



PHASE III ENVIRONMENTAL SITE ASSESSMENT

**154TH AVENUE PROPERTY
3970 154TH AVENUE SE
BELLEVUE, WA 98006**

Project Number 2016-07-012

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Subject: Phase III Environmental Site Assessment for
154th Avenue Property
3970 154th Avenue SE
Bellevue, WA 98006
APN(s): 2202500260

1. INTRODUCTION

As requested, Enviro Assessment, PC (Enviro Assessment) has prepared a Phase III Environmental Site Assessment (ESA) for 3970 154th Avenue SE, Bellevue, WA 98006. The Property is identified by its APN(s) as 2202500260. For the purpose of this report, the term “Property” shall refer to either one property or multiple properties. The purpose of the Phase III was to evaluate the soil for impacts near the former underground heating oil tank and remove any soils above Tier 1 detection levels. The tank was located at the site for an indeterminate amount of time.

Site History

The client reported to Enviro Assessment that a heating oil tank had been removed previously at an unknown date. It was further reported that sampling of the soil had been conducted in June of 2016. The sample results were provided to Enviro Assessment and indicated elevated levels above the Tier 1 detection limits.

2. TOPOGRAPHY AND HYDROLOGY

Topography

According to the most recent USGS Topographic maps covering the Property and vicinity, the

Property is relatively flat and lies at approximately 426 feet above mean sea-level.

Groundwater

Groundwater was not encountered at this site. There is no active well or ground water data available within 1000 linear feet of the subject property.

3. SOILS AND GEOLOGY

Soils

The soils of the subject property are reported by the USDA as King County Area, Washington (WA633) composed of Arents, Alderwood material, 6 to 15 percent slopes (100%).

Soils encountered at the site are represented in the Plates located in the Appendix.

Geology

According to the Geological Map of Washington, the subject property is located within the Qg1t: Younger glacial drift (Pleistocene)

Young glacial drift is defined as consisting of till (hard, blue-gray to gray concrete-like mixture of clay, silt, sand, and gravel deposited as end or recessional moraine). Principally Wisconsin in age. Possibly some outwash from the Fraser Glaciation (which encompassed the Vashon and Sumas Stades) occurs in this unit; most of it, however, is mapped within WAQg1o.

4. PHASE III ENVIRONMENTAL SITE ASSESSMENT

Pre-field Activities

- At least 48 hours prior to any digging at the site, Dig Alert was contacted so that the utilities could be marked prior to start of work.

- A private locator with a Ground-Penetrating Radar (GPR) was utilized for determining the location of the former underground storage tank area which was marked with spray paint. GPR was also utilized to mitigate striking underground utilities.
- Prior to start of work, a brief "tailgate safety meeting" was conducted to inform the field crew of anticipated hazards and the emergency action plan for the site.

Sampling Strategy and Locations

This investigation is intended to determine whether petroleum related impacts to the subject property exist and, if impacts do exist, remove the impacted soils at those specific portions of the property. The following is a summary of the work performed:

On July 13, 2016 the property owner marked the area where the heating oil tank had been with white paint. On July 15, 2016 a private locator utilized ground penetrating radar in the front yard. The private locator identified the area where the former heating oil tank cavity was located and marked the area with red paint. The entire front yard was assessed and the water and sewer lines were marked as well.

On July 20th, the area where the tank was previously located was excavated to approximately four feet BGS. The depth of the bottom of the tank cavity was identified by the presence of pipes that were abandoned in place. The pipes were observed by Enviro Assessment personnel to be empty. The depth of the pipes was approximately 4 feet below ground surface. Soils from each wall of the tank area were sampled and Enviro Assessment personnel identified the soil sample names for the pit walls using the wall direction and the number of the sample (N1, E1, W1, S1). The bottom of the tank cavity was sampled and identified as "1@4'." The pit was then over excavated by two feet and sampled as well. This sample was identified as "3@6'." No staining or petroleum odors were observed. Groundwater was not reached nor attempted to be reached in any of the borings.

Two additional soil samples were collected. One soil sample was taken to the west of the cavity at a depth of six below ground service. The other soil sample was taken approximately three feet to the south of the cavity. These soil samples were taken to the lab and placed on hold pending testing

requirement from the state. The tank cavity has been left open pending a response from the State to determine whether the hole can be filled. Once cleared by the State, the cavity will be filled with clean soils or the native soils that are currently on site. Please refer to Plate A5 for the sample location map. Please see Table 1 below for laboratory results.

