

1. INTRODUCTION

On behalf of the City of Bellevue (City), Parametrix has prepared this Phase II Environmental Site Assessment (ESA) report related to three properties located at 130th Avenue NE and NE Spring Boulevard in Bellevue, Washington (Figure 1). The subject properties are identified by King County parcel numbers 2825059159, 2825059040, and 2825059191, also known as right-of-way (ROW) lots EL296, EL297, and EL299 (Figure 2). The investigation activities were conducted to support the acquisition of the properties by the City of Bellevue from Sound Transit. The properties were previously acquired by Sound Transit for the East Link Lightrail Extension project, primarily for construction of the Bel-Red/130th Station and for use as construction staging.

The City is conducting an update of due diligence prior to transferring ownership of the subject properties from Sound Transit to the City. In July 2017, Parametrix completed an environmental analysis of the properties, which primarily included review and evaluation of previous environmental documents and supporting information (Parametrix 2017). In 2018, Parametrix completed a Phase II ESA of the properties and determined soil and groundwater conditions below the subject properties (Parametrix 2018). Since the prior Phase II ESA, Sound Transit has developed the Bel-Red/130th Station and utilized the subject properties for construction staging.

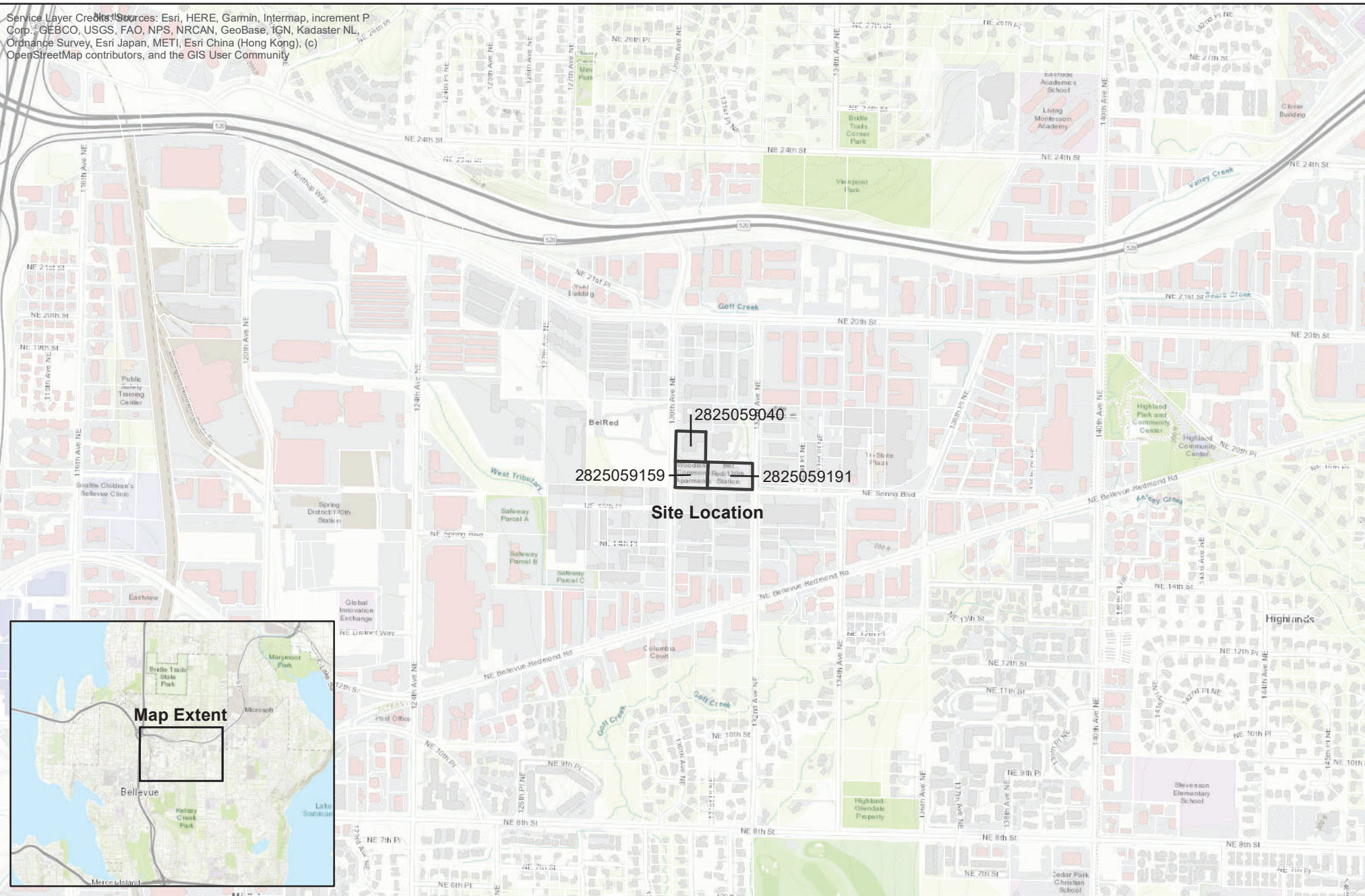
The purpose of this Phase II ESA was to evaluate potential environmental impacts of Sound Transit's use of the subject properties from 2018 to the present and update the evaluation of the previous Phase II ESA results.

This Phase II ESA was conducted in accordance with the scope of work provided to the City. Specific tasks included the collection of soil and groundwater samples from eight investigative borings (B21 through B28) on the three subject properties. Conclusions and recommendations within this report are based on observed evidence and data collected during the performance of this assessment, as well as information obtained through previous investigations or documentation, where available.

1.1 Site Location

The subject properties are located between 130th Avenue NE and 132nd Avenue NE in Bellevue, Washington (Figure 1). The subject property includes King County parcel numbers 2825059159 (1606 130th Avenue NE), 2825059040 (1700 130th Avenue NE), and 2825059191 (1625 132nd Avenue NE). The boundaries of the parcels are shown on Figure 2.

