

State of Oregon  
Department of Environmental Quality

Memorandum

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**Date:** July 1, 2024

**To:** West Valley Farmers II, ECSI File #6123

**Through:** Brad Shultz, WR Cleanup Manager and Bruce Scherzinger, WR Cleanup Lead Worker

**From:** Nancy Sawka, Project Manager  
Western Region

**Subject:** West Valley Farmers II, ECSI #6123; Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended No Further Action (CNFA) determination for the West Valley Farmers II, property (the "Site") in Sheridan, Oregon. As discussed in the reports, contaminant concentrations in soil, air and groundwater are below acceptable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 0360; and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A copy of the administrative record index can be found at Your DEQ Online (YDO) at [ordeq.org/ESCI-6123](http://ordeq.org/ESCI-6123).

## 1. BACKGROUND

### Site location (Figure 1)

The Site's location can be described as follows:

- Address: 342 S. Bridge St, Sheridan, Oregon, Yamhill County
- Latitude 45.0963° North, Longitude 123.3955° West
- Yamhill County Tax Map 5635BD Lot 05900.

### Site setting

- Industrial property four blocks south of Highway 18 and just south of the railroad.
- Site size is 1.73 acres.
- Structures on this site include:
  - A 6,214 square foot commercial building (Former Wilco Farm store), parking lot and beyond that the Bridge St. Right-of-Way. Building has concrete slab foundation, exterior metal siding and roofing and large roll up doors on the west end where there is a warehouse.

- Near the center of the property is an area used for storing supplies and equipment. Prior to this use, the area was the former location of a grain elevator.
- On the west end of the property is a warehouse building (6,000 square foot).
- Adjacent properties are primarily Commercial and Light Industrial with Residential uses only to the south
  - North - Northern Pacific Railroad then two Public Facilities (PF) zoned properties. (Sheridan Fire District and Sheridan City Hall).
  - West – Un-zoned lot (Rail-Road property) then an Industrial (I) lot then SW Mill St.
  - East – Bridge Street and then Commercial zoned uses (Sheridan Building Materials and NAPA Auto Supply).
  - South – Railroad Street and then Primarily Residential use with Commercial zoned properties on the east end of the block along Bridge St.
- Land use zoning for the subject property is Industrial (I).

### **Physical setting**

- The SE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of Section 35, Township 5 South, Range 6 West, Yamhill County Tax Lot 05900.
- Depth to groundwater is approximately 10 to 13 feet bgs.
- The site is 196 feet above mean sea level.
- Groundwater flow direction in the shallow aquifer is typically to the north-northeast.
- The local topography is generally level, with a gentle regional slope to the east.
- BB&A reports the geology of the area consists of Holocene age alluvial deposits from the South Yamhill River ranging from zero to 50 feet bgs. The alluvium appears to be underlain by middle to upper Eocene age shale, siltstone and basaltic sandstone of the Yamhill Formation which can be over 1,000 feet thick in the site vicinity. Groundwater was first encountered within sandy, gravel alluvium at about 13 feet bgs during subsurface investigations at the site. The top of a competent shale unit was encountered between 6 to 18 feet beneath the site.

### **Site history**

- The Site was historically occupied by a Wilco Farm store until 2004.
- Between 2007 and 2013 the main building was used by Dura Lite Rock, Inc. for manufacturing of fiberglass and concrete fireplace hearths.
- The area west of the former Wilco store was used for grain, equipment and merchandise storage until 2014.
- The westernmost portion of the Site includes a 6,000 square foot warehouse building that was used for feed and some chemical storage.
- Beyond the warehouse, on the adjacent property to the west is a vacant lot that contains four above-ground storage tank (AST) pads and a closed building that appears to have been used for petroleum distribution on a bulk-fuel scale. This property is currently in the voluntary cleanup program and being investigated for petroleum contamination under ECSI 6259 (UPRR – Sheridan).

- The property immediately to the north is owned and operated by Union Pacific Railroad (aka locally as Norther Pacific Railroad).
- Beyond the railroad to the north is the Sheridan Fire Department and Yamhill County Sheriff Office.
- South of the site is the SW Railroad Street ROW. Properties beyond this are residential.

