up the remainder of the Site, you can re-apply and request additional services under the VCP.

### **Questions**

If you have any questions about this opinion or the termination of the Agreement, please contact me by phone at (206) 459-6287 or email at [david.unruh@ecy.wa.gov](mailto:david.unruh@ecy.wa.gov).

Sincerely,



David Unruh, LG  
Toxics Cleanup Program, NWRO

Enclosures (4):

- A – Environmental Covenants for Institutional Controls
- B – Property Legal Description
- C – Site Description, History, and Diagrams
- D – Basis for the Opinion: List of Documents

cc: Thomas Morin, TRC Environmental Corporation ([tmorin@trccompanies.com](mailto:tmorin@trccompanies.com))  
Sonia Fernández, VCP Coordinator ([sonia.fernandez@ecy.wa.gov](mailto:sonia.fernandez@ecy.wa.gov))  
Fiscal, VCP Fiscal Analyst ([kelli.barker@ecy.wa.gov](mailto:kelli.barker@ecy.wa.gov)) (w/o encl)  
TCP, Operating Budget Analyst ([tra.thai@ecy.wa.gov](mailto:tra.thai@ecy.wa.gov)) (w/o encl)

---

<sup>10</sup> <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170>

# Enclosure A

---

## Environmental Covenants for Institutional Controls



## Enclosure B

---

Property Legal Description

Joel Haack  
January 6, 2023  
Page 10

**Parcel 00438610400600 Legal Description**

Section 08 Township 29 Range 05 Quarter SW EVERETT DIV S PLAT OF BLK 104 D-00 PAR A CITY  
EV BLA FILE NO BLA19-011 REC AFN 201912185007 AMD BY REC AFN 202009115004 & DEC OF  
OWNERSHIP REC AFN201912180588 BEING PTN BLK 104 SD PLAT

## Enclosure C

---

Site Description, History, and Diagrams



# 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 as releases of the following in Everett, Snohomish County, Washington (**Figure 1, Figure 2**):

- Arsenic, lead, and cadmium into the Soil.

The Site is located at 145 and 149 Alverson Boulevard and 413 Rockefeller Avenue, and consists of the following three Snohomish County tax parcels:

- 29050800200300 (145 Alverson Boulevard)
- 29050800300100 (149 Alverson Boulevard)
- 00438610400600 (413 Rockefeller Avenue)

The Haack Parcels (the Property; **Figure 3**) are located on the west side of the Site at 413 Rockefeller Avenue (parcel 00438610400600).

According to MTCA, the Site is defined as all areas where contamination has come to be located.

**Area and Property Description:** The Site is located in a mixed recreational and residential area in Everett. The Property is bounded to the south and east by LMGC, to the north by single family residences and 4<sup>th</sup> Street, and to the west by Rockefeller Avenue. The Property is currently developed with six single-family homes, which are designated as Lot 1 through Lot 6 from south to north (**Figure 3**). The use of surrounding properties includes the following:

- Single-family residences are located to the north and west.
- A golf course is located to the east and south.

**Property History and Current Use:** Legion Memorial Park was first developed in 1933. The Property was a part of Legion Memorial Park by 1950, which included the current extent of LMGC east of Rockefeller Avenue. The Property remained as a part of Legion Memorial Park and subsequently LMGC until 2019 when it was rezoned for residential use. The Property is currently developed with six single-family residences.

**Sources of Contamination:** From 1894 to 1912, smelter operations resulted in the release of airborne particulate matter with high concentrations of arsenic and lead to the area surrounding the smelter. The Property is located approximately 0.5 miles west of the location of the former smelter. Shallow soil samples collected from LMGC indicated arsenic was present above the Method A cleanup level on the Property.

**Physiographic Setting:** The Site is located within the Puget Sound Lowland Physiographic Province, a north-south trending structural and topographic depression that is bordered on its west side by the Olympic Mountains, and to the east by the Cascade Mountain foothills. The Puget Sound Lowland is underlain by Tertiary volcanic and sedimentary bedrock, and has been filled to the present-day land surface with Pleistocene-aged glacial and nonglacial sediments.

The Property is located on the north end of the Everett Uplands, a north-south trending topographic high bounded on the east by the Snohomish River Valley and on the west by the Puget Sound. The ground surface at the Property is located at 80 feet above mean sea level (amsl) and is mostly flat.

**Surface/Storm Water System:** Stormwater runoff on and in the vicinity of the Property disperses via sheet flow to catch basins connected to the City of Everett stormwater system. The nearest surface water body is Puget Sound, located approximately 2,000 feet east.

**Ecological Setting:** The Site is zoned for low-density residential use. Adjoining properties to the north and west are also zoned for low-density residential use. Properties to the east and south are zoned as a park/open space. Surrounding properties to the north and west are mostly covered with impervious surfaces with some small landscaped areas. The Property is located adjacent to LMGC, which includes landscaped trees and open areas for golfing. A small pond is located immediately south of the Property.

**Geology:** The [geologic map of the area](#)<sup>11</sup> indicates that the Site is underlain by Vashon Till, a dense diamict with varying amounts of sand, silt, and gravel. The Property is underlain by fill materials placed to a maximum depth of 6.5 feet bgs. Fill materials are underlain by very stiff silt with sand to sandy silt, interpreted to be Vashon Till, to the maximum explored depth of 10 feet bgs.

**Groundwater:** No monitoring wells are present on the Property. Groundwater has not been encountered in borings and excavations on the Property to the maximum explored depth of 10

---

<sup>11</sup> [https://ngmdb.usgs.gov/Prodesc/proddesc\\_7476.htm](https://ngmdb.usgs.gov/Prodesc/proddesc_7476.htm)

feet bgs. Groundwater depths in resource protection wells located 1,500 feet northwest and approximately 80 feet downhill of the Site average at approximately 6.5 feet bgs. Anticipated depth to groundwater at the Site is greater than 50 feet bgs.

**Water Supply:** Drinking water is supplied to the Property by water mains operated by the City of Everett. Water for the City is sourced from the Spada reservoir, located approximately 25 miles east of the Site. The Site is located approximately 2.2 miles southeast of the nearest 10-year wellhead protection zone for a water supply well.

**Release and Extent of Contamination:**

**Site conditions prior to remedial actions:** Subsurface investigations at the LMGC Site were described in the *Remedial Investigation, Everett Smelter Site, Everett, Washington*, dated September 1995 (1995 RI). A total of 412 soil characterization samples were collected from 103 discrete locations at depths ranging from 0 to 2 feet bgs. Sample results indicated that concentrations of arsenic and lead were greatest on the east side of the Site, closest to the location of the former smelter (**Figure 2**). Soil samples collected in the vicinity of the Property contained arsenic above the Method A cleanup level (**Figure 2**). Due to the lack of shallow groundwater in borings and anticipated regional groundwater depth (greater than 50 feet bgs), soil leaching to groundwater pathway is not considered complete at this Site. Therefore, groundwater was not investigated.