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Parametrix



0 250 500 1,000 Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap,

 Parcel Boundary

Figure 1. Site Location Map

Phase II ESA
Bel-Red 2020
Bellevue, WA

Document Path: U:\PCO\Projects\1580-CH-0\Bellevue\553-1580-081 Bel-Red 2020 Ph II ESA\9595vc\GIS\Mapdocs\Fig2_BelRed_SiteDetail.mxd



Parametrix



0 25 50 100 Feet

Service Layer Credits: EagleView Technologies

Parcel Boundary

Sound Transit 2019
Excavation Areas

Soil Boring Location

Previous Locations

Soil Boring

Soil and Groundwater Boring

Figure 2. Site Detail Map

Phase II ESA
Bel-Red 2020
Bellevue, WA

1.2 Site and Vicinity Characteristics

The subject property encompasses three parcels formerly occupied by warehouse-type structures.

The northern parcel (EL 297) was developed in 1977 with a one-story office and warehouse that had a mezzanine level. Airphone appears to have occupied the building from the time of development through approximately 2017. The building was demolished by Sound Transit in 2020.

The southwest parcel (EL296) was developed in 1962 with a single-story concrete block building. The building was primarily occupied by Stusser Electric through 2003, with several other businesses renting space from the 1970's through 2013. The building was demolished by Sound Transit in 2017.

The southeast parcel (EL299) was developed in 1969 and occupied by Ace Bulldozing. Two 5,000-gallon heating-oil underground storage tanks (USTs) were present on the northwest corner of the historical building. In 1983, Journal American developed a new press facility on the southeast parcel. The new facility used a fuel-dispensing UST below the southern portion of the press building within a maintenance bay area. The building was demolished in 2017 by Sound Transit.

The three parcels have been used as a construction site and staging area for Sound Transit during the construction of the Bel-Red/130th Station adjacent south of the subject properties through November 2020. Sound Transit's use of the property included development of a street sweeping disposal pond, vehicle wheel wash, equipment storage, clearing, and grading of the subject properties.

1.3 Physical Setting

The subject properties are located within the Bel-Red neighborhood of Bellevue within the Northeast quarter of Section 28, Township 25 North, Range 5 East. The subject properties are at an elevation of approximately 190 to 205 feet above sea level with a southerly slope (King County iMap 2020).

Soils in the area are mapped as Everett very gravelly sandy loam (NRCS 2020). These are described as somewhat excessively drained soils formed from glacial outwash deposits.

The surface geology of the subject properties is mapped as Quaternary Vashon recessional outwash (Qvr) deposits (Troost et al. 2006). The Qvr deposits are described as coarse to fine-grained sand and gravel deposits. The Qvr deposits were initially laid by outwash floodwaters during the northward recession of the Puget Lobe during the Vashon Stage of the Fraser Glaciation. Quaternary Vashon lacustrine silt (Qvrl) deposits are a finer grained subset of recessional outwash deposits, primarily composed of silty sands or silts related to outwash lake deposits during the recession of the Puget Lobe. No Qvrl deposits are mapped in the area, but the unit is overall related to the Qvr deposits. Qvr deposits are typically underlain by Quaternary Vashon till (Qvt) deposits. Qvt deposits primarily consist of compacted sand and gravel within a silt or clay matrix. Their compacted nature makes the Qvt deposits a regional low-permeability confining layer, often creating a shallow perched aquifer within the Qvr deposits.

The previous Phase II ESA of the subject properties (discussed in Section 2.0, below) encountered the shallow perched aquifer at approximately 5 to 15 feet bgs, with shallow soils being primarily composed of sand, silty sand, and silt typical of Qvr or Qvrl deposits.

The gradient below the subject properties is interpreted to be primarily to the south-southeast, following the trajectory of Goff Creek. Goff Creek is located on the eastern boundary of the subject property and flows to the south-southeast. However, there may also be a south-southwest gradient towards the West Tributary particularly on the western portion of the subject property. The West Tributary is located 1,100 feet west of the subject properties.

2. PREVIOUS INVESTIGATIONS

Historical investigations were summarized in the Parametrix (2017) Environmental Evaluation of the subject properties. Parametrix then completed a Phase II ESA in 2018. Sound Transit completed remediation at the subject properties in 2019. Copies of these reports are attached in Appendix C. The following summarizes the previous work completed at the subject properties.

2.1 1996 Restrictive Covenant

In 1994 and 1995, subsurface investigations were performed on the subject properties related to historical underground storage tanks (USTs) on the southeastern parcel (EL 299). Petroleum hydrocarbon-contaminated soils were discovered at both the northern and southern UST areas on EL299. Approximately 75 tons of petroleum contaminated soils (PCS) were excavated and removed from the northern UST area. The southern UST area was primarily underneath the building. Monitoring wells and boreholes were completed to determine the extent of contamination. Groundwater within the source area was initially found above the MTCA Method A cleanup levels (CULs) for gasoline, diesel, and xylenes. Approximately 40 tons of PCS was excavated and removed from south of the building with soil contamination remaining below the building. In 1996, a Restrictive Covenant was recorded on the subject properties, and Ecology issued a NFA determination for the cleanup.

2.2 2015 Phase I ESAs

In 2015, Shannon and Wilson, Inc. completed three separate Phase I ESAs for the subject parcels related to potential acquisition of the subject properties by Sound Transit. The Phase I ESAs were provided to Parametrix for the 2017 Environmental Evaluation.

2.3 2017 Environmental Evaluation

An environmental evaluation (document review) was conducted on the subject properties by Parametrix in July 2017 (Parametrix 2017). This information revealed:

- Potential soil impacts to the subject properties were relatively minimal, except for the southeastern parcel (2825059191/El 299), which had an estimated 430 cubic yards of petroleum-impacted soil near the southern portion of the former building related to a documented historical release.
- Groundwater below the subject property had been impacted by on-site or off-site issues, specifically on the southeast portion of the subject properties on parcel 2825059191(El 299), with potential minor impacts to the southwest portion of the subject properties on parcel 2825059159 (El 296).
- There were relatively little data to support that all impacts to the subject properties had been identified and/or sufficiently addressed (or planned to be addressed). The report noted that the potential for significant impacts to the subject properties beyond the southeastern portion was relatively low and recommended a Phase II ESA be completed to determine soil and groundwater conditions below the subject properties.

2.4 2018 Phase II ESA

On August 14, 15, and 16, 2017, a total of 20 environmental boreholes (B-1 through B-20) were drilled to evaluate soil and groundwater conditions below the subject properties.