## **2. BENEFICIAL LAND AND WATER USE DETERMINATIONS**

### **Land use**

The current and reasonably likely future zoning is Industrial (I).

### **Groundwater use**

- There are no current or reasonably likely future beneficial uses of groundwater within the area of contamination.
- City water is obtained from springs on “Stoney Mountain” and from the South Yamhill River, which is treated and provided to users within the City of Sheridan.
- All properties within 400 feet of the Site are connected to the municipal water supply.

### **Surface Water and Storm Water**

- The South Yamhill River flows easterly through Sheridan about 850 feet north of the Site.
- Storm-water is collected along Bridge and Morgan Streets. After collection, the storm-water system flows north toward the South Yamhill River.
- On-site storm-water that does not make it into the storm-water system is infiltrates into the ground or migrates as run-off onto neighboring properties.

## **3. INVESTIGATION AND CLEANUP WORK**

### **Investigations**

BB&A conducted a Phase I Environmental Site Assessment (ESA) at the property in May 2015 at the request of Wilco Cooperative. Based on multiple Recognized Environmental Conditions (RECs) identified in the Phase I ESA, BB&A conducted a Phase II ESA between May 18 and August 3, 2015. Eleven temporary borings (P-1 to P-11) were installed during this time to investigate soil and groundwater conditions in areas of the identified RECs (Figures 2 and 3). Constituents of Interest (COIs) included total petroleum hydrocarbons (gasoline, diesel and heavy oil range petroleum hydrocarbons), volatile organic hydrocarbons (VOCs), polynuclear aromatic hydrocarbons (PAHs) and pesticides. COIs detected included carbon tetrachloride (CTC), chloroform and 1,2-dichloroethane (EDC) in groundwater collected from P-5, 7, 8 and 9 and EDC in P-10 and P-11 located in the area of a former grain elevator and a former liquid fertilizer AST. Soil samples were not collected from these borings. The highest concentrations were detected in groundwater from P-5 with CTC of 18,000 microgram per liter (ug/L), Chloroform at 1,350 ug/L and EDC at 2,300 ug/L. The contamination exceeded DEQs generic risk-based concentrations (RBCs) available at the time for Groundwater in an Excavation,

Occupational Vapor Intrusion into Buildings, and Occupational Volatilization to Outdoor Air. CTC and EDC have historically been used as grain fumigants and were possibly historically stored and used at the Site. Chloroform is a breakdown, daughter product of CTC. Table 1 summarizes the groundwater data.

Petroleum contamination was identified on the west end of the property in soil and groundwater from P-1 and P-2. No on-site source of the petroleum contamination had been recognized and DEQ had no records of petroleum underground storage tanks ever being installed or operated on the property. DEQ pursued the property to the west, which contained four cement pads typically used for AST foundations. Union Pacific Railroad was identified as a responsible party for this property and has since been actively conducting investigations to confirm the petroleum source and to determine the nature and extent of that contamination. This property is listed as UPRR-Sheridan, ECSI #6259.

In November 2015, BB&A conducted a *Remedial Design Characterization* investigation to further define the vertical and horizontal extent of CTC, chloroform and EDC contamination in soil and groundwater of the former grain storage area. The information gained from this investigation was used to develop a remedial design plan using injections of BOS100®<sup>1</sup> into the subsurface of the source area. Ten borings (P-12 to P-22) were installed and sampled. Locations of the borings are shown in Figure 4. Borings P12, 15 and 16 were installed north of the source area along the property boundary P14, 17 and 19 were installed within the footprint of the former grain elevator, P18 was installed near P5 in the source area of highest contamination; P13 was installed downgradient to the northwest of P18 and P5; P20 was installed near former boring P7 and P21 and 22 were installed in an upgradient location, south of the source area. Significant concentrations of contaminants were detected in soil at 17 feet bgs in groundwater from P-18, located near former boring P-5, the area of highest contamination. CTC, chloroform and EDC were detected at 5.76 milligram per kilogram (mg/kg), 10.6 mg/kg and 9.3 mg/kg, respectively, in soil and at 1,520,000 ug/L, 10,900 ug/L and 25,000 ug/L, respectively, in groundwater. The second highest concentrations were detected in the groundwater of downgradient boring P-13 with CTC at 65,000 ug/L, chloroform at 3,190 ug/L and EDC at 8,850 ug/L. Little to no contamination was detected in the soil from P13 or any of the other borings. Soil contamination appeared to be limited to the source area around P5/P18.