Sample Collection Methods

The sampling event occurred on July 20, 2016. Excavation was advanced onsite with continuous visual observation and screening using the Photo-Ionization Detector (PID) for each sample. The cavity excavation was conducted by a track-mounted excavator until total depth of six feet below the ground surface (two feet past the tank cavity). The soil did not appear to be stained. There was no petroleum odor noticed.

Soil samples were collected by the environmental professional and screened with a PID. Select samples were collected from the desired strata and placed into laboratory provided containers, capped, and labeled. All samples were observed for contamination. The selected samples were immediately placed on ice and transported under chain of custody to ESN Northwest Laboratories in Bellevue, WA for final analysis.

All soil samples were analyzed utilizing the NWTPH-Dx standard for oil range hydrocarbons.

Quality assurance and quality control (QA/QC) samples (trip blanks) were used during this project.

Laboratory Results

The tables below present the laboratory results as reported by ENS Northwest Laboratories. Complete laboratory results are attached. The Regional Screening Levels were reviewed for each chemical for soil being used for residential purposes. Screening Levels provide a risk-based determination of environmental concerns on a potentially contaminated property. Note that the lab reports concentrations in parts per million (mg/kg). The samples are summarized in the following table.

Table 1. Soil Analytical Results

<i>Chemical</i>	<i>1@6'</i> <i>(mg/kg)</i>	<i>3@4'</i> <i>(mg/kg)</i>	<i>NI</i> <i>(mg/kg)</i>	<i>E1</i> <i>(mg/kg)</i>	<i>W1</i> <i>(mg/kg)</i>	<i>S1</i> <i>(mg/kg)</i>
Lube Range Organics (C13-C50)	ND	ND	ND	ND	ND	ND
Diesel Range Organics (C10-C28)	ND	810	ND	ND	ND	ND

The Washington State Department of Ecology (WADOE) states that Method A for soil cleanup of potentially contaminated sites, table 740-1 is to be utilized to determine soil clean up levels.¹ The table states that soil clean up levels for Diesel Range Organics (utilizing the NWTPH-Dx soil testing method) is 2000mg/Kg. As shown in Table 1, the soil samples were reported as non-detect (ND) or below action level in the constituents analyzed.

5. SUMMARY AND OPINION

The property is located at 3970 154th Avenue, Bellevue, WA 98006. The property is identified by the APN(s) as 2202500260. The purpose of the Phase III was to evaluate the soil for impacts from the former oil heating tank previously removed and remove soil contaminated above WADOE cleanup levels.

The site was marked and cleared using a ground penetrating radar (GPR). The former tank cavity was also identified by the homeowner and verified using the GPR. After marking and clearing the site, a tracked excavator was utilized to remove soils from the cavity and soil samples were collected at the tank bottom, sides, two feet under the tank bottom, and two samples were collected at six feet BGS three feet to the west and south of the cavity. The additional samples were placed on hold for later testing if required by the state.

The soil analytical results indicated either no detection of diesel range organics or low levels of diesel range organics utilizing the NWTPH-Dx method as required by the State of Washington.

¹ <https://fortress.wa.gov/ecy/clarc/FocusSheets/Table%20740-1.pdf>

The soil analytical results are below clean up levels established by WADOE. Groundwater was not encountered during this investigation.

No hazards to human health are anticipated from the subject property based on the lack of detected chemicals in the soils analyzed.

6. CONCLUSIONS AND RECOMMENDATIONS

No additional investigation is recommended at this time. We recommend filling the cavity and requesting a No Further Action Letter from the State of Washington.

Special Terms and Conditions

We have been authorized by Jacob Amy on behalf of Hung Sin & Bo Lee to perform a Phase III environmental site assessment of the subject property. It is our understanding that they will use the information contained in this report for due diligence and as part of the finance of the property. Without prior written consent of the client, Enviro Assess will keep confidential and not disclose to any person or entity, and data or information provided by the client or generated in conjunction with the performance of this study, except when required by law. Provisions of confidentiality shall not apply to data or information obtained from the public domain or acquired from third parties not under obligation to the client to maintain confidentiality.

User Reliance

This report was prepared for the exclusive use of Hung Sin & Bo Lee. No other person or entity is entitled to rely upon this report without the specific written authorization of Enviro Assess. Such reliance is subject to the same limitations, terms, and conditions as the original contract with the client. Enviro Assess specifically disclaims any responsibility for any unauthorized use of this report.