Multiple soil samples were collected from each of the 20 boreholes, and groundwater samples were collected from eight of the boreholes. Drilling encountered primarily sand, silty sand, and silt in each of the boreholes with groundwater depths ranging from 5 to 15 feet bgs. Soil and groundwater samples were primarily analyzed for petroleum hydrocarbons, with some samples submitted for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), carcinogenic polycyclic aromatic hydrocarbons (cPAHs), and metals.

Total petroleum hydrocarbons (TPH) were detected in soil from six of the 32 samples submitted for analysis. Gasoline-range TPH was detected in three samples from Borehole B-15 on the southeastern portion of the subject property, ranging from 6 to 21 mg/kg below the MTCA Method A CUL and at the MTCA Method A CUL of 100 mg/kg (no benzene present) in Borehole B-17. Diesel-range TPH was detected in soil samples from Borehole B-15 ranging from 1,100 mg/kg below the MTCA Method A CUL to 2,500 mg/kg above the MTCA CUL. Similarly, oil-range TPH was detected in soil samples from B-15 ranging from 1,000 mg/kg below the MTCA CUL to 4,800 mg/kg above the MTCA CUL. Low levels of oil-range TPH were detected at Boreholes B-1 and B-19 at 50 mg/kg and 71 mg/kg, respectively, below the MTCA Method A cleanup level. Low levels of SVOCs and cPAHs were detected in the soil samples from B-15 but at levels below the respective MTCA Method A and Method B CULs.

Low concentrations of metals were detected in nearly all soil samples for mercury, arsenic, chromium, and lead at concentrations below the MTCA CULs. No cadmium was detected in any of the samples.

Total petroleum hydrocarbons were detected in groundwater from four of the eight samples submitted for analysis. Oil-range TPH was found in groundwater from B-1 at 260 µg/L and B-18 at 270 µg/L below the MTCA Method A CUL of 500 µg/L. Groundwater at two locations, B-11 on the southwest portion of the subject properties and B-15 on the southeast portion of the subject properties, had concentrations above the MTCA Method A CULs for diesel- and oil-range TPH. B-11 was reported to have diesel-range TPH at 510 µg/L and oil-range TPH at 520 µg/L. B-15 was reported to have diesel-range TPH at 2,600 µg/L and oil-range TPH at 4,500 µg/L. Low concentrations of gasoline at 75 µg/L were also present in the groundwater from B-15.

Groundwater samples were also submitted for VOCs and metals. Two of the groundwater samples (B-15 and B-18) had concentrations above MTCA Method A CULs for arsenic at 41 µg/L and 52 µg/L respectively. However, these concentrations were likely related to turbidity in the samples rather than leaching from an on-site source.

Based on the results of the Phase II ESA, Parametrix recommended excavations to remove source areas of soil contamination discovered at the subject properties and to develop mitigation and monitoring efforts to facilitate redevelopment.

2.5 2019 Sound Transit Excavation

In 2018, Ecology was notified of Sound Transit's plan to excavate contaminated soil from the subject properties in accordance with notification requirements of the Restrictive Covenant.

In 2019, KLB Construction excavated contaminated soil below the subject properties. Innovex Environmental Management Inc. (Innovex) completed characterization and soil confirmation sampling during the excavation.

Four areas of the subject properties (Figure 2) were excavated at depths ranging from 8 to 18 feet bgs. A total of 34 confirmation soil samples were collected for laboratory analysis from the four excavations, including sidewall and pit bottom samples. A total of approximately 223 tons of PCS was excavated and disposed off-site. Soil confirmation samples from the four areas showed low-level detections of diesel- and oil-range TPH at concentrations below the MTCA Method A CULs. There were no detections of gasoline in the confirmation samples remaining at the subject properties. No groundwater was reportedly encountered or investigated (Innovex 2019).

3. CURRENT INVESTIGATION

As noted in Section 1.0, the goal of the current Phase II ESA was to both evaluate conditions from Sound Transit's use of the property from the previous Phase II ESA through the present as well as to understand the current conditions below the subject property related to the historical release and cleanup completed by Sound Transit.

3.1 Field Investigation

On November 24, 2020, Parametrix observed the drilling of eight boreholes across the property (B21 through B28). The locations of the boreholes are presented on Figure 2. The boreholes were spaced to allow three locations on each of the southern parcels (B21, B22, and B23 on EL 296; B24, B25, and B26 on EL 299), and two locations on the northern parcel (B27 and B28 on EL 297).

A one-call utility locate was completed, and Applied Professional Services (APS) was retained to locate conductible utilities below the subject property. The locations of the planned boreholes were slightly adjusted to allow Sound Transit to continue to operate on the property and to prevent striking newly placed utilities. Holt Services Inc. was retained as the licensed driller.

The boreholes were drilled to depths ranging from 10 to 15 feet bgs to evaluate soil and groundwater conditions below the property. Borehole logs and photographs of the drilling and soil cores from each of the boreholes are attached in Appendix A.

Sample cores were retained in 5-foot intervals using a direct-push hollow core sampler with new liners. The samplers were cleaned between borehole locations using a detergent/water mixture and water rinse.

The recovered soil cores were logged into a field book for lithology, color, and water content. The soil cores were field screened with a calibrated photoionization detector (PID) that was rented from Geotech Environmental Equipment Inc. Soil samples were collected from areas of PID field-screening detections or just above the groundwater interface. Four 40 milliliter (mL) volatile organic analysis (VOA) containers were filled with approximately 5-gram soil samples using the U.S. Environmental Protection Agency (EPA) 5035 method (purge and trap), and one 4-ounce glass jar with a Teflon lid liner was filled for each soil sample.

Soils encountered were typical of shallow sand and gravel fill above native outwash sand and lacustrine outwash deposits. The fill depth ranged from 1 to 7 ft bgs across the subject properties prior to encountering sand, silty sand, and silt layers.

Groundwater was encountered in each of the boreholes at depths ranging from 5.5 to 12 feet bgs. Following completion of the drilling, a temporary 1-inch diameter PVC screen and riser was installed in the boreholes using new materials and groundwater was extracted with a peristaltic pump and polyethylene and silicone tubing. Three 40 mL VOA containers and two 500 mL glass amber containers were filled at each borehole. Duplicate VOAs (B90-W) were collected from location B24. Duplicate amber containers were collected from location B25 (B91-W).