Four of the borings, P13, P16, P21 and P22, were completed as monitoring wells MW1, MW2, MW3 and MW4, respectively. The highest levels of contamination detected in the monitoring wells was found in groundwater from MW-1 which was installed in boring P-13 and downgradient from the source area around P-18. CTC, Chloroform and EDC were detected at 65,500 ug/L, 3,190 ug/L and 8,850, respectively. Contamination detected in groundwater from MW1, 2 and MW3 exceeded DEQ's generic RBCs for Groundwater in an Excavation,

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<sup>1</sup> BOS100 is a specialized catalyst manufactured by Remediation Products, Inc. (RPI), designed for rapid degradation of chlorinated solvents (e.g., carbon tetrachloride); utilizing activated carbon to bind the contaminant immediately upon contact, and extremely large zero-valent iron to act as an electron donor for progressive dechlorination.

Occupational Vapor Intrusion into Buildings, and Occupational Volatilization to Outdoor Air. Soil and groundwater monitoring well data are summarized in Tables 2 and 3, respectively.

### **Cleanup Work**

B&A completed initial injections of BOS100® in February 2016. Approximately 4,910 pounds of BOS100® and 10,475 gallons of water was injected as a slurry at 87 injection points, between depths of 10 and 18 feet bgs at 1 to 2-foot intervals.

Four consecutive quarterly monitoring events were conducted between April 2016 and January 2017 to evaluate the effectiveness of the BOS100® injections. The results, shown in Table 3, demonstrated a significant decrease in concentrations of CTC, chloroform and EDC in groundwater since the initial injections in February 2016. In July 2019 three confirmation borings, P21, P22 and P23, were installed around the main source areas by former borings P5/P18, P7 and P13/MW1. Two borings, P21 and P25, were installed downgradient from the Site on the Sheridan Fire District property to the north to examine the extent of remaining groundwater contamination following the injections. The groundwater results from the borings shown in Table 4 indicated that significant levels of CTC, Chloroform and EDC still remained around P5/P18 source area in P23.

Follow-up injections of BOS100® focusing on the remaining contamination in the source area around former P5/P18 and confirmation boring P23 were completed in July 2019. Approximately 850 pounds of BOS100® and 750 gallons of water was injected as a slurry into 15 injection points at alternating depths (1 to 2-foot intervals) between of 10 and 18 feet bgs. In August 2019, BB&A installed two confirmation borings (P26 and 27) around the P5/P18/P23 source area. Soil and groundwater samples were collected from each boring. Chloroform in soil from boring P27 at 2 to 3 feet bgs exceeded the Occupational Vapor Intrusion into buildings RBC. Soil from 15 feet bgs was located in the saturated zone and was not compared to the soil RBC. Groundwater concentrations appeared to be reduced to below applicable RBCs. Results are summarized in Table 5 and 6.

BB&A conducted excavation and removal of shallow soil in July 2020 to address the remaining soil contamination above the Occupational Vapor Intrusion RBC. A 10x10 foot area was removed around P27 to a depth of 4 feet bgs. BB&A collected four confirmation soil samples along the sidewall and four from the floor of the open excavation. All samples were below the Occupational Vapor Intrusion RBCs except for the NE floor sample which was slightly above the RBC of 0.41 mg/kg for chloroform with a concentration of 0.517 mg/kg. At the suggestion of DEQ and after leaving the excavation open for several days, BB&A collected additional samples adjacent to and below the former NE floor sample location. All samples were non-detect for chloroform indicating that the open excavation promoted further reduction of chloroform by volatilization to the open air. Confirmation soil sample results from the excavation are shown in Tables 7 and 8.

BB&A submitted a final report of the cleanup activities to DEQ in August 2020 with a request for a No Further Action determination. In an e-mail to the responsible party and BB&A dated

November 5, 2021, DEQ approved the final report and agreed the site was ready for closure and no further investigation or cleanup was required.

