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Voluntary Cleanup Program
Toxics Cleanup Program
Washington State Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008

**RE: REQUEST FOR A NO FURTHER ACTION DETERMINATION FOR
LAKESHORE LANDING PROPERTY (LOT 10-80s BUILDINGS),
745 PARK AVENUE NORTH, RENTON, WASHINGTON**

This letter report serves to provide a synopsis of the investigation work undertaken on the Lakeshore Landing Property (subject property) located at 745 Park Avenue, Renton, Washington (Figure 1). This document is intended to aid Washington State Department of Ecology (Ecology) in determining the condition of the subject site with a goal of being provided a no further action (NFA) opinion related to the previous site characterizations.

The specific subject property activities that are the focus of this request were undertaken between 2005 and 2010 by Golder Associates Inc. (Golder) and from 2010 to 2012 by Shannon & Wilson, Inc. (Shannon & Wilson). The activities include the characterization of soil on the subject property, delineation of a “vinyl chloride mitigation area,” and monitoring of documented groundwater contamination until the cleanup level was consistently achieved.

GEOGRAPHIC AREA

The subject property is located at 745 Park Street, Renton, Washington, near the industrial Boeing Renton facilities. The subject property is in King County with a parcel number of 0886610010. The subject property, also known as the 10-80s property, is currently a 13.68-acre vacant lot. The subject property is bounded by Park Avenue North on the east, by Logan Avenue North on the west, North 8th Street on the north, and by Boeing-owned property on the south (Figure 2).

SITE HISTORY

The subject property was used as a heliport in the mid-1940s. The western portion of the subject property was developed between 1957 and 1966 to support the manufacturing of aircraft on the

Boeing Renton Facility. The property has historically been used by Boeing for research and development activities, offices, photographic development, vehicle washing, training rooms, cafeterias, and storage.

Historical research conducted on the subject property revealed the use of aboveground storage tanks (ASTs), an underground storage tank (UST), and storage of hazardous materials.¹ Documentation for five ASTs were identified as formerly present on the subject property. No evidence of release had been observed or documented. Only one UST was documented as present. The UST which stored 550 gallons of diesel fuel for an emergency generator was installed in 1975 and removed in 1987. No evidence of widespread contamination was identified during soil exploration work near the UST. Fourteen sumps were identified within three of the buildings prior to their demolition. Sumps were determined to be used for collection of rainwater, sinks, dishwasher, and other unidentified uses. Each sump either drained to the municipal sanitary or storm system rather than the ground.

The 10-80's parcel was reduced in size after the old buildings were demolished in 1987, and a new 10-80's building was built on a smaller parcel to the south. The new 10-80's building is not included within the subject property footprint.

GEOLOGY, HYDROGEOLOGY, AND HYDROLOGY

The Lakeshore Landing is located in the Puget Sound Basin that lies between the Cascade Range to the east, and the Olympic Mountains to the west. The landscape configuration of the Puget Sound Basin was a consequence of multiple Pleistocene glaciations resulting in a series of north-trending, elongated ridges separated by deep troughs, the latter now occupied by marine waters or freshwater lakes or streams. Deposits of the most recent (Vashon) glaciation, which ended 13.5 thousand years ago in the Puget Sound area, consist of lacustrine deposits, advance outwash, till, and recessional outwash that collectively dominate the surface and subsurface geology.

The soil observed onsite include fill, overlying sand and silt beds deposited by the Black and Cedar rivers. Fill depths ranged from 2 to 20 feet across the subject property. Native soils

¹ Golder Associates Inc. (Golder), 2005, Boeing Renton Facility – Parcel 2 (10-80s Property) Phase I Environmental Site Assessment: Renton Wash, The Boeing Company, Report No. 043-1126-1300, March.

include sand interbedded with silt and clay lenses. Beds of peat or gravel may be present at thicknesses ranging from 5 to 10 feet.