Samples were placed in a cooler with ice and kept at temperatures below 4 degrees Celsius until delivery to the laboratory.

A summary of the boreholes, samples collected, and observations is presented in Table below:

Table 1. Drilling Observations Summary

| Location (BOREHOLE NUMBER) | Samples Collected | DEPTH TO WATER (Ft bgs) | Total Drilling Depth (Ft bgs) | Observations |
|----------------------------------|--|-------------------------------|-------------------------------------|--|
| B21 | Soil (B21-11) Water (B21-W) | Approx. 12 | 15 | Seven feet of fill above native outwash. PID detections 14.5 to 29.8 ppm at 11 ft |
| B22 | Soil (B22-6) Water (B22-W) | Approx. 6 | 10 | One and a half feet of fill above native outwash. no PID detections |
| B23 | Soil (B23-9) Water (B23-W) | Approx. 10 | 15 | One foot of fill above native outwash and lacustrine silt layers. No PID detections |
| B24 | Soil (B24-2) Water (B24-W) | Approx. 8 | 15 | Three feet of fill above native outwash. PID detections 2.0 to 2.7 ppm in fill, 0.2 ppm at five feet |
| B25 | Soil (B25-4) Water (B25-W & B90-W) | Approx. 8 | 10 | One foot of fill/asphalt above native outwash. PID detections 1.7 to 6.5 ppm from one to five feet |
| B26 | Soil (B26-7) Water (B26-W & B91-W) | Approx. 7 | 15 | Two feet of fill above native outwash and lacustrine silt layers. PID detections 0.2 ppm from five to seven feet |
| B27 | Soil (B27-5.5) Water (B27-W) | Approx. 5.5 | 10 | Three feet of fill above native outwash and lacustrine silt layers. no PID detections |
| B28 | Soil (B28-9) Water (B28-W) | Approx. 9.5 | 15 | Two feet of fill above native outwash. no PID detections |

As noted in the summary and attached borehole logs, Parametrix measured low levels of VOCs using the PID in both fill and native deposits.

Fill placed by Sound Transit was largely absent of detectable VOCs using the field screening. However, at one location, B24 in the central southeast portion of the subject properties, VOCs were detected in the fill ranging from 2.0 to 2.7 parts per million (ppm). Many small spills of oils or fuels were observed across the construction site. The field-screening measurements of the fill appear to be consistent with these types of small releases during equipment mobilization across the property by Sound Transit.

Additionally, Parametrix measured low-level VOCs with the PID within the native deposits consistent with historical releases. Concentrations ranging from 14.5 to 29.8 ppm were measured at B21 just above the water table. Concentrations ranging from 1.7 to 6.5 ppm in native deposits from 1 to 5 feet bgs (directly below Sound Transit-placed fill) were measured at location B25. Concentrations up to 0.2 ppm from 5 to 7 feet bgs within native outwash deposits were measured at B26.

No VOCs were measured in soil cores recovered from B22, B23, B27, or B28.

The samples were delivered on the same day of collection to OnSite Environmental Inc. (OnSite) for rush analysis of gasoline-, diesel-, and oil-range TPH and BTEX. A total of eight soil samples, ten water samples (eight boreholes and two duplicates), and one trip blank was delivered to Onsite for analysis.

3.2 Laboratory Analytical Results

Onsite completed rush analysis of the soil and groundwater samples on November 24 and 25, 2020, using Ecology methods NWTPH-Gx, NWTPH-Dx/Dx Extended, and EPA Method 8021b (Ecology 2016). Laboratory reports are presented in Appendix B.

3.2.1 Analytical Methods

Ecology Method NWTPH-Gx is the qualitative and quantitative method for volatiles, primarily gasoline, petroleum products in soil and water. The method is primarily used for analysis of automotive gasolines, mineral spirits, Stoddard solvent and naphtha.

Ecology Method NWTPH-Dx/Dx Extended is the qualitative and quantitative method for semi-volatile—primarily diesel and oil—petroleum products in soil and water. This method is primarily used for analysis of diesel- and oil-range TPH, jet fuels, kerosene, hydraulic fluids, lubricating oils, and other fuel oils.

EPA Method 8021b is the qualitative and quantitative method for analysis of VOCs in soil and water in concurrence with the Ecology NWTPH-Gx method. The main VOCs analyzed by this method include BTEX.

3.2.2 Soil Results

Table 2 summarizes the results of the soil analyses. Figure 3 and Table 2 shows the soil results map. The eight soil samples were analyzed for gasoline-, diesel-, and oil-range TPH and BTEX. No gasoline- or diesel-range TPH or BTEX were detected in any of the samples. Oil-range TPH was detected in three samples: 57mg/kg at B22 from a depth of 6 feet; 660 mg/kg at B24 from a depth of 2 feet; and 100 mg/kg at B27 from a depth of 5.5 feet. These are all below the applicable MTCA Method A CUL for oil-range TPH in soil of 2,000 mg/kg (Ecology 2013).

3.2.3 Groundwater Results

Table 3 summarizes the results of the groundwater analyses. Figure 4 and Table 3 shows the groundwater results map. The eight water samples and two duplicates were analyzed for gasoline-, diesel-, and oil-range TPH and BTEX, one duplicate was analyzed for Gas-BTEX, and the other duplicate was analyzed for diesel- and oil-range TPH. The trip blank was analyzed for Gas-BTEX (not summarized in the table).

There were no detections of gasoline- and diesel-range TPH or BTEX in any of the samples. Oil-range TPH was detected in five samples: 400 µg/L to 440 µg/L at B25 and its duplicate (B91); 250 µg/L at B26; 410 µg/L at B27; and 230 µg/L at B28. These results are all below applicable the MTCA Method A CUL for oil-range TPH in groundwater of 500 µg/L (Ecology 2013).