Limitations

Our professional services were performed, our findings obtained, and our conclusions proposed in accordance with generally accepted principles and practices. This warranty is in lieu of all other warranties either expressed or implied. Test findings and statements of professional opinion do not

constitute a guarantee or warranty, expressed or implied.

Opinions provided herein apply to the currently available data, and existing and reasonably foreseeable conditions at the time of this investigation. They cannot apply to changes in site conditions of which this office is unaware or has not had the opportunity to evaluate. Soil samples are collected from a small “representative area of soil”, these samples are assumed to represent the chemical makeup of the general area, and as such there may be variations in adjacent soils. To further reduce the clients’ liabilities, additional samples may be collected and analyzed to lower the possibility of generalizing the conditions and/or not locating an area of impacted soils at the site. Changes in conditions at the properties may occur with time due to natural processes or works of man on the properties or adjacent properties. Specifically, the properties are still under active use and chemicals may be applied to the properties between the date of this report and property redevelopment.

Changes in applicable standards may also occur as a result of legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated, wholly or in part, by changes beyond our control.

7. PROFESSIONAL SIGNATURE

We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property.

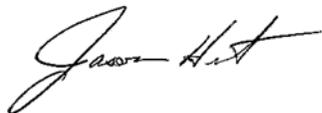
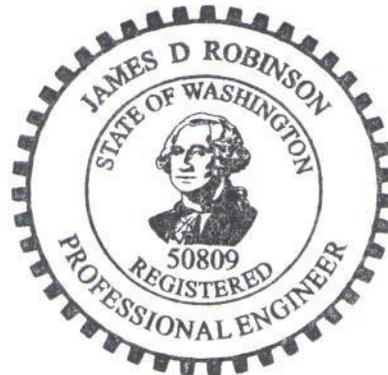
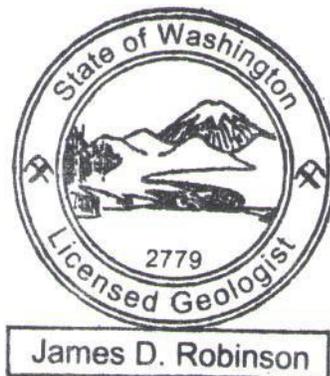
It has been a pleasure to be of service. If any questions arise, please contact our office.