According to reports described in the 2022 CAR, fill soils were stored on the Property during retention pond construction to the south (Lake 5, **Figure 2**). Following a removal of a portion of the stockpiled fill material from the Property, samples were collected from shallow soil around the area of the stockpile. One soil sample, reportedly collected from the north side of the stockpile contained arsenic above the Method A cleanup level. A sampling report was not generated for this work; the precise location of this sample is unknown.

A targeted subsurface investigation of the Property was conducted in 2019 to assess shallow soils on the north side of the Property. Four test pits were advanced to a maximum of 7 feet bgs in the northern portion of the Property (Lot 5 and Lot 6) to assess the concentrations of lead and arsenic in native soils (TP-1 to TP-4; **Figure 4**). Lead and arsenic were not detected above the Method A cleanup level at any sample. Based on recommendations in Ecology's 2020 *Opinion*, an expanded subsurface sampling plan was implemented at the Property.

Soil sampling in accordance with Ecology's residential sampling requirements for properties within the Everett Smelter Cleanup area was conducted in January 2021. Ten direct-push borings were advanced in each lot to 10 feet bgs for a total of 60 borings at the Property (B-1 through B-60, **Figure 3**). Up to two samples were collected from fill material from 0.5 to 5 feet bgs. Two samples of native material were also collected from each boring at 0 to 6 inches and 18 to 24 inches below the contact with fill material. Soil samples collected from borings B-1, B-11, B-14, B-15, B-19, B-21, B-24, B-25, B-41, and B-56 contained contaminants above their respective cleanup levels (**Figure 3**). Results of soil samples collected from the Property are further summarized in **Table 1**.

**Remedial Actions:** Based on the results of sampling activities in January 2021, six excavation areas for soils contaminated with lead, arsenic and cadmium were identified at the Property (Excavation Area 1 to Excavation Area 6, **Figure 3**). A total of 805 tons of known and potentially contaminated soil from the six excavation areas was excavated and removed from the Property in October 2021 for disposal at a permitted facility. **Table 2** summarizes the extents of the excavations and location of confirmation soil samples. The extent of the excavations and locations of confirmation soil samples are shown on **Figure 5** through **Figure 10**.

With the exception of B21SW-E:3 (Excavation Area 3; **Table 2; Figure 7**), all confirmation soil samples did not contain arsenic, lead, or cadmium above the Method A cleanup levels. Sample B21SW-E:3 was collected from the eastern sidewall of Excavation Area 3 along the eastern Property boundary with the LMGC.



**Table 1**

Sample	Depth (ft bgs)	Soil Designation	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)
B-1	0.5	Fill	<b>27</b>	< 1	66.1
B-11	3	Native	8.82	< 1	<b>331</b>
B-14	3	Fill	<b>20.6</b>	< 1	54
B-15	3	Fill	<b>28.2</b>	1.09	<b>947</b>
B-19	3	Fill	<b>33.5</b>	1.32	153
B-21	3	Fill	<b>29.8</b>	< 1	<b>439</b>
B-24	5	Fill	<b>26.3</b>	< 1	43.6
B-25	2.5	Fill	<b>20.5</b>	< 1	37.1
B-41	2.5	Fill	13	<b>2.04</b>	26
B-56	3	Fill	<b>42.9</b>	1.26	64.9
Method A Cleanup level for unrestricted use			<b>20</b>	<b>2</b>	<b>250</b>

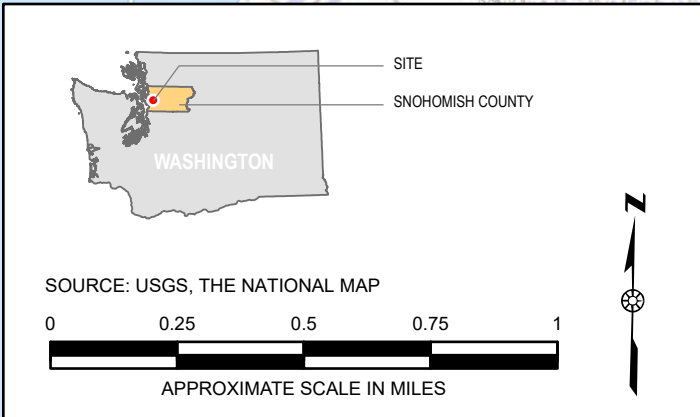
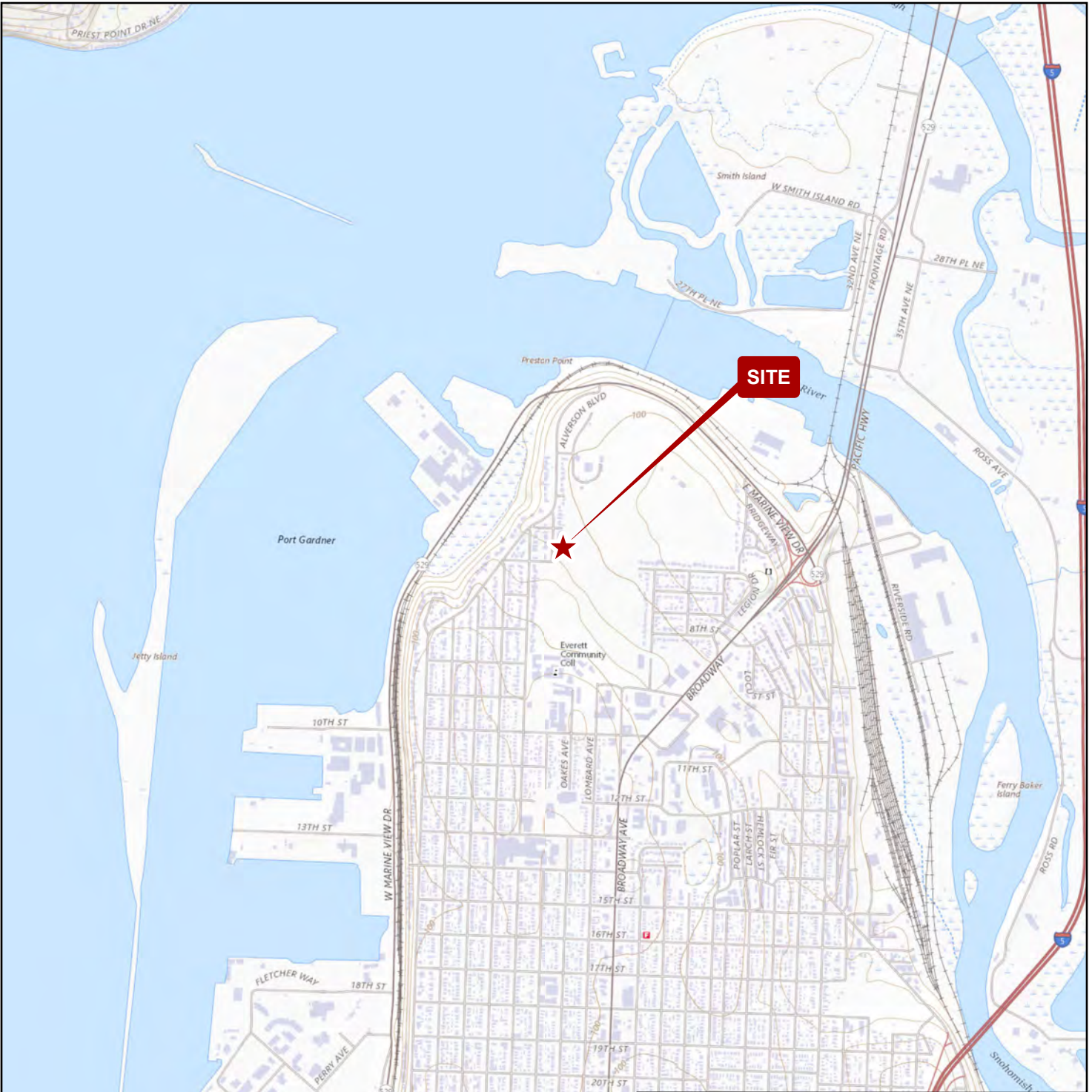
**Bold** – Indicates that analyte exceeds the Method A cleanup level for unrestricted use.