**Table 2. Soil Results, November 24, 2020, Phase II Environmental Site Assessment 130th Avenue NE Properties (EL296, EL297, EL299)
Bellevue, Washington (mg/kg)**

| Sample ID | TPH-Gasoline | TPH-Diesel | TPH-Heavy Oil | Benzene | Toluene | Ethylbenzene | m,p-Xylene | o-Xylene |
|------------------------------------|--------------|-------------|---------------|-------------|----------|--------------|------------|----------|
| B21-11 | <5.3 | <27 | <53 | <0.020 | <0.053 | <0.053 | <0.053 | <0.053 |
| B22-6 | <5.5 | <29 | 57 | <0.020 | <0.055 | <0.055 | <0.055 | <0.055 |
| B23-9 | <6.2 | <31 | <62 | <0.020 | <0.062 | <0.062 | <0.062 | <0.062 |
| B24-2 | <5.1 | <130 | 660 | <0.020 | <0.051 | <0.051 | <0.051 | <0.051 |
| B25-4 | <5.8 | <28 | <56 | <0.020 | <0.058 | <0.058 | <0.058 | <0.058 |
| B26-7 | <5.7 | <29 | <58 | <0.020 | <0.057 | <0.057 | <0.057 | <0.057 |
| B27-5.5 | <8.3 | <33 | 100 | <0.020 | <0.083 | <0.083 | <0.083 | <0.083 |
| B28-9 | <5.1 | <27 | <53 | <0.020 | <0.051 | <0.051 | <0.051 | <0.051 |
| MTCA Method A Cleanup Level | | | | | | | | |
| | 100 | 2000 | 2000 | 0.03 | 7 | 6 | 9 | 9 |

concentration is above Model Toxics Control Act WAC 173-340 (MTCA) Method A Cleanup Level

BOLD indicates analyte detected above laboratory practical quantitation limit

Gasoline cleanup level is presented for the circumstance in which benzene is not detected

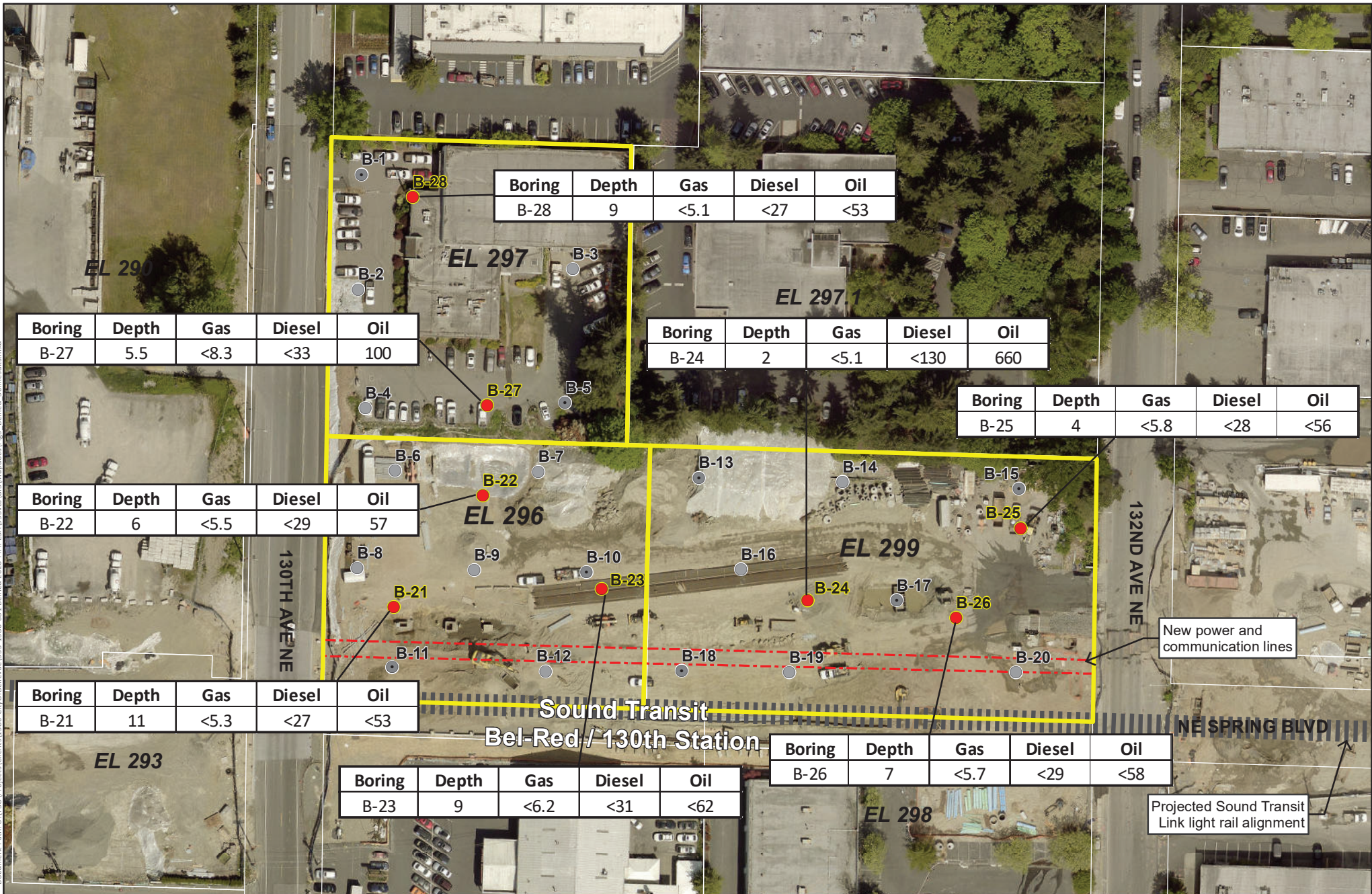
<## indicates analyte not detected at or above given laboratory reporting limit

ug/L - micrograms per liter

TPH - total petroleum hydrocarbons

NA = not analyzed

Document Path: U:\P\CO\Projects\1580-081 Bel-Red 2020 Ph II ESA\99595\GIS\MapDocs\Fig3_BelRed_SoilResults.mxd



Parametrix



0 25 50 100 Feet

Service Layer Credits: EagleView Technologies

Notes:
Depths are in feet below ground surface
Gas, Diesel, and Oil TPH levels are mg/kg