Sincerely,

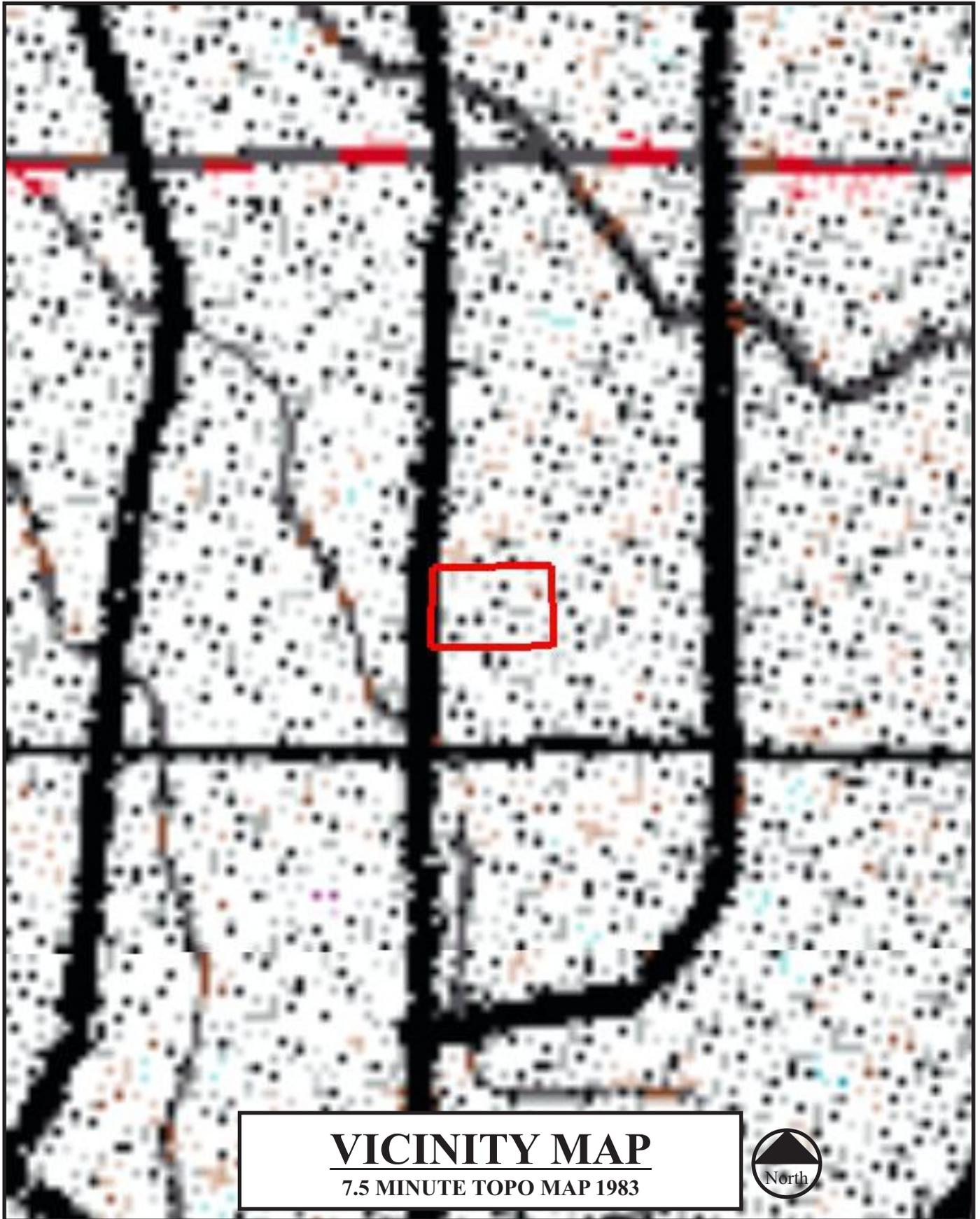
ENVIRO ASSESS



James D. Robinson
Signed on August 5, 2016
Professional Geologist



Jason Hunt
Signed on August 5, 2016
Project Manager



VICINITY MAP

7.5 MINUTE TOPO MAP 1983

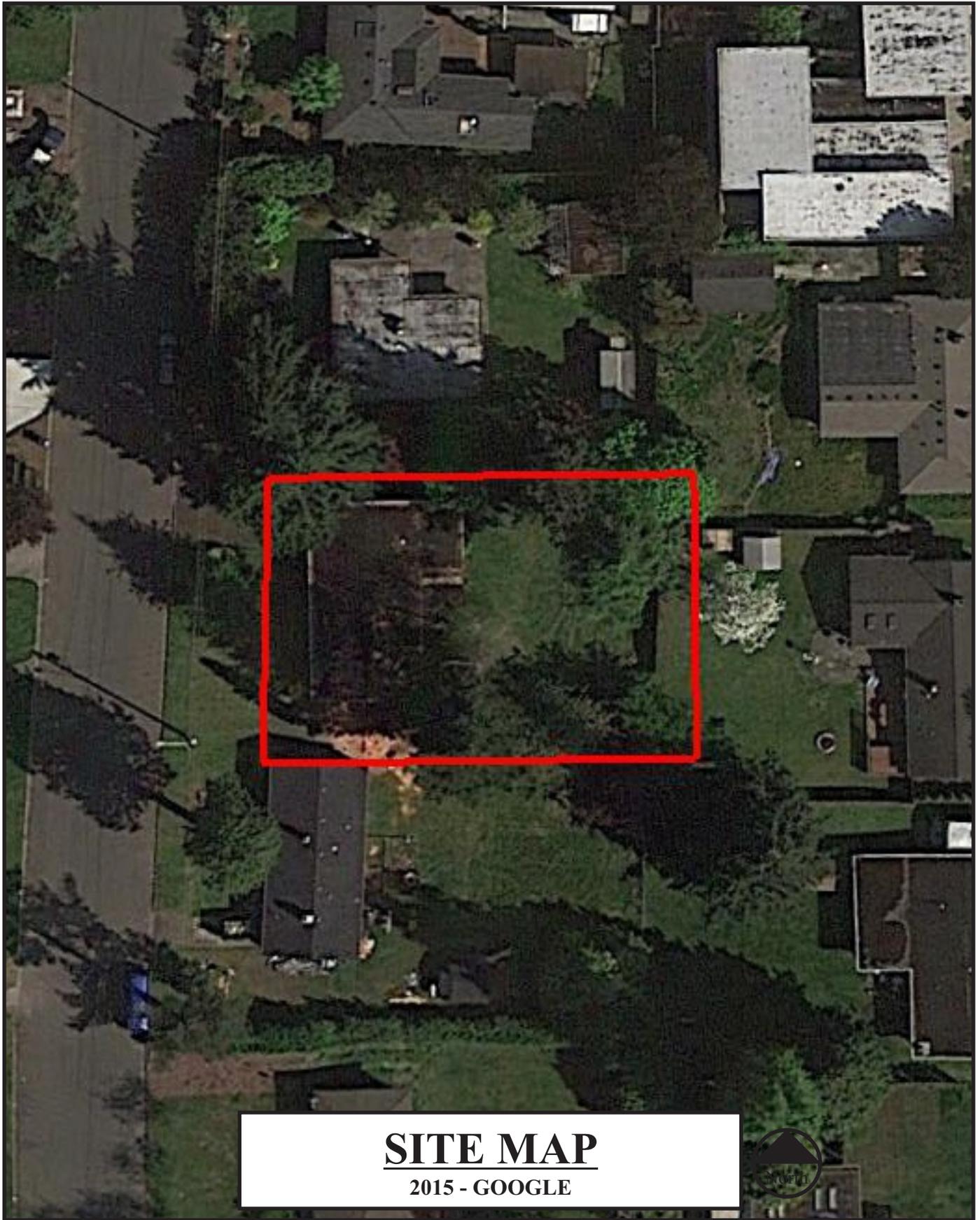


2016-07-012
AUGUST 4, 2016
PLATE: A1

PHASE III ENVIRONMENTAL SITE ASSESSMENT
154TH AVENUE PROPERTY
3970 154TH AVENUE SE
BELLEVUE, WA 98006

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SITE MAP

2015 - GOOGLE

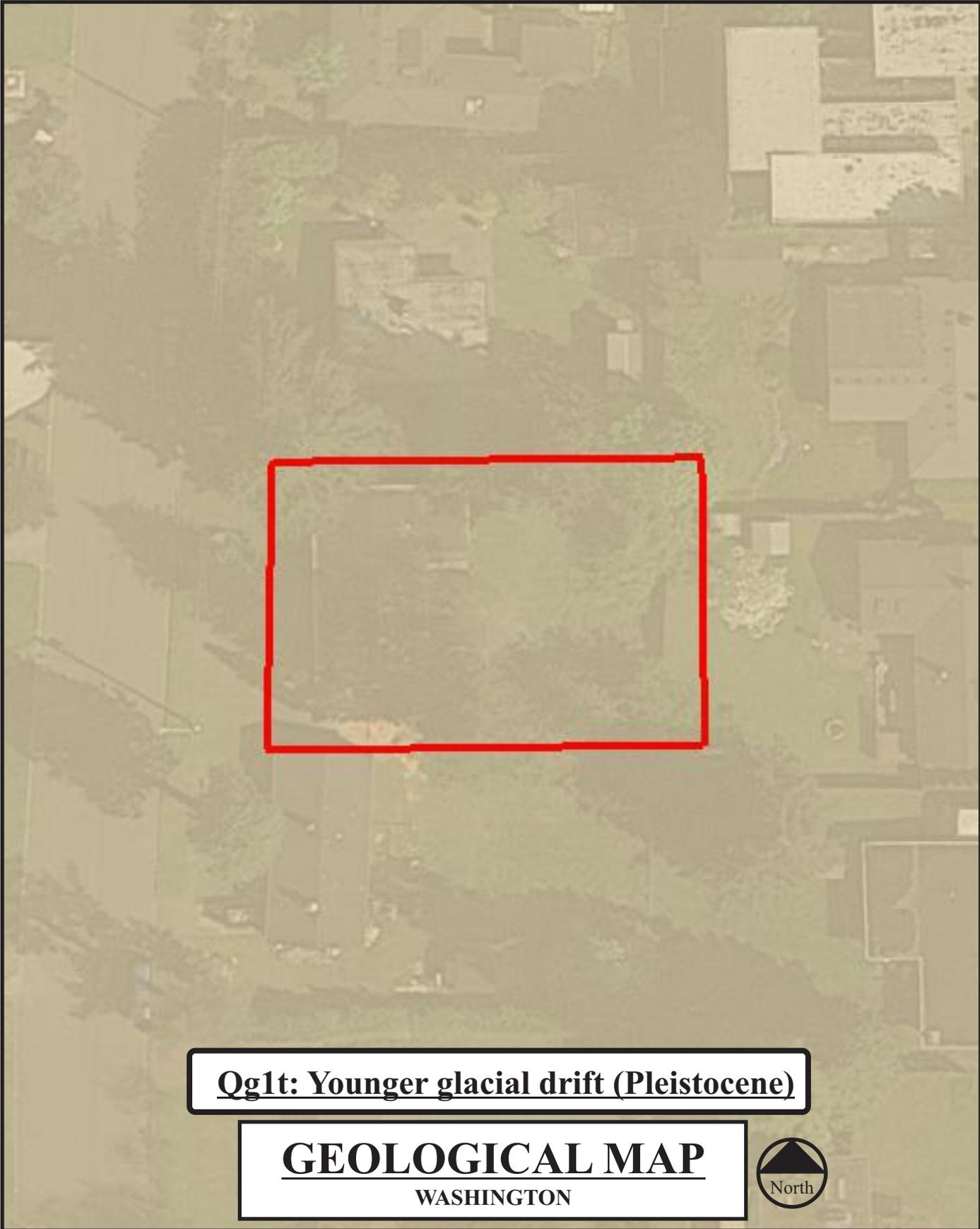


2016-07-012
AUGUST 4, 2016
PLATE: A2

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Qg1t: Younger glacial drift (Pleistocene)

GEOLOGICAL MAP
WASHINGTON



2016-07-012
AUGUST 4, 2016
PLATE: A3