The direction of groundwater flow is generally believed to be to the west to northwest based on data from adjacent facilities. Groundwater is shallow, ranging from 3 to 9 feet below ground surface (bgs). The subject property is generally flat and surface water can currently infiltrate through the unpaved areas.

INVESTIGATION AND DELINEATION ACTIVITIES

The subject property was first investigated in April 2005, when 3 soil and 16 grab groundwater samples were collected.² The samples were analyzed for total petroleum hydrocarbons, metals, volatile organic compounds (VOCs) and polychlorinated biphenyl's (PCBs). No indications of widespread contamination were identified during the investigation although diesel range hydrocarbons were detected.

After removal of the 10-80's building in 2007, investigation was undertaken in the footprint of the demolished buildings. No evidence of hazardous materials release was noted at the time of the investigation.³

A second stage of the 2007 investigation included collection of soil, soil gas vapor and grab groundwater samples.⁴ Thirty-seven soil samples from 19 locations, 5 groundwater samples, and 15 soil gas vapor samples were collected. The soil and groundwater samples were analyzed for diesel range hydrocarbons, metals, VOCs, and PCBs. Soil samples were not detected above the screening criteria in use at the subject property, except for one soil sample. The one soil sample out of 22 analyzed had an arsenic concentration of 21 milligrams per kilogram (mg/kg). The groundwater did not contain diesel range hydrocarbons. Vinyl chloride was detected in a soil gas vapor sample at one location (SG-09) and a focused investigation was undertaken in that area. The focused investigation was to delineate the vinyl chloride and included soil and groundwater

² Golder Associates Inc. (Golder), 2005, Boeing Renton Facility – Parcel 2 (10-80s Property) Phase II Environmental Site Assessment: Renton Wash, The Boeing Company, Report No. 043-1126-100.001, July.

³ Golder Associates Inc. (Golder), 2007, 10-80s Property Environmental Assessment Completion Report: Renton Wash, The Boeing Company, Report No. 043-1126-200.300, June 22.

⁴ Golder Associates Inc. (Golder), 2008, Boeing Renton Facility – Parcel 2 (10-80s Property) Continued Phase II Environmental Site Assessment: Renton Wash, The Boeing Company, Report No. 043-1126-200.400, January 30.

sample collection. Soil samples did not contain vinyl chloride above the cleanup level. Groundwater samples from five locations exceeded the cleanup level. The remaining 11 groundwater samples did not contain vinyl chloride. The area where the vinyl chloride was identified in groundwater was delineated with boundaries 100 feet beyond the sample locations that contained detectable concentrations of vinyl chloride and named the “vinyl chloride mitigation area” (Figure 2).

In 2008, in the vinyl chloride mitigation area four groundwater monitoring wells were installed and a soil gas vapor investigation was undertaken.⁵ Four events of groundwater monitoring were undertaken between installation and the date of the report in 2009. Low levels of vinyl chloride were detected above the cleanup level in groundwater. Vinyl chloride above the California State cleanup levels in use at that time and the current Washington State levels was identified in the soil gas.

Golder undertook subsequent groundwater monitoring events inside the vinyl chloride mitigation area, and the data are reported on tables provided to Shannon & Wilson.⁶ The tables provide the data from groundwater sampling events performed between 2008 to 2010. Shannon & Wilson collected groundwater samples from the wells in 2011.⁷ Over four sequential groundwater monitoring events vinyl chloride concentrations were non-detect starting from December 2, 2009, and ending on December 8, 2011. It was determined that the contamination had naturally attenuated and groundwater monitoring events discontinued.

In 2010, Shannon & Wilson staff further investigated shallow soil conditions at the subject property.⁸ In April 2010, five direct push probes were advanced to 12 feet bgs within the vinyl chloride mitigation area. Concentrations of VOCs were detected in soil below the Model Toxics Control Act (MTCA) Method A cleanup for unrestricted land use and did not require follow-on analysis.

⁵ Golder Associates Inc. (Golder), 2009, Boeing Renton Facility – Parcel 2 (10-80s Property) Groundwater and Soil Vapor Evaluation: Renton Wash, The Boeing Company, Report No. 043-1126-009.009, September 30.