Parcel Boundary

Soil Boring Location

Previous Locations

Soil Boring

Soil and Groundwater Boring

Figure 3. Soil Results Map

Phase II ESA
Bel-Red 2020
Bellevue, WA

Table 3. Ground Water Results, November 24, 2020, Phase II Environmental Site Assessment 130th Avenue NE Properties (EL296, EL297, EL299) Bellevue, Washington (ug/L)

| Sample ID | TPH-Gasoline | TPH-Diesel | TPH-Heavy Oil | Benzene | Toluene | Ethylbenzene | m,p-Xylene | o-Xylene |
|------------------------------------|--------------|------------|---------------|----------|-------------|--------------|-------------|-------------|
| B21-W | <400 | <210 | <210 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 |
| B22-W | <100 | <210 | <210 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| B23-W | <100 | <220 | <220 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| B24-W | <100 | <250 | <250 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Dup(B90-W) | <100 | NA | NA | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| B25-W | <100 | <200 | 400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Dup(B91-W) | NA | <220 | 440 | NA | NA | NA | NA | NA |
| B26-W | <100 | <220 | 250 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| B27-W | <400 | <300 | 410 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 |
| B28-W | <100 | <210 | 230 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| MTCA Method A Cleanup Level | | | | | | | | |
| | 1000 | 500 | 500 | 5 | 1000 | 700 | 1000 | 1000 |

concentration is above Model Toxics Control Act WAC 173-340 (MTCA) Method A Cleanup Level

BOLD indicates analyte detected above laboratory practical quantitation limit

Gasoline cleanup level is presented for the circumstance in which benzene is not detected

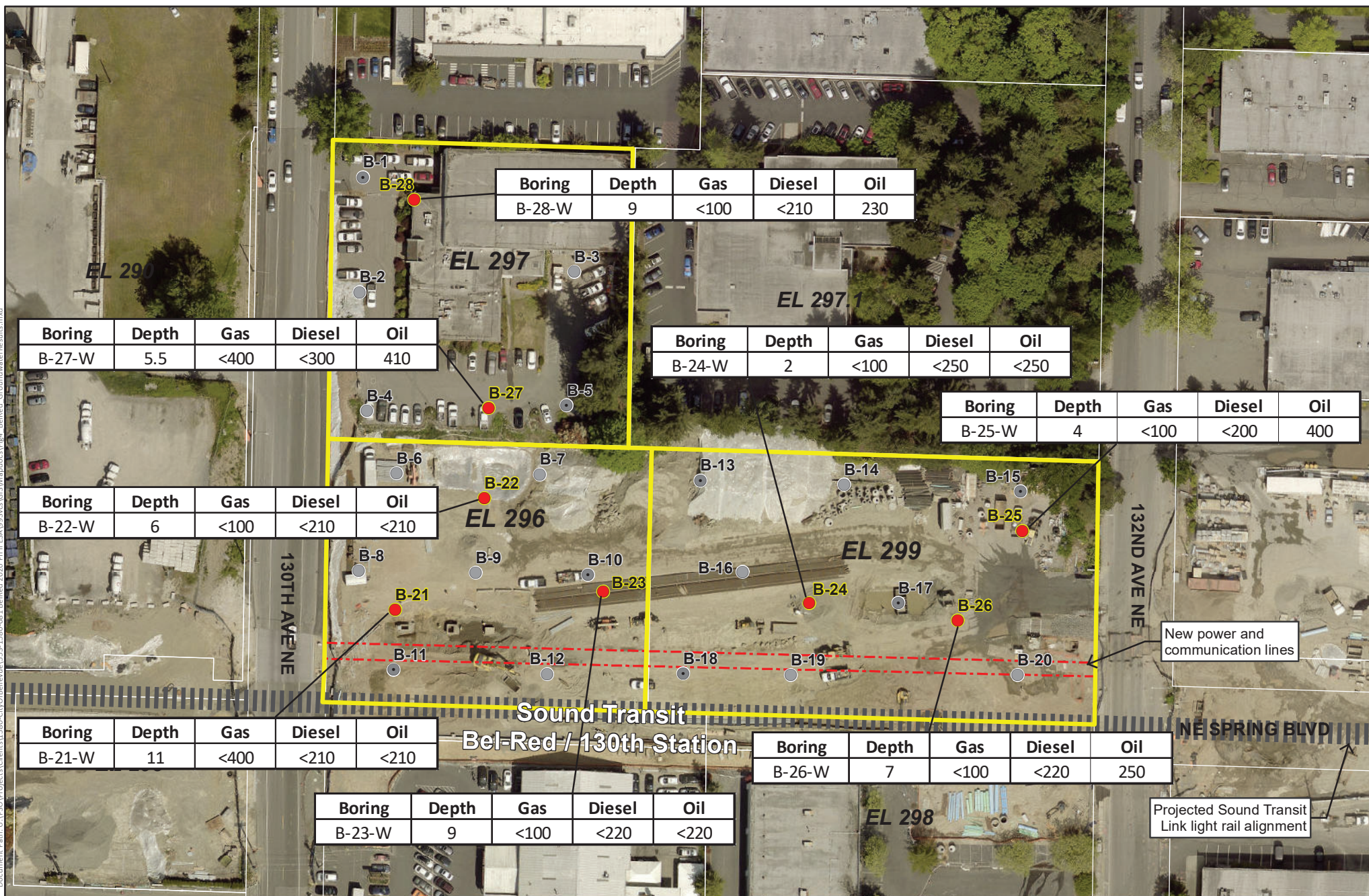
<## indicates analyte not detected at or above given laboratory reporting limit

ug/L - micrograms per liter

TPH - total petroleum hydrocarbons

NA = not analyzed

Document Path: U:\PCO\Projects\1580-CityOfBellevue\553-1550-081 Bel-Red 2020 Ph II ESA\999\GIS\Mapdocs\Final_Bel-Red_GroundwaterResults.mxd



Parametrix



0 25 50 100 Feet

Service Layer Credits: EagleView Technologies

Notes:
Depths are in feet below ground surface
Gas, Diesel, and Oil TPH levels are mg/kg

Parcel Boundary

Soil Boring Location

Previous Locations

Soil Boring

Soil and Groundwater Boring

Figure 4. Groundwater Results Map

Phase II ESA
Bel-Red 2020
Bellevue, WA

3.3 Discussion

The results from eight soil samples and ten groundwater samples collected from eight boreholes across the three subject properties were reported below MTCA Method A CULs for gasoline-, diesel-, and oil-range TPH and BTEX. No gasoline, diesel, or BTEX were detected above laboratory detection limits (Tables 2 and 3 above) (Ecology 2013).

Oil-range TPH was detected in three soil samples and four water samples (plus one duplicate) but below applicable MTCA Method A CULs (Ecology 2013). The results are consistent with the oil-range TPH from multiple sources, including small spills related to Sound Transit use of the property as well as historical releases to the subject property.