< - indicates that the analyte was not detected above the method detection limit.

mg/kg = milligrams per kilogram

**Table 2**

Excavation	Excavation total depth (feet bgs)	Soil removed (tons)	Confirmation sample locations (sample location – sample depth)
Area 1 ( <b>Figure 5</b> )	1.5 – north end 2.5 – south end	70	Four sidewall – 0.5 feet bgs Three bottom – 1.5 and 2.5 feet bgs.
Area 2 ( <b>Figure 6</b> )	4 – southeast and northwest corners 5 – southwest and northeast corners	165	Six sidewall – 3 feet bgs Six bottom – 4 and 5 feet bgs
Area 3 ( <b>Figure 7</b> )	4	270	14 Sidewall – 3 feet bgs Six bottom – 4 feet bgs
Area 4 ( <b>Figure 8</b> )	3.5 – northwest corner 4.5 – southwest corner 6 – east half	165	Seven sidewall – 2.5 feet bgs Western half, 5 feet bgs eastern half Five bottom - 3.5, 4.5, and 6 feet bgs
Area 5 ( <b>Figure 9</b> )	3.5	66	Four sidewall – 2.5 feet bgs Two bottom – 3.5 feet bgs
Area 6 ( <b>Figure 10</b> )	4	69	Five sidewall – 3 feet bgs Two bottom – 4 feet bgs



1180 NW MAPLE ST, SUITE 310  
 ISSAQUAH, WA 98027  
 425.395.0010  
 WWW.TRCCOMPANIES.COM

**FIGURE 1**  
**GENERAL VICINITY MAP**

**Enclosure C Figure 1**

**REPORT**  
 CLEANUP ACTION REPORT

**PREPARED FOR**  
 HAACK BROTHERS HOMES

**LOCATION**  
 413 AND 419 ROCKEFELLER AVE  
 EVERETT, WASHINGTON

**PROJECT NUMBER**  
 424198.0001.0000

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW



SCALE  
 (In Feet) 400  
 0 [Scale bar] 400



## LEGEND

- EAST MARINE VIEW DRIVE PROJECT BOUNDARY
- LEGION MEMORIAL GOLF COURSE PROJECT BOUNDARY
- <20 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- >20 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- >50 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- >100 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- >150 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- >200 PPM ARSENIC ISO-CONCENTRATION CONTOUR
- NEW FAIRWAYS
- Haack Parcels approximate location

Enclosure C Figure 2



**NOTES:**

- SOIL BORING LOCATION
- SOIL BORING LOCATION WITH CONCENTRATION EXCEEDING A MTCA METHOD A CLEANUP LEVELS
- - - SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
- ▨ APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
- ▭ APPROXIMATE REMEDIATION AREAS
- ▭ APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY
- ⊢ APPROXIMATE LOCATION OF PROPERTY PERIMETER FENCE

As - 0.5' BGS CONTAMINANT OF CONCERN AT APPROXIMATE DEPTH IN FEET BELOW GROUND SURFACE (BGS)