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King County Area, Washington (WA633)

Map Unit Symbol	Map Unit Name	Percent of AOI
AmC	Arents, Alderwood material, 6 to 15 percent slopes	100.0

SOIL MAP

NO SCALE



2016-07-012
AUGUST 4, 2016
PLATE: A4

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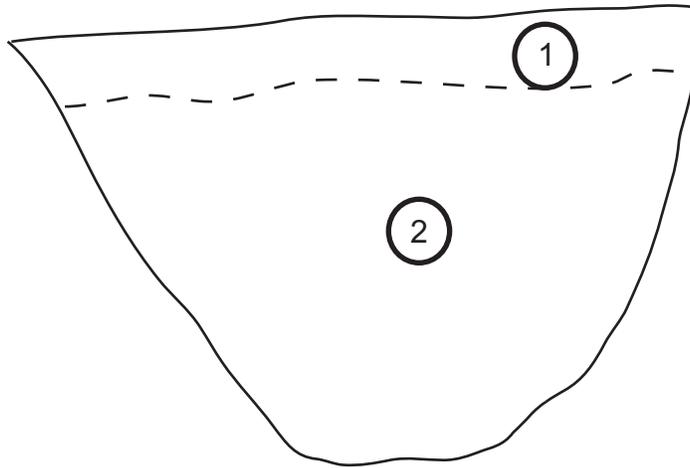
GENERAL BOREHOLE LOCATION

2016-07-012
AUGUST 4, 2016
PLATE: A5

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Tp-1



① 0" to 4" Vegetation.

② 4" to 6' Sandy SILT, brown, loose, moist.

Test Depth = 6. No water encountered. Logged on 07/20/16

TP - 1
NO SCALE

2016-07-012
AUGUST 4, 2016
PLATE: A7

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ESN NORTHWEST CHEMISTRY LABORATORY

Enviro Assessment
154TH AVENUE PROJECT
Client Project #2016-07-012
Bellevue, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Soil by Method NWTPH-Dx/Dx Extended

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (mg/kg)	Lube Oil Range Organics (mg/kg)
Method Blank	7/21/2016	7/21/2016	109	nd	nd
LCS	7/21/2016	7/21/2016	126	118%	---
1@6'	7/21/2016	7/21/2016	134	810	nd
3@4'	7/21/2016	7/21/2016	74	nd	nd
N1	7/21/2016	7/21/2016	117	nd	nd
E1	7/21/2016	7/21/2016	115	nd	nd
W1	7/21/2016	7/21/2016	104	nd	nd
S1	7/21/2016	7/21/2016	88	nd	nd
S1 Duplicate	7/21/2016	7/21/2016	73	nd	nd
Reporting Limits				50	100

"---" Indicates not tested for component.

"nd" Indicates not detected at the listed detection limits.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%