#### **Nature and extent of remaining contamination**

Contaminants of concern include CTC, Chloroform and EDC in soil and groundwater near the center of the property and the former grain elevator. Petroleum contamination was identified on the westernmost end of the property and has been attributed to off-site petroleum storage on the neighboring property owned by Union Pacific Railroad. This contamination is being addressed by UPRR under ECSI #6259. None of the petroleum contamination detected on the Site exceeded applicable RBCs.

The COCs in shallow soil appear to have been remediated through the BOS100® injections and subsequent excavation/removal work. Little to no contaminated soil remains in the vadose zone soils above the groundwater table.

Groundwater was first encountered in borings at around 13 feet bgs. Depth to groundwater at the Site as measured in the monitoring wells ranged between 4.72 and 7.12 feet bgs over the course of the investigations. Concentrations of COCs in groundwater have been significantly reduced through the BOS100® injections. Remaining contamination is shown in Figure 4. The highest level of remaining contamination appears to be located around the source area near P27 and P26. This contamination significantly reduces outside of this area. Some low-level contamination remains offsite to the north in P21 and P25 and to the south in P11. Based on reports by BB&A and indicator chemicals, the BOS100® is continuing to be effective and contamination is expected to continue to breakdown over time.

#### **4. HUMAN HEALTH AND ECOLOGICAL RISK EVALUATION**

The Site and surrounding area within the remaining contamination is zoned for industrial and public service use. The complete exposure pathways as summarized in the Table below and include exposure by occupational workers to contaminants in outdoor and indoor air and potential construction and excavations worker exposure to contaminated soil or groundwater during excavation work below 3 feet bgs.

##### **RISK EVALUATION Applicable Pathways and Receptors**

| <b>Pathway</b>                            | <b>Receptor</b>   | <b>Is Pathway<br/>Applicable/Complete?</b> | <b>Basis for<br/>selection/exclusion</b> |
|-------------------------------------------|-------------------|--------------------------------------------|------------------------------------------|
| <b>SOIL</b>                               |                   |                                            |                                          |
| Ingestion, dermal contact, and inhalation | Residential       | No                                         | See Note 1.                              |
|                                           | Urban residential | No                                         |                                          |
|                                           | Occupational      | No                                         |                                          |

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| Pathway                                 | Receptor                           | Is Pathway Applicable/Complete? | Basis for selection/exclusion |
|-----------------------------------------|------------------------------------|---------------------------------|-------------------------------|
|                                         | Construction worker                | Yes                             |                               |
|                                         | Excavation worker                  | Yes                             |                               |
| Volatilization to outdoor air           | Residential                        | No                              | See Note 2.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | Yes                             |                               |
| Vapor intrusion into buildings          | Residential                        | No                              | See Note 2.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | Yes                             |                               |
| Leaching to groundwater                 | Residential                        | No                              | See Note 3.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | No                              |                               |
| GROUNDWATER                             |                                    |                                 |                               |
| Ingestion and inhalation from tap water | Residential                        | No                              | See Note 4.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | No                              |                               |
| Volatilization to outdoor air           | Residential                        | No                              | See Note 1.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | Yes                             |                               |
| Vapor intrusion into buildings          | Residential                        | No                              | See Note 1.                   |
|                                         | Urban residential                  | No                              |                               |
|                                         | Occupational                       | Yes                             |                               |
| Groundwater in excavation               | Construction and excavation worker | Yes                             |                               |

### Notes:

1. This pathway is only applicable to residential and occupational receptors if soil contamination is above 3 feet bgs. There is no soil contamination remaining above this depth.
2. The site is zoned for industrial use and is located along the railroad tracks.
3. Groundwater is not used for drinking within the area of contamination. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's RBDM guidance.
4. City water is provided. Groundwater on the site is not currently used for drinking water and future use of groundwater on the site is not expected.

### Contaminant Concentrations and Human health risk.

None of the remaining contamination in groundwater or soil exceeds the applicable RBCs for the on and off Site current and reasonably likely land or water uses.

### Ecological risk.

During the site assessment there were no indications that screening for ecological risks is necessary. Impacted soils are only present at a depth greater than three feet bgs. There is no surface water at the Site and the nearest surface water body is the south Yamhill River, which is located approximately 870 feet down-gradient (north) of the contaminated area. It does not appear reasonably likely that impacted groundwater will discharge to surface waters or come into contact with aquatic sediments. Due to the nature of the land use the property and surrounding

area it is unlikely that significant habitat is present or will develop. Therefore, no ecological risks were found to be associated with this Site.