As ARSENIC

Cd CADMIUM

Pb LEAD

TOTAL ESTIMATED SOIL VOLUME ~670 YDS<sup>3</sup>

30 15 0 30

APPROXIMATE SCALE IN FEET

N

**TRC** 1180 NW MAPLE ST, SUITE 310  
ISSAQUAH, WA 98027  
425.395.0010  
WWW.TRCCOMPANIES.COM

**FIGURE 5**  
REMEDIAL EXCAVATION AREAS Enclosure C Figure 3

**REPORT**  
CLEANUP ACTION REPORT

**PREPARED FOR**  
HAACK BROTHERS HOMES

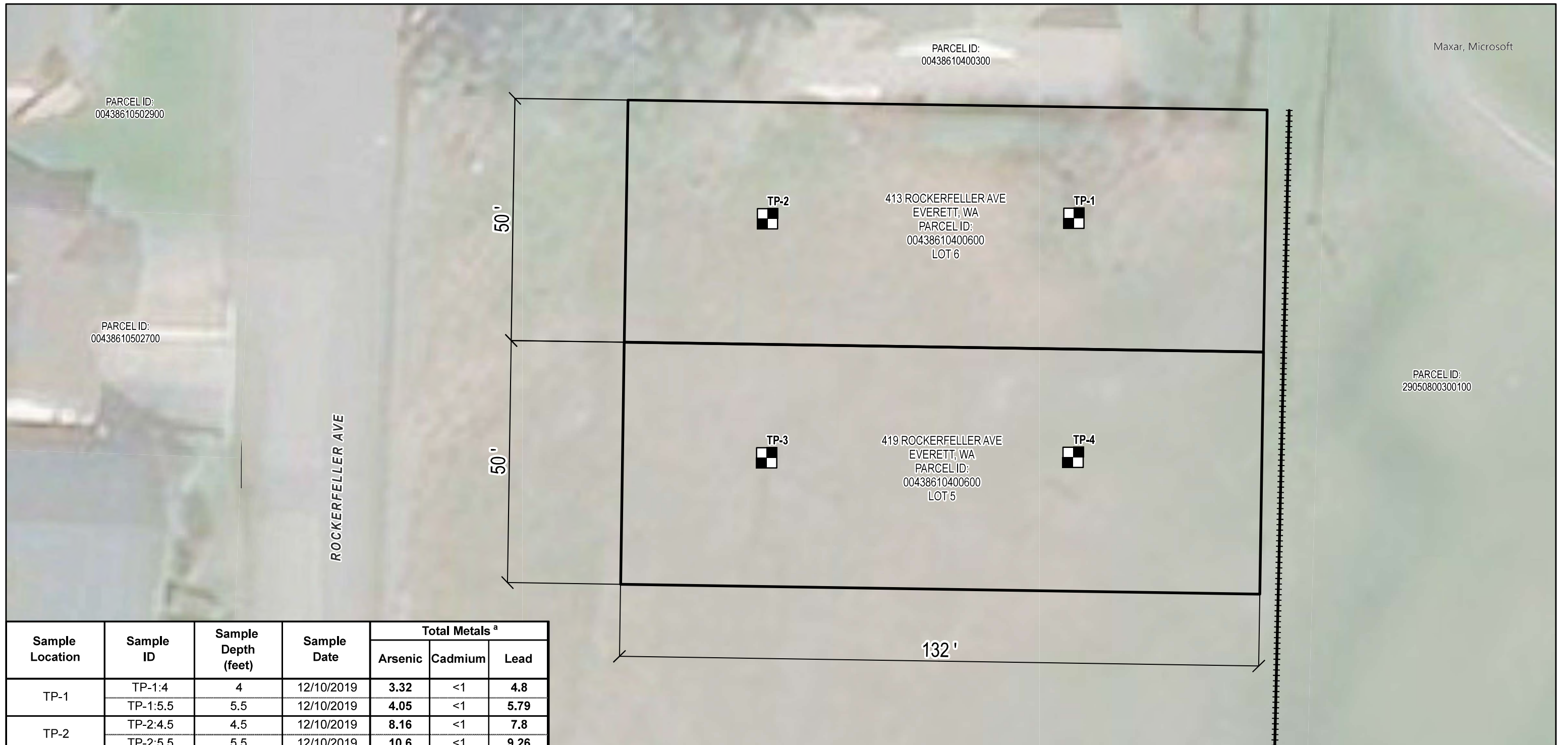
**PROJECT NUMBER**  
424198.0001.0000

**LOCATION**  
413 AND 419 ROCKERFELLER AVENUE  
EVERETT, WASHINGTON

**DATE** 1/10/22

**DRAWN BY** KPC

**REVIEWED BY** WRW



Sample Location	Sample ID	Sample Depth (feet)	Sample Date	Total Metals <sup>a</sup>		
				Arsenic	Cadmium	Lead
TP-1	TP-1:4	4	12/10/2019	<b>3.32</b>	<1	<b>4.8</b>
	TP-1:5.5	5.5	12/10/2019	<b>4.05</b>	<1	<b>5.79</b>
TP-2	TP-2:4.5	4.5	12/10/2019	<b>8.16</b>	<1	<b>7.8</b>
	TP-2:5.5	5.5	12/10/2019	<b>10.6</b>	<1	<b>9.26</b>
TP-3	TP-3:5.5	5.5	12/10/2019	<b>5.86</b>	<1	<b>6.91</b>
	TP-3:7	7	12/10/2019	<b>8.94</b>	<1	<b>9.58</b>
TP-4	TP-4:4.5	4.5	12/10/2019	<b>12.5</b>	<1	<b>17.8</b>
	TP-4:5.5	5.5	12/10/2019	<b>4.0</b>	<1	<b>3.96</b>
<b>MTCA Method A Soil Cleanup Level for Unrestricted Land Uses<sup>b</sup></b>				<b>20</b>	<b>2</b>	<b>250</b>




Notes:  
 All results presented in milligrams per kilogram (mg/kg).

**Bold** Bold results exceed the laboratory reporting limit.


a Analyzed by EPA Method 6020B.

b Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1, Washington Administrative Code (WAC) 173-340-900.



NOTES:

-  APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY
-  APPROXIMATE LOCATION OF PROPERTY PERIMETER FENCE
-  APPROXIMATE TEST PIT LOCATION

AERIAL IMAGERY: MAXAR, MICROSOFT (2021)  
 PARCEL INFORMATION: SNOHOMISH COUNTY (2021)



APPROXIMATE SCALE IN FEET

1180 NW MAPLE ST, SUITE 310  
 ISSAQUAH, WA 98027  
 425.395.0010  
 WWW.TRCCOMPANIES.COM

**FIGURE 3** Enclosure C Figure 4  
**TEST PIT SOIL ANALYTICAL RESULTS**

---

**REPORT**  
 CLEANUP ACTION REPORT

**PREPARED FOR**  
 HAACK BROTHERS HOMES

---

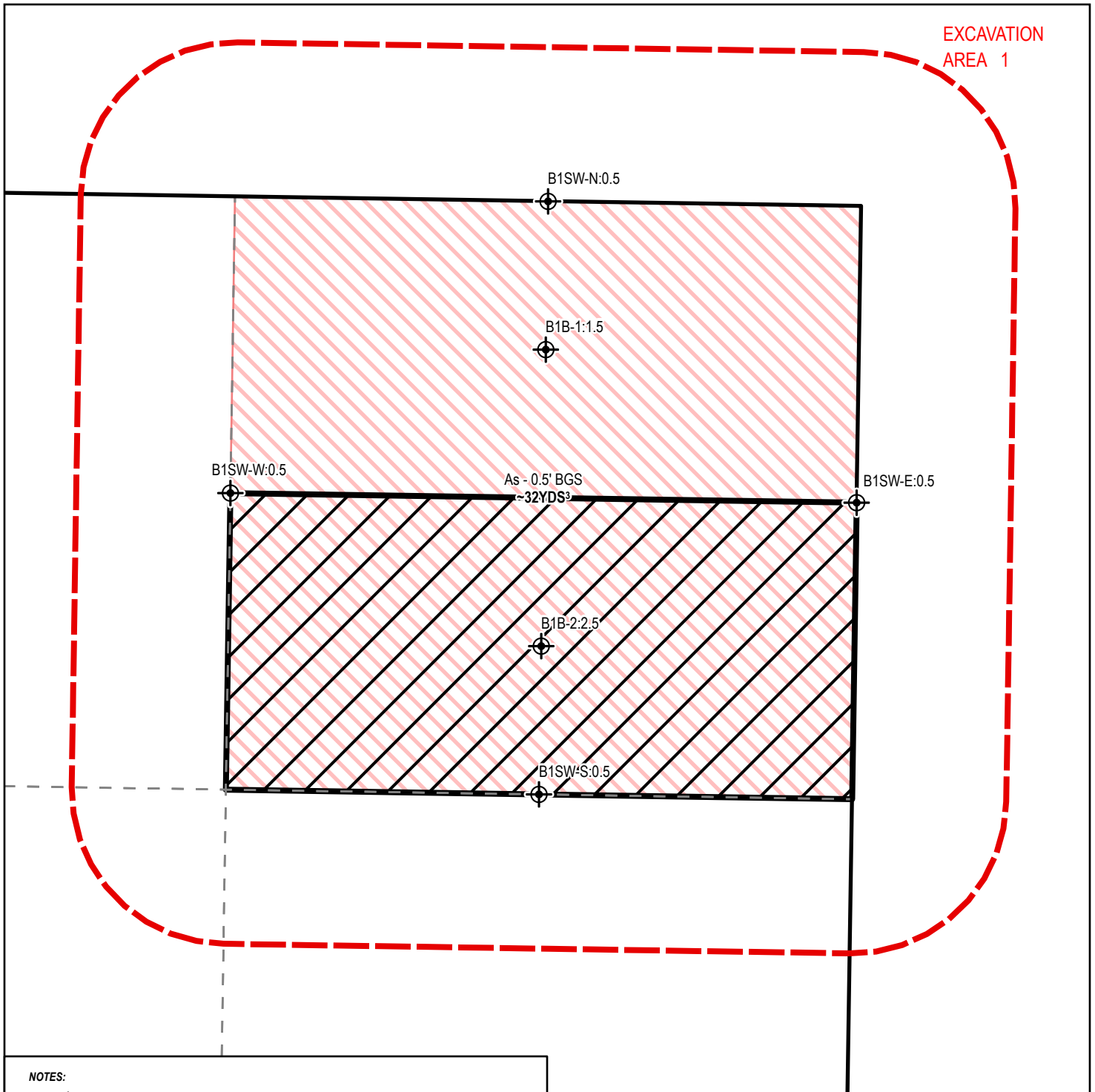
**PROJECT NUMBER**  
 424198.0001.0000

---

**LOCATION**  
 413 AND 419 ROCKEFELLER AVENUE  
 EVERETT, WASHINGTON

**DATE** ..... 1/17/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW

EXCAVATION  
AREA 1



NOTES:

- FINAL PERFORMANCE SAMPLE LOCATION
- SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
- APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS³)
- APPROXIMATE REMEDIATION AREAS
- AREA EXCAVATED TO A TOTAL DEPTH OF 2.5'
- APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



SW-N:3



1180 NW MAPLE ST, SUITE 310  
ISSAQUAH, WA 98027  
425.395.0010  
WWW.TRCCOMPANIES.COM

**FIGURE 8**  
EXCAVATION AREA 1 - FINAL PERFORMANCE  
SAMPLES

Enclosure C Figure 5

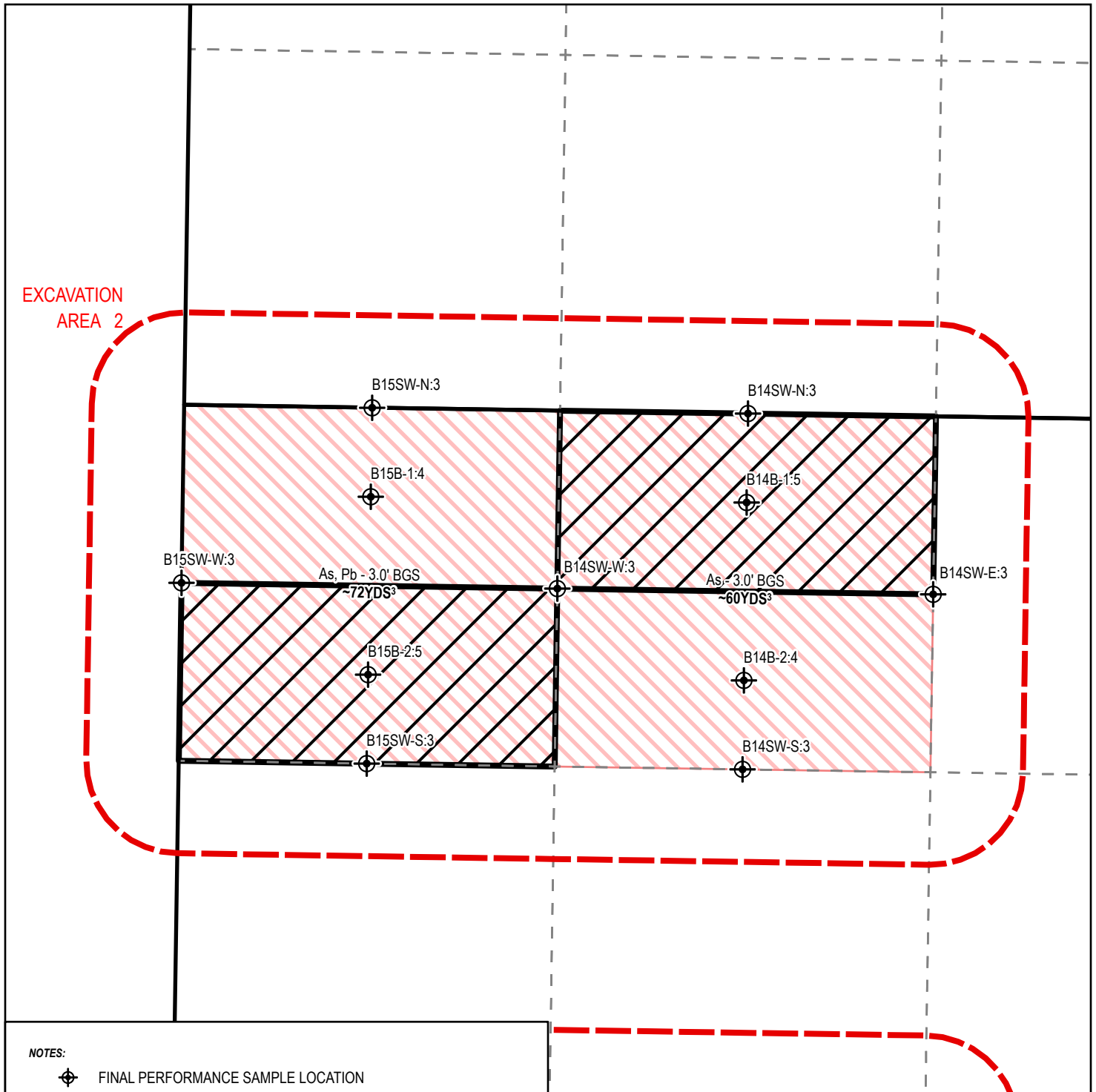
REPORT  
CLEANUP ACTION REPORT

PREPARED FOR  
HAACK BROTHERS HOMES

PROJECT NUMBER  
424198.0001.0000

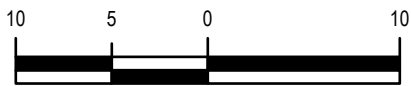
LOCATION  
413 AND 419 ROCKEFELLER AVENUE  
EVERETT, WASHINGTON

DATE ..... 1/10/22  
DRAWN BY ..... KPC  
REVIEWED BY ..... WRW

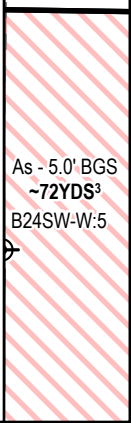


**NOTES:**

- FINAL PERFORMANCE SAMPLE LOCATION
- SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
- APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
- APPROXIMATE REMEDIATION AREAS
- AREA EXCAVATED TO A TOTAL DEPTH OF 5'
- APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