3.3.1 Sound Transit Use

Small spills of oil related to Sound Transit equipment were observed throughout the property during the Phase II ESA, appearing as small rainbow sheens on the ground. These are generally *de minimis* conditions affecting the subject properties. The B24-2 soil sample was collected from fill placed onto the subject property by Sound Transit and was found to contain up to 660 mg/kg of oil-range TPH below the MTCA Method A CUL of 2,000 mg/kg. The results generally confirm the small spills related to Sound Transit use to be *de minimis*. However, care should be given when the subject properties are redeveloped to pay attention to potential petroleum hydrocarbons in shallow fill soils. Due to the limited nature of this Phase II ESA, there may be areas in the fill above MTCA Method A CULs.

The groundwater results do not appear to show groundwater impacts related to Sound Transit's use. We observed a street sweeping and water pit on the north side of EL 296. Two boreholes were placed near the pit, B27 to the north, and B22 to the south. At B27, upgradient, oil-range TPH was found at 410 µg/L. At B22, downgradient, oil-range TPH was found below detection levels. This suggests the street sweeping pit was not the source of the oil-range TPH in groundwater.

A vehicle wheel wash pit was observed on the eastern portion of the subject property on EL 299. B25 was placed southeast of the wheel wash pit, and B26 was placed south and downgradient of the wheel wash pit. Soil samples from both locations were non-detect for petroleum hydrocarbons. Groundwater results showed 400 to 440 µg/L of oil-range TPH at B25 and 250 µg/L of oil-range TPH at B26. These results are below the MTCA Method A CUL. As discussed below, the groundwater samples from these locations appear to largely reflect residual impacts related to historical releases prior to Sound Transit's use.

3.3.2 Historical Releases

In 2019, Sound Transit completed excavation of soil in the areas of historical releases (Figure 2). Boreholes placed in the vicinity of these historical releases (B21, B23, B24, B25, B26, and B28) found no soil contamination related to historical releases. Groundwater results were found below MTCA Method A CULs, ranging from below detection levels up to 440 µg/L for oil-range TPH. These results appear to generally show that the excavation of the historical releases completed by Sound Transit was effective.

Due to the limited nature of the Phase II ESA and inability to drill in exact locations of the historical releases, care should be given when the subject properties are redeveloped to evaluate potential for encountering petroleum impacted groundwater. This investigation found concentrations below MTCA Method A CULs, suggesting areas of petroleum impacted groundwater, if any, appear to be minimal and isolated.

4. CONCLUSIONS

Parametrix conducted a Phase II ESA at three properties (EL296, EL297, and EL299) in the 130th Avenue NE area of Bellevue, Washington. Based on the findings of this investigation, Parametrix reached the following conclusions:

1. Parametrix previously completed an environmental review and Phase II ESA of the subject property and identified areas of soil and groundwater contamination.
2. Sound Transit utilized the subject properties from 2018 to 2020 for construction of the Bel-Red/130th Avenue station. Sound Transit completed an excavation of the historical release areas in 2019. However, no post-excavation groundwater analysis was performed.
3. Parametrix completed eight boreholes across the property and sampled soil and groundwater for the purpose of analyzing of Sound Transit's use of the property and confirming the current conditions of the subject properties related to the historical releases.
4. All soil and water samples were found non-detect for target gasoline-range TPH, diesel-range TPH, and BTEX. Oil-range TPH was found below the MTCA Method A CUL in three soil samples and four groundwater samples.
5. These results appear to show *de minimis* impacts to the property related to Sound Transit's use and appear to confirm that areas of historical releases have been properly remediated.
6. Due to the limited nature of the Phase II ESA, there may be isolated impacts to soil and groundwater below the property that could be encountered during redevelopment. However, concentrations are anticipated to be below applicable MTCA Method A CULs based on the results of this Phase II ESA.

5. RECOMMENDATIONS

Based on the conclusions of this investigation, Parametrix offers the following recommendations:

1. If the property is redeveloped, it is recommended that a contaminated media management plan (CMMP) be prepared for the subject properties to guide excavation and construction activities and describe potential contaminants, notification procedures, safety precautions, handling, storage, and sampling of the contaminated materials. In addition, since the depth of groundwater is less than 10 feet bgs, there is potential that contaminated groundwater may be encountered during excavation or trenching activities for subsurface structures. Therefore, the CMMP should be prepared to include handling, management, and disposal of groundwater during construction activities.
2. A restrictive covenant remains for the property, related to the historical soil contamination. The contamination was reported to Ecology to have been removed by Sound Transit. It may be prudent to enter the subject properties into the Ecology Voluntary Cleanup Program or Pollution Liability Insurance Agency (PLIA) Petroleum Technical Assistance Program (PTAP) to determine steps for delisting of the subject properties and removal of the restrictive covenant. Completion of permanent monitoring wells and quarterly groundwater monitoring would likely be required to remove covenants and obtain NFA determinations from either agency with no land use restrictions.

6. REFERENCES

- Ecology (Washington State Department of Ecology). 2013. Model Toxics Control Act Regulation and Statute. Publication No. 94-06. Olympia, WA.
- Ecology. 2016. Guidance for Remediation of Petroleum Contaminated Sites. Toxics Cleanup Program. Publication 10-09-057. Revised 2016. Olympia, WA.
- Innovex. 2019. Restrictive Covenant Compliance Report EL 2990 Journal American. Facility Site ID #2558, 1625 132nd Avenue NE, Bellevue, WA.
- King County. 2020. King County iMAP GIS mapping program. Available at:
<https://www.kingcounty.gov/services/gis/Maps/imap.aspx>.
- NRCS (Natural Resources Conservation Service). 2020. NRCS Web Soil Survey. U.S. Department of Agriculture, Washington, D.C. Available at:
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- Parametrix. 2017. Environmental Analysis of 130th Properties. Prepared for City of Bellevue. July 14, 2017. Bellevue, WA.
- Parametrix. 2018. Phase II Environmental Site Assessment 130th Avenue NE Properties (EL296, EL297, and EL299). Prepared for City of Bellevue. Bellevue, WA.
- Troost, K.G., D.B. Booth, and A.P. Wisher. 2006. Geologic Map of King County, Washington. Scale 1:100,000. University of Washington Department of Earth and Space Sciences and the Pacific Northwest Center for Geologic Mapping Studies. Seattle, WA.