⁶ Golder Associates Inc. (Golder), 2008, Boeing (10-80s Property) Summary of VOCs Detected in Groundwater Quality Samples Table 3.1, September.

⁷ Shannon & Wilson, Inc. (Shannon & Wilson), 2012, Groundwater Sampling Results, Lakeshore Landing Property, Renton, Washington: Letter Report prepared for On the Rock 98040 LLC, Auburn, WA by Shannon & Wilson, Inc., January 16.

⁸ Golder Associates Inc. (Golder), 2005, Final Boeing Renton Facility – 10-50s Complex Demolition, Sump Removal Report: Renton Wash, The Boeing Company, Report No. 043-1126-100.004, September.

The source of the vinyl chloride in groundwater was not identified during the various subject property investigations. To identify if other sources of the vinyl chloride were present to the north of the subject property, we reviewed the report for the former Boeing property to the north. Soil vapor analysis was undertaken on a grid pattern through the complex to determine if VOCs were present in soil or ground. No elevated levels were detected in the southern part of the building in 2005.

Arsenic was detected above the cleanup level in one soil sample of the 38 samples analyzed for the chemical. Most of the samples were non-detect at a detection limit of 5 mg/kg with the remainder no greater than 12 mg/kg. The one sample does not reflect the typical conditions on the subject property and is considered anomalous.

TERRESTRIAL ECOLOGICAL EVALUATION

Table 749-1 and the terrestrial ecological evaluation form are attached and the 500-foot radius for evaluation is identified on Figure 2. The subject property due to its size had continued ecological evaluation undertaken as shown on the terrestrial ecological evaluation form. Since soil and groundwater was not detected or detected below the cleanup criteria established by MTCA the subject property does not have a pathway to either human health or ecological exposure. Development is also planned which includes offices, labs, and paved parking lots (Figure 3). The subject property does not present an ecological exposure pathway.

CONCLUSIONS

Based on our review of the results presented, we conclude the following:

- Documented vinyl chloride contamination does not appear to persist in groundwater in the vinyl chloride mitigation area on the subject property.
- Low concentrations of VOCs in shallow soil on the subject property identified during the 2010 investigation do not appear to be impacting groundwater in the vinyl chloride mitigation area.
- VOCs identified at the subject property likely have naturally attenuated over time and remediation of groundwater in the vinyl chloride mitigation area may not be necessary.
- The source of the vinyl chloride is likely isolated to the limited area where the contaminated groundwater was previously identified. No other areas around the

perimeter of the vinyl chloride mitigation area had elevated detections of vinyl chloride.

This synopsis provides an overview of the information contained within the enclosed referenced reports and data. The information presented provides evidence that the soil and groundwater on the subject property is below the current cleanup levels. Soil gas vapor analysis will be undertaken in 2017 and the data submitted as an addendum to this letter.

Enclosed is the voluntary cleanup program application and associated documentation to complete the request for an opinion regarding a NFA designation for the subject property.

LIMITATIONS

Shannon & Wilson reviewed historical records collected from Ecology and other sources related to the subject property. We examined and relied on those documents and they are enclosed with this letter report. We have not conducted an independent examination of the facts contained in the referenced materials and statements. We have assumed that these documents are genuine and that the information provided in these documents and statements is true and accurate. We have no knowledge or indication to the contrary.

Shannon & Wilson has prepared this letter report in a professional manner using that level of skill and care normally exercised for similar projects under similar conditions by reputable and competent environmental consultants currently practicing in the area, and in accordance with the terms and conditions set forth in our contract and proposal.

If you have any questions regarding the findings presented herein, please call Christian Canfield at (206) 695-6716.