## **5. PUBLIC NOTICE**

A 30-day public notice and opportunity to comment on the proposed site closure will be sent to adjacent and impacted properties, the City of Sheridan and interested parties. DEQ will consider and respond to all viable comments before issuing a No Further Action determination.

## **6. RECOMMENDATION**

Based on the soil and groundwater data, the remaining contamination does not pose a threat to human health or the environment under the current and reasonably like future uses of the Site and surrounding properties. The Site meets the general requirements for a risk-based closure and it is recommended that no further investigation or cleanup be required. The No Further Action determination should be recorded in DEQ's ECSI database (ECSI # 6123).



## TABLES

**Table 1 – Phase II ESA Groundwater Data August 2015**

| <b>Table 7: Groundwater Analytical Results (Pesticides/Herbicides and Other VOCs)</b><br>342 S. Bridge Street, Sheridan, OR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |                                |                      |            |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------|----------------------|------------|----------|
| UNITS: All concentrations in micrograms per Liter (µg/L), or parts per billion (ppb).<br>ND<0.05) Indicates contaminant was not detected above method-reporting limit.<br>NS: No standard<br>>S: This groundwater RBC exceeds the solubility limit. Groundwater concentrations in excess of solubility limit may potentially indicate the presence of free product.<br>RBCs = Occupational Risk-Based Concentration (RBC) for applicable exposure pathways including vapor intrusion into buildings (RBC <sub>wi</sub> ), volatilization to outdoor air (RBC <sub>wo</sub> ), and excavation worker (RBC <sub>we</sub> ). |                       |                                |                      |            |          |
| Sample Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Pesticides (EPA 8081) | Chlorinated Herbicides (8151A) | Carbon tetrachloride | Chloroform | EDC      |
| P1-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All ND                | All ND                         | ND<0.500             | ND<1.00    | 4.49     |
| P2-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                |                      |            |          |
| P3-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All ND                | All ND                         | ND<0.500             | ND<1.00    | ND<0.500 |
| P4-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | ND<0.500             | ND<1.00    | ND<0.500 |
| P5-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | 18,000               | 1,350      | 2,300    |
| P6-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | ND<0.500             | ND<1.00    | ND<0.500 |
| P7-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | 71.1                 | 9.86       | 11.1     |
| P8-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | 321                  | 117        | 134      |
| P9-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |                                | 52.6                 | 134        | 623      |
| P10-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                                | ND<0.500             | ND<1.00    | 1.41     |
| P11-GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                                | ND<5.0               | ND<10      | 499      |
| RBC <sub>wo</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Varies                | Varies                         | 5,400                | 5,500      | 9,500    |
| RBC <sub>wi</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Varies                | Varies                         | 790                  | 1,200      | 3,800    |
| RBC <sub>we</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Varies                | Varies                         | 1,700                | 720        | 630      |

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**Table 2 - Soil Data November 2, 2015 (mg/Kg)**