Appendix A

Boring Logs and Photographs



Parametrix

Boring Log

Boring ID:

B-21

Project Name:

Bel-Red 2020 Ph II ESA

Project #:

553-1580-081

Location:

130th Ave NE Bellevue, WA

Drilling Company:

Holt Services

Drilling Method:

Direct Push

Logged by:

MBrady

Checked by:

Sheet 1 of 1

Starting Date:

11/24/20

Ending Date:

Boring Depth:

15

Depth to Water:

~12

| Depth (ft) | Sample Type | Lithologic Symbol | Description/Classification of Materials | Sample | | Boring Diagram | Depth (ft) |
|------------|-------------|-------------------|--|-----------|----------|----------------|------------|
| | | | | Sample ID | Recovery | | |
| 0 | | | Ground Surface | | | | 0 |
| | | | Brown sand and gravel, fill, dry No detections on PID | | 50 | | |
| 5 | | | | | | | 5 |
| | | | | | 70 | | |
| | | | Gray to brown fine sand and gravel, occ. silty, moist | | | | |
| 10 | | | PID 14.5 ppm to 29.8 ppm @ 10-12 ft bgs | B21-11 | | | 10 |
| | | | | | | | |
| | | | Gray-green silty fine sand and gravel, wet No detections on PID | B21-W | 100 | | |
| 15 | | | Bottom @ 15 ft bgs | | | | 15 |
| | | | | | | | |
| 20 | | | | | | | 20 |
| | | | | | | | |
| 25 | | | | | | | 25 |

Parametrix

Parametrix

Boring Log

Boring ID:

B-23

Project Name:

Bel-Red 2020 Ph II ESA

Project #:

553-1580-081

Location:

130th Ave NE Bellevue, WA

Drilling Company:

Holt Services

Drilling Method:

Direct Push

Logged by:

MBrady

Checked by:

Sheet 1 of 1

Starting Date:

11/24/20

Ending Date:

Boring Depth:

15

Depth to Water:

~10

| Depth (ft) | Sample Type | Lithologic Symbol | Description/Classification of Materials | Sample | | Boring Diagram | Depth (ft) |
|------------|-------------|-------------------|---|-----------|----------|----------------|------------|
| | | | | Sample ID | Recovery | | |
| 0 | | | Ground Surface | | | | 0 |
| | | | Gray sand and gravel, fill, dry | | | | |
| | | | Brown fine sand to tan silty sand moist No detections on PID | | 60 | | |
| 5 | | | | | | | 5 |
| | | | Tan to gray silt layers with very fine sand No detections on PID | | 100 | | |
| | | | | B23-9 | | | |
| 10 | ▼ | | Tan fine sand, moist to wet No detections on PID | | | | 10 |
| | | | | | | | |
| | | | Tan silty fine sand with silt layers, wet No detections on PID | B23-W | 100 | | |
| 15 | | | | | | | 15 |
| | | | Bottom @ 15 ft bgs | | | | |
| | | | | | | | |
| 20 | | | | | | | 20 |
| | | | | | | | |
| | | | | | | | |
| 25 | | | | | | | 25 |

Parametrix

Parametrix

Boring Log

Boring ID:

B-24

Project Name:

Bel-Red 2020 Ph II ESA

Project #:

553-1580-081

Location:

130th Ave NE Bellevue, WA

Drilling Company:

Holt Services

Drilling Method:

Direct Push

Logged by:

MBrady

Checked by:

Sheet 1 of 1

Starting Date:

11/24/20

Ending Date:

Boring Depth:

15

Depth to Water:

~8

| Depth (ft) | Sample Type | Lithologic Symbol | Description/Classification of Materials | Sample | | Boring Diagram | Depth (ft) |
|------------|-------------|-------------------|---|----------------|----------|----------------|------------|
| | | | | Sample ID | Recovery | | |
| 0 | | | Ground Surface | B24-2 | 60 | | 0 |
| | | | Gray sand and gravel, fill, dry PID 2.0 ppm to 2.7 ppm at 2 ft bgs | | | | |
| | | | Tan - brown fine to medium silty sand and gravel, moist, PID 0.2 ppm at 5 ft bgs | | | | 5 |
| 5 | | | Tan to gray fine to medium sand with gravel, moist No detections on PID | | 60 | | |
| | ▼ | | Gray to brown fine to medium silty sand, wet No detections on PID | B24-W B90-W | | | 10 |
| 10 | | | Gray silty fine sand with silt layers, wet No detections on PID | | 100 | | |
| | | | Bottom @ 15 ft bgs | | | | 15 |
| | | | | | | | 20 |
| | | | | | | | 25 |

Parametrix

| | | |
|---|---|--|
| Boring ID: B-26 Project Name: Bel-Red 2020 Ph II ESA Project #: 553-1580-081 Location: 130th Ave NE Bellevue, WA | Drilling Company: Holt Services Drilling Method: Direct Push Logged by: MBrady Checked by: | Sheet 1 of 1 Starting Date: 11/24/20 Ending Date: Boring Depth: 15 Depth to Water: ~7 |
|---|---|--|

| Depth (ft) | Sample Type | Lithologic Symbol | Description/Classification of Materials | Sample | | Boring Diagram | Depth (ft) |
|------------|-------------|-------------------|---|-----------|----------|----------------|------------|
| | | | | Sample ID | Recovery | | |
| 0 | | | Ground Surface | | | | 0 |
| | | | Gray sand and gravel, fill, dry No detections on PID | | 40 | | |
| | | | Gravel, push a rock 2-5 ft bgs, | | | | |
| 5 | | | Gray medium sand occ. gravel, fill, moist PID 0.2 ppm at 6.5 to 7 ft bgs | B26-7 | 80 | | 5 |
| | ▼ | | Tan fine silty sand, wet No detections on PID | B26-W | | | |
| 10 | | | | | 100 | | 10 |
| | | | Gray silty fine sand with silt layers, wet No detections on PID | | | | |
| 15 | | | Bottom @ 15 ft bgs | | | | 15 |
| | | | | | | | |
| 20 | | | | | | | 20 |
| | | | | | | | |
| 25 | | | | | | | 25 |