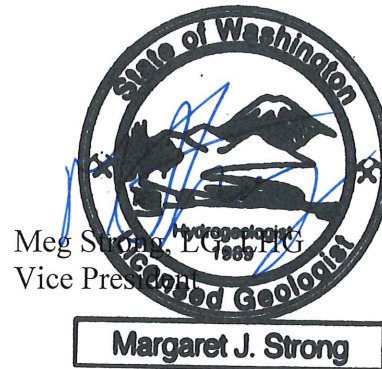
Sincerely,

SHANNON & WILSON, INC.



Christian Canfield
Environmental Staff

CTC:MJS/ctc

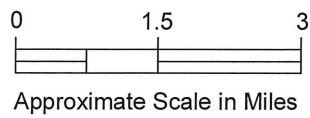
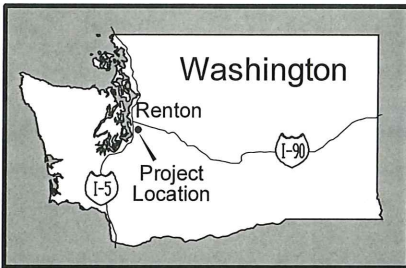


- Enc: Figure 1 – Vicinity Map
Figure 2 – Site Map with Monitoring Well Locations
Figure 3 – Lakeshore Landing Conceptual Layout
Washington State Department of Ecology – Voluntary Cleanup Program Application
Washington State Department of Ecology – Voluntary Cleanup Program Agreement
Washington State Department of Ecology – Terrestrial Ecological Evaluation Form
In enclosed CD:
Golder Associates Inc. – Phase I Environmental Site Assessment, Boeing Renton Facility, Parcel 2 (10-80s Property) – March 2005
Golder Associates Inc. – Boeing Renton Facility – Parcel 2 (10-80s Property), Phase II Environmental Site Assessment Report – July 2005
Golder Associates Inc., 2007, 10-80s Property Environmental Assessment Completion Report: Renton Wash, The Boeing Company, Report No. 043-1126-200.300, June 22
Golder Associates Inc. – Boeing Renton Facility, Parcel 2 (10-80s Property), Continued Phase II Environmental Site Assessment – January 30, 2008
Golder Associates Inc., 2008, Boeing (10-80s Property) Summary of VOCs Detected in Groundwater Quality Samples Table 3.1, September
Golder Associates Inc., 2009, Boeing Renton Facility – Parcel 2 (10-80s Property) Groundwater and Soil Vapor Evaluation: Renton Wash, The Boeing Company, Report No. 043-1126-009.009, September 30.
Shannon & Wilson, Inc. – Environmental Impact Assessment, Lakeshore Landing Site – May 7, 2010
Shannon & Wilson, Inc. – Groundwater Sampling Results, Lakeshore Landing Property – January 12, 2012

c: ITF Developments LLC



Michael J. Strong



NOTE

Map adapted from aerial imagery provided by Google Earth Pro, reproduced by permission granted by Google Earth™ Mapping Service.