APPROXIMATE SCALE IN FEET



1180 NW MAPLE ST, SUITE 310  
 ISSAQUAH, WA 98027  
 425.395.0010  
 WWW.TRCCOMPANIES.COM

**FIGURE 10**  
 EXCAVATION AREA 2 - FINAL PERFORMANCE  
 SAMPLES

Enclosure C Figure 6

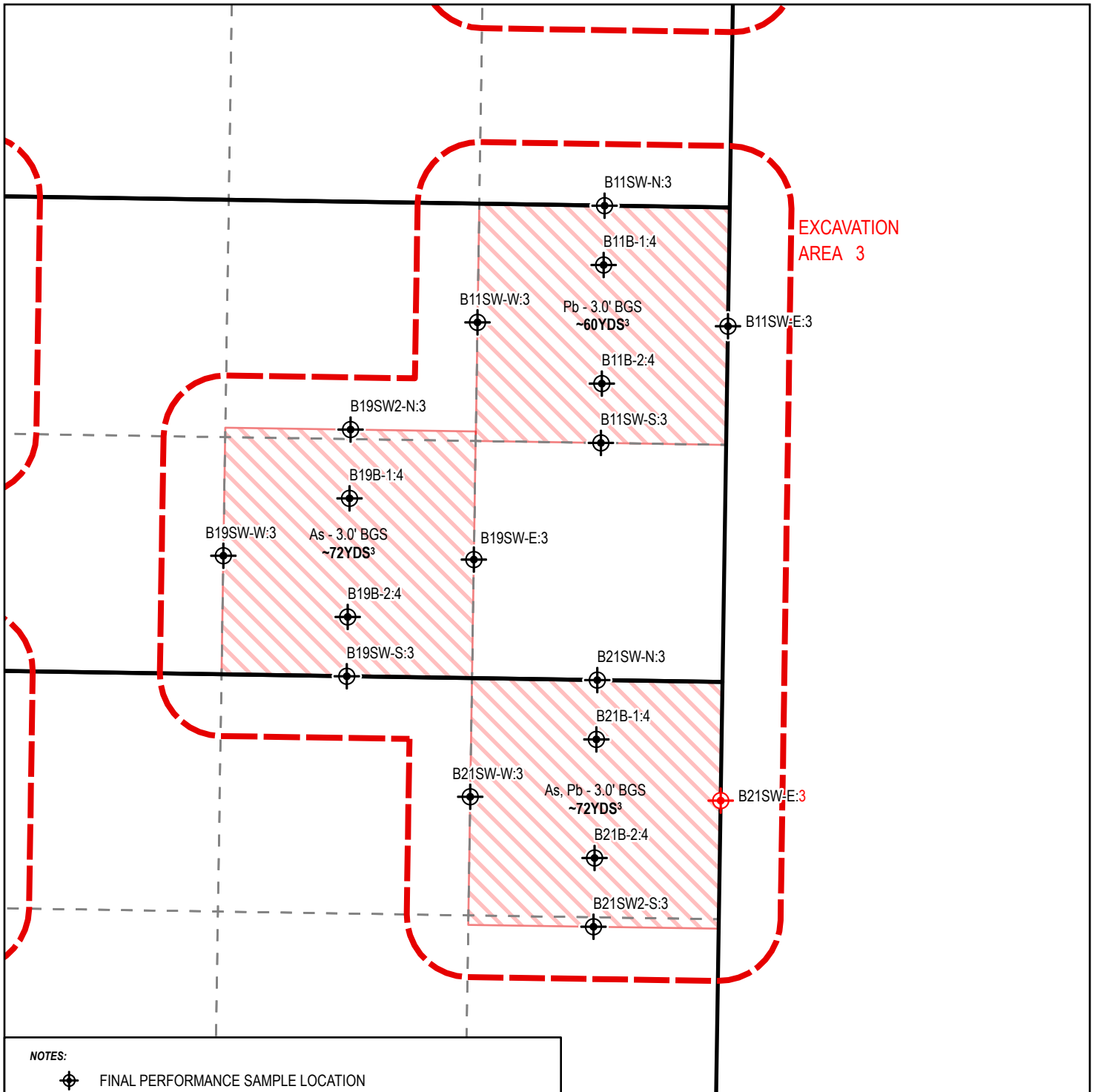
**REPORT**  
 CLEANUP ACTION REPORT

**PREPARED FOR**  
 HAACK BROTHERS HOMES

**PROJECT NUMBER**  
 424198.0001.0000

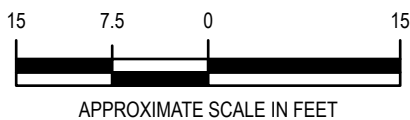
**LOCATION**  
 413 AND 419 ROCKEFELLER AVENUE  
 EVERETT, WASHINGTON

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW



**NOTES:**

- FINAL PERFORMANCE SAMPLE LOCATION
- PERFORMANCE SAMPLE LOCATION WITH CONCENTRATION EXCEEDING A MTCA METHOD A CLEANUP LEVELS
- SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
- APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
- APPROXIMATE REMEDIATION AREAS
- APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



1180 NW MAPLE ST, SUITE 310  
 ISSAQUAH, WA 98027  
 425.395.0010  
 WWW.TRCCOMPANIES.COM

**FIGURE 12**  
**EXCAVATION AREA 3 - FINAL PERFORMANCE SAMPLES**

Enclosure C Figure 7

**REPORT**  
 CLEANUP ACTION REPORT

**PREPARED FOR**  
 HAACK BROTHERS HOMES

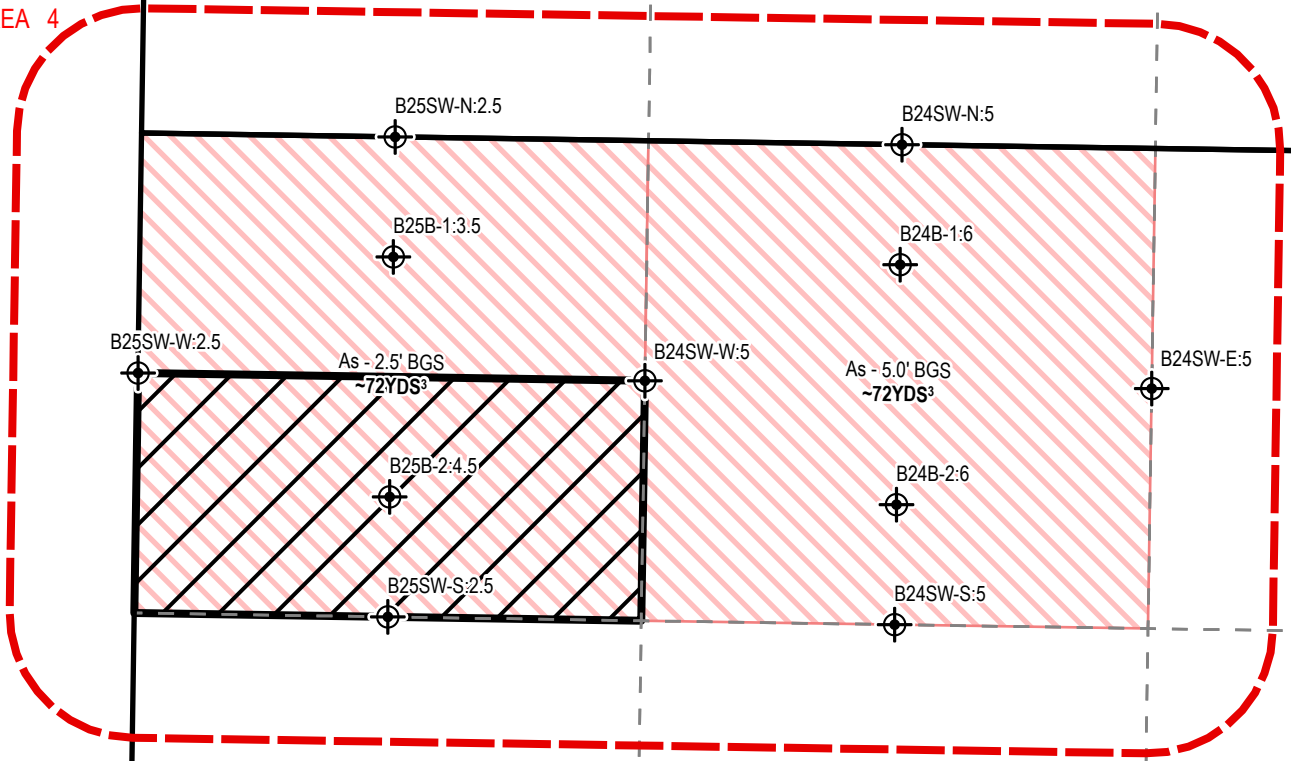
**PROJECT NUMBER**  
 424198.0001.0000

**LOCATION**  
 413 AND 419 ROCKEFELLER AVENUE  
 EVERETT, WASHINGTON

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW

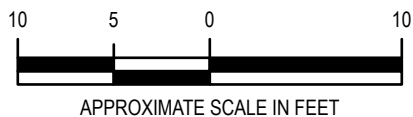


**EXCAVATION  
AREA 4**



**NOTES:**

- FINAL PERFORMANCE SAMPLE LOCATION
- SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
- APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
- APPROXIMATE REMEDIATION AREAS
- AREA EXCAVATED TO A TOTAL DEPTH OF 4.5'
- APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



1180 NW MAPLE ST, SUITE 310  
ISSAQUAH, WA 98027  
425.395.0010  
WWW.TRCCOMPANIES.COM

**FIGURE 14**  
**EXCAVATION AREA 4 - FINAL PERFORMANCE  
SAMPLES**

**Enclosure C Figure 8**

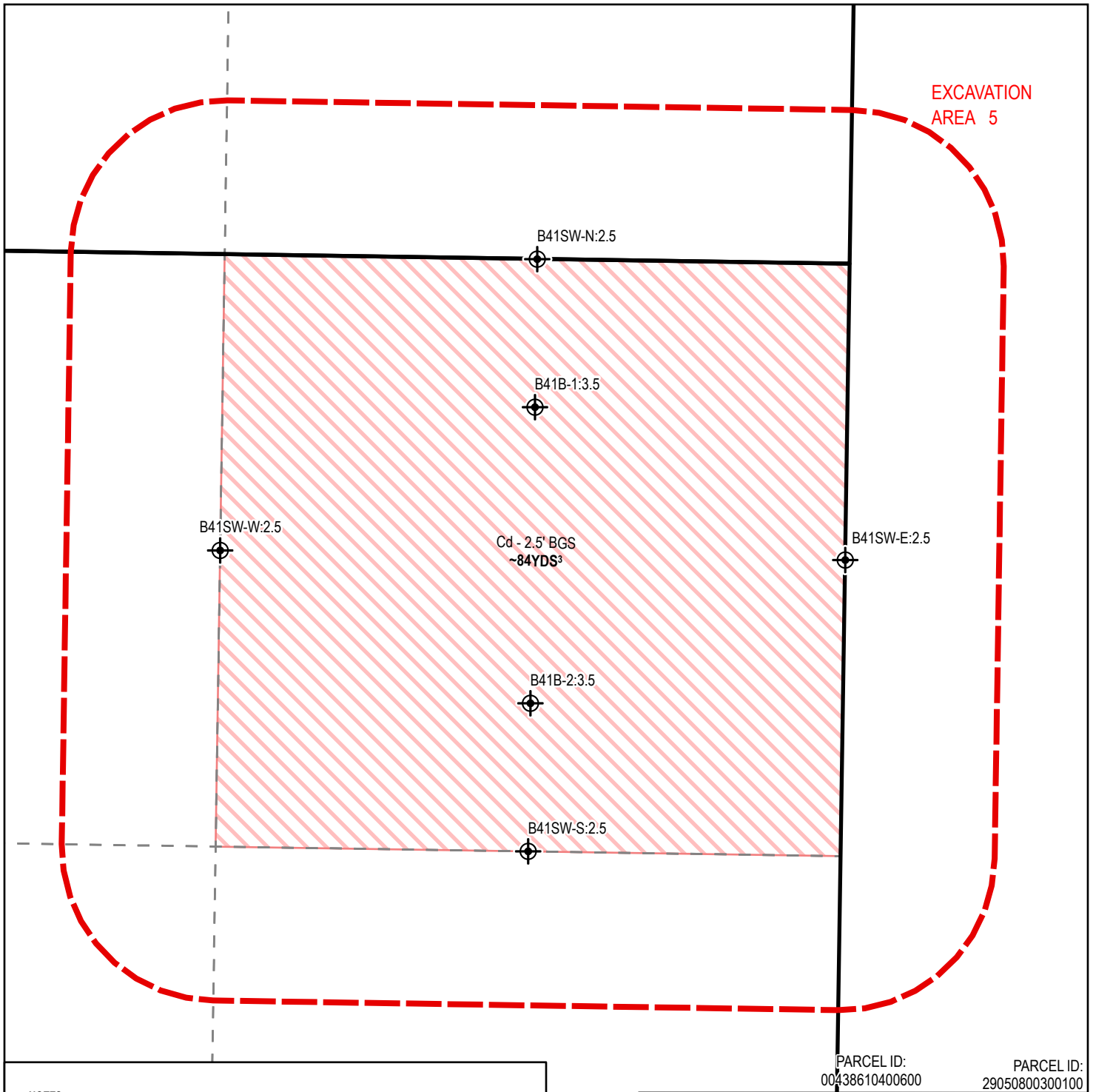
**REPORT**  
CLEANUP ACTION REPORT

**PREPARED FOR**  
HAACK BROTHERS HOMES






**PROJECT NUMBER**  
424198.0001.0000

**LOCATION**  
413 AND 419 ROCKEFELLER AVENUE  
EVERETT, WASHINGTON

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW



**NOTES:**

-  PERFORMANCE SAMPLE LOCATION
-  SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
-  APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
-  APPROXIMATE REMEDIATION AREAS
-  APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