Lakeshore Landing
Renton, Washington

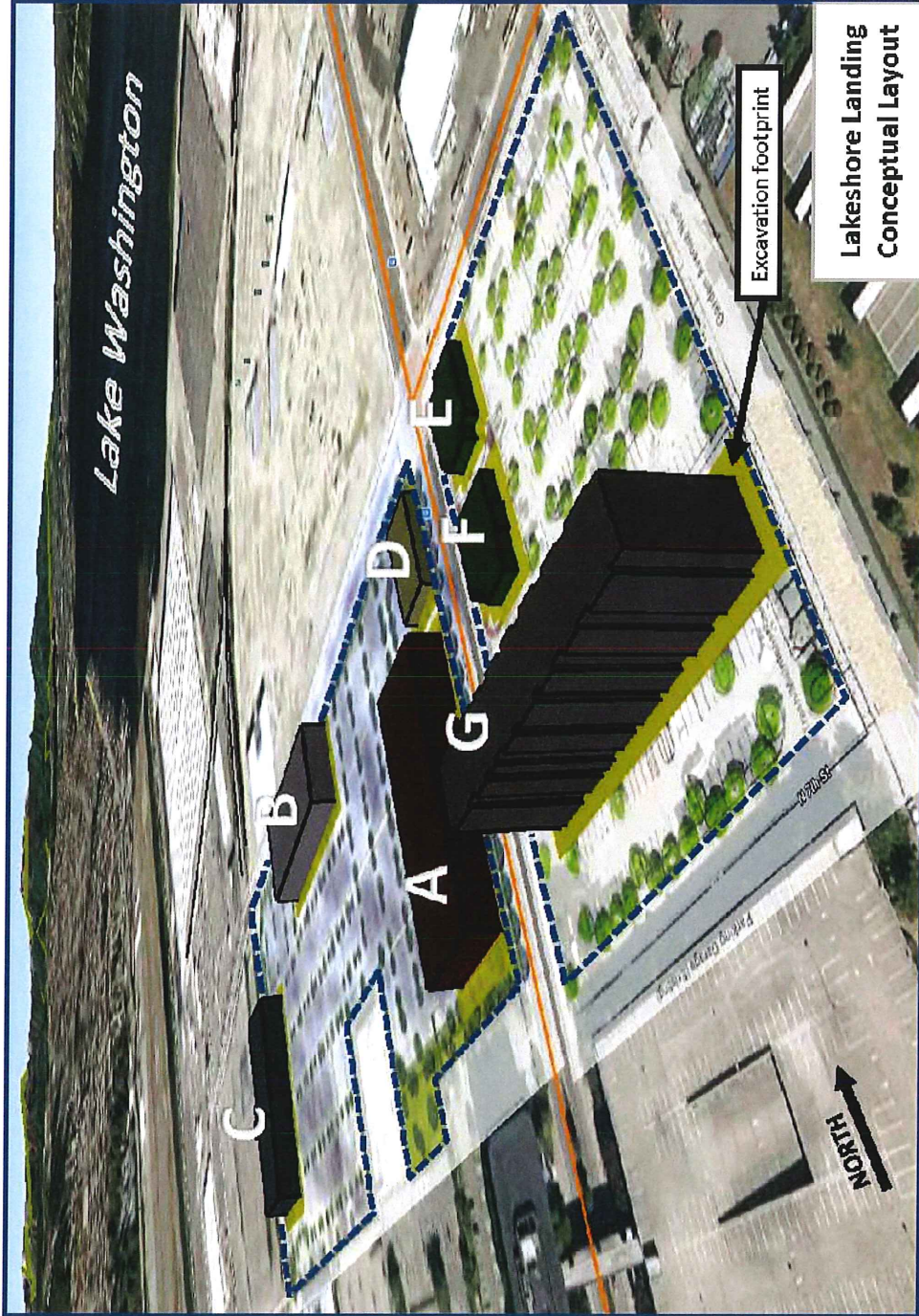
VICINITY MAP

October 2017

21-1-12309-004

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FIG. 1



Lakeshore Landing
Conceptual Layout

- A. 3-Story Office/Lab (47,000 sqft)
- B. 3-Story Office/Lab (45,300 sqft)
- C. 3-Story Office/Lab (48,100 sqft)
- D. 1-Story Retail (12,300 sqft)
- E. 1-Story Restaurant (11,200 sqft)
- F. 1-Story Restaurant (8,800 sqft)
- G. 7-Story Hotel (29,700 sqft)

Note: Sqft estimates include 20-foot of lateral overexcavation.

Lakeshore Landing
Renton, Washington

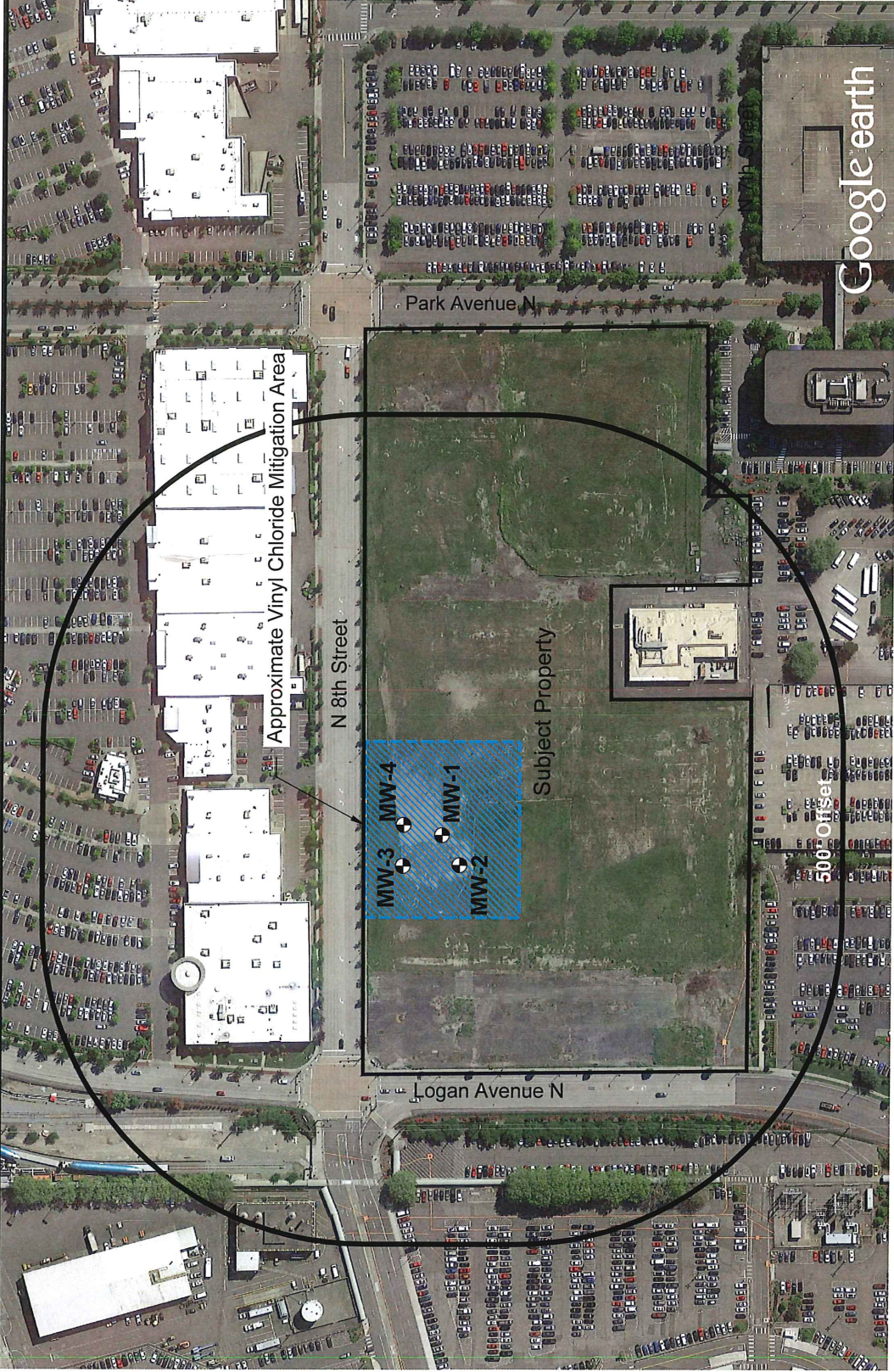
**LAKESHORE LANDING
CONCEPTUAL LAYOUT**

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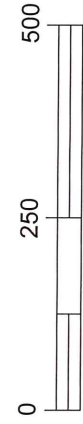
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FIG. 3

FIG. 3



Lakeshore Landing
Renton, Washington



Scale in Feet

LEGEND

MW-1 Monitoring Well Designation
and Approximate Location

NOTE

Map adapted from aerial imagery
provided by Google Earth Pro,
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**SITE MAP WITH
MONITORING WELL LOCATIONS**

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FIG. 2

FIG. 2