APPROXIMATE SCALE IN FEET



1180 NW MAPLE ST, SUITE 310  
ISSAQUAH, WA 98027  
425.395.0010  
WWW.TRCCOMPANIES.COM

Enclosure C Figure 9

**FIGURE 15**  
EXCAVATION AREA 5 - ALL / FINAL PERFORMANCE  
SOIL SAMPLES

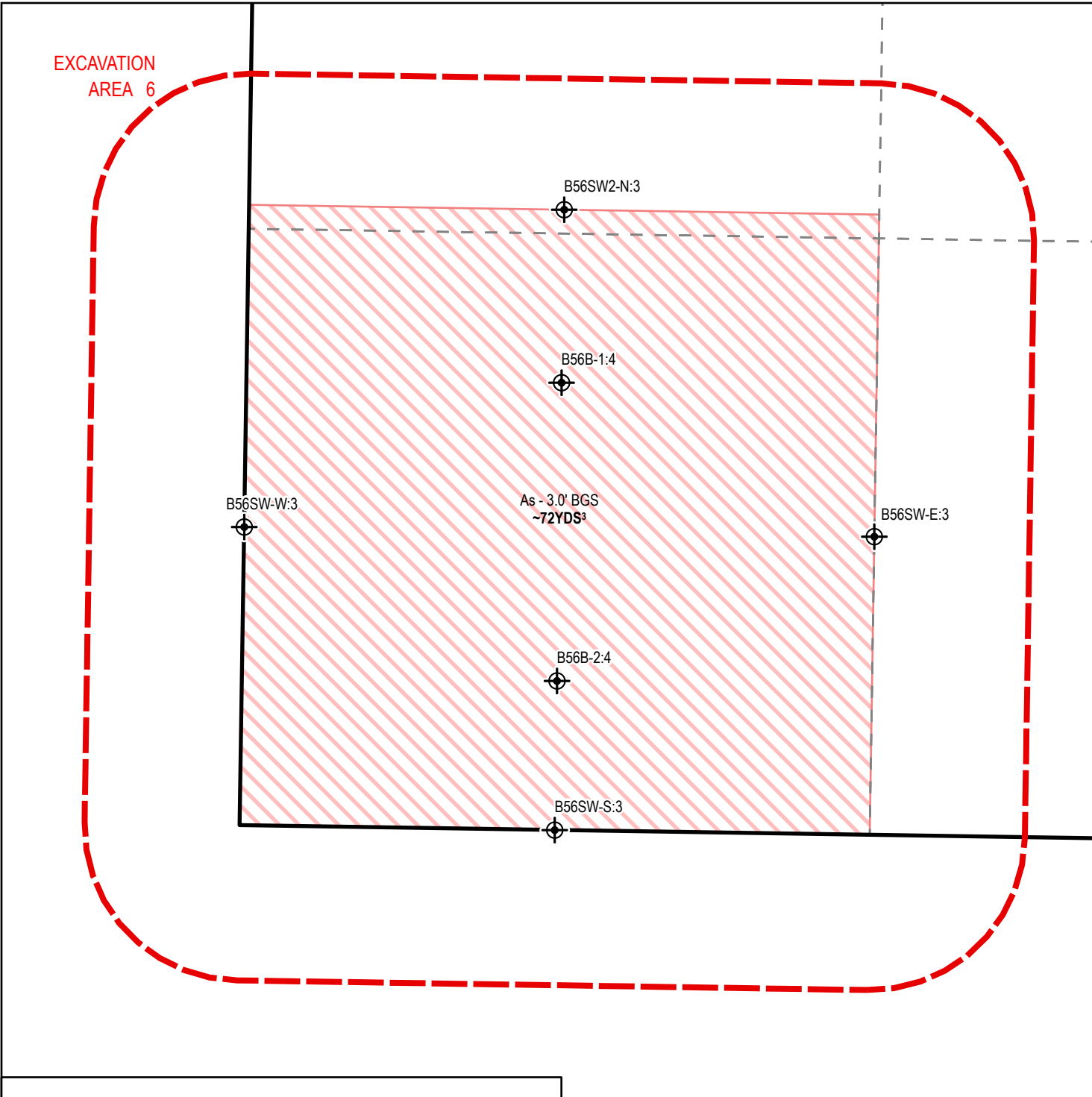
**REPORT**  
CLEANUP ACTION REPORT

**PREPARED FOR**  
HAACK BROTHERS HOMES






**PROJECT NUMBER**  
424198.0001.0000

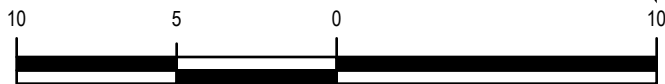
**LOCATION**  
413 AND 419 ROCKEFELLER AVENUE  
EVERETT, WASHINGTON

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW



**NOTES:**

-  FINAL PERFORMANCE SAMPLE LOCATION
-  SAMPLING GRID LAYOUT, ESTABLISHED USING EVERETT SMELTER PLUME (ESP) GUIDANCE
-  APPROXIMATE SOIL VOLUME IN CUBIC YARDS (YDS<sup>3</sup>)
-  APPROXIMATE REMEDIATION AREAS
-  APPROXIMATE SUBJECT PROPERTY BOUNDARY PER SNOHOMISH COUNTY



APPROXIMATE SCALE IN FEET



1180 NW MAPLE ST, SUITE 310  
 ISSAQUAH, WA 98027  
 425.395.0010  
 WWW.TRCCOMPANIES.COM

Enclosure C Figure 10

**FIGURE 17**  
 EXCAVATION AREA 6 - FINAL PERFORMANCE  
 SAMPLES

**REPORT**  
 CLEANUP ACTION REPORT

**PREPARED FOR**  
 HAACK BROTHERS HOMES

**PROJECT NUMBER**  
 424198.0001.0000

**LOCATION**  
 413 AND 419 ROCKEFELLER AVENUE  
 EVERETT, WASHINGTON

**DATE** ..... 1/10/22  
**DRAWN BY** ..... KPC  
**REVIEWED BY** ..... WRW

## Enclosure D

---

Basis for the Opinion: List of Documents

1. TRC Environmental Corporation, *Legion Lots Haack Parcels, 413 and 419 Rockefeller Avenue, Everett, Washington, May 2, 2022.*
2. TRC Environmental Corporation, *Re: Revised Subsurface Investigation Work Plan, Legion Lots 1 through 6, 413 and 419 Rockefeller Avenue, Everett, Washington, January 29, 2021.*
3. Ecology, *Re: Opinion Pursuant to WAC 173-340-515(5) on Remedial Action for the Following Hazardous Waste Site: Legion Lots Haack Parcels, 413-419 Rockefeller Avenue, Everett, Washington, 98201, Facility/Site ID No.: 9311679, Cleanup Site ID No.: 1653, VCP Project No.: NW3268, November 30, 2020.*
4. TRC Environmental Corporation, *Re: Additional Subsurface Investigation Work Plan, Legion Lots 1 through 4, 413 and 419 Rockefeller Avenue, Everett, Washington, February 28, 2020.*
5. *Legion Memorial Golf Course – Property Sale Notification, Legion Lots 1 through 4, 144 West Marine View Drive/419 Rockefeller Avenue, Everett, Washington, September 18, 2019.*
6. HWA Geosciences, Inc., *Soil Sampling and Cap Inspection Report, Legion Memorial Golf Course, Everett, Washington, September 8, 2009.*
7. *Legion Memorial Golf Course (Upland) Environmental Covenant; Recording Number 200812050469, December 5, 2008.*
8. Hydrometrics, Inc., *East Marine View Drive Widening and Legion Memorial Golf Course Improvements, Independent Remedial Action Report, Everett, Washington, December, 1998*
9. Hydrometrics, Inc., *Remedial Investigation, Everett Smelter Site, Everett, Washington, September, 1995.*