| Boring ID                                               | Depth               | Chloroform | Carbon<br>Tetrachloride | 1,2-Dichloroethane | Trichloroethene | Tetrachloroethene |
|---------------------------------------------------------|---------------------|------------|-------------------------|--------------------|-----------------|-------------------|
| P12                                                     | 2'                  | 0.0060     | 0.0061                  | 0.0038             | ND (0.0005)     | 0.00177           |
|                                                         | 4'                  | 0.0020     | 0.0047                  | 0.0008             | 0.0102          | 0.00154           |
|                                                         | 6'                  | 0.0055     | 0.0080                  | 0.0037             | 0.0051          | ND (0.0005)       |
|                                                         | 8'                  | 0.0020     | 0.0014                  | 0.0038             | 0.0158          | ND (0.0005)       |
|                                                         | 10'                 | 0.0026     | 0.0100                  | 0.0009             | 0.0020          | 0.00197           |
|                                                         | 12'                 | 0.0032     | 0.0110                  | 0.0012             | 0.0011          | 0.0024            |
|                                                         | 14'                 | 0.0031     | 0.0139                  | 0.0060             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 16'                 | 0.1640     | 0.0082                  | 0.0355             | ND (0.0005)     | ND (0.0005)       |
| P13                                                     | 18'                 | 0.2700     | 0.0055                  | 0.0490             | 0.0049          | ND (0.0005)       |
|                                                         | 2'                  | 0.0218     | 0.0250                  | 0.0081             | 0.0048          | ND (0.0005)       |
|                                                         | 4'                  | 0.0027     | 0.0027                  | 0.0027             | 0.0011          | ND (0.0005)       |
|                                                         | 6'                  | 0.0453     | 0.0021                  | 0.0033             | 0.0021          | ND (0.0005)       |
|                                                         | 8'                  | 0.0044     | 0.0048                  | 0.0033             | 0.0043          | ND (0.0005)       |
|                                                         | 10'                 | 0.0049     | 0.0214                  | 0.0041             | 0.0021          | ND (0.0005)       |
|                                                         | 12'                 | 0.0041     | 0.0048                  | 0.0019             | 0.0034          | ND (0.0005)       |
|                                                         | 14'                 | 0.0026     | 0.0048                  | 0.0174             | 0.0022          | ND (0.0005)       |
| Risk-Based Concentrations for Non-Residential Scenarios | 16'                 | 0.0034     | 0.0838                  | 0.0047             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 17'                 | 0.0289     | 0.0014                  | 0.1460             | 0.0236          | ND (0.0005)       |
| Risk-Based Concentrations for Non-Residential Scenarios |                     |            |                         |                    |                 |                   |
| Soil Ingestion, Dermal<br>Contact, & Inhalation         | Occupational        | 26         | 34                      | 16                 | 51              | 1,000             |
|                                                         | Construction Worker | 410        | 320                     | 200                | 470             | 1,800             |
|                                                         | Excavation Worker   | 11,000     | 8,900                   | 5,600              | 13,000          | 50,000            |
| Occupational Volatilization to Outdoor Air              |                     | 17         | 65                      | 15                 | 96              | >Csat             |
| Occupational Vapor Intrusion into Buildings             |                     | 0.41       | 1.6                     | 1                  | 2.3             | 36                |

| Boring ID                                               | Depth               | Chloroform  | Carbon<br>Tetrachloride | 1,2-Dichloroethane | Trichloroethene | Tetrachloroethene |
|---------------------------------------------------------|---------------------|-------------|-------------------------|--------------------|-----------------|-------------------|
| P14                                                     | 2'                  | 0.00629     | ND (0.0005)             | 0.00175            | ND (0.0005)     | ND (0.0005)       |
|                                                         | 4'                  | 0.00821     | 0.0225                  | 0.0026             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 6'                  | 0.00542     | 0.0131                  | 0.0018             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 8'                  | 0.00423     | 0.0118                  | 0.0013             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 10'                 | 0.00742     | 0.00893                 | 0.00275            | ND (0.0005)     | ND (0.0005)       |
|                                                         | 12'                 | 0.00232     | ND (0.0005)             | ND (0.0005)        | ND (0.0005)     | ND (0.0005)       |
|                                                         | 14'                 | ND (0.0005) | 0.00432                 | 0.0079             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 16'                 | 0.0312      | 0.0118                  | 0.046              | ND (0.0005)     | ND (0.0005)       |
| P15                                                     | 17'                 | 0.0532      | 0.0676                  | 0.677              | ND (0.0005)     | ND (0.0005)       |
|                                                         | 4'                  | 0.0058      | 0.0128                  | 0.0042             | ND (0.0005)     | ND (0.0005)       |
| P15                                                     | 6'                  | 0.0052      | 0.0088                  | 0.0032             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 8'                  | 0.0042      | 0.0076                  | 0.0050             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 10'                 | 0.0036      | 0.0050                  | 0.0025             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 12'                 | 0.0023      | 0.0292                  | 0.0017             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 14'                 | 0.0052      | 0.0281                  | 0.0064             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 16'                 | 0.0426      | 0.0238                  | 0.139              | ND (0.0005)     | ND (0.0005)       |
| P16                                                     | 2'                  | 0.0178      | 0.0213                  | 0.0039             | 0.0027          | ND (0.0005)       |
|                                                         | 4'                  | 0.0068      | 0.0078                  | 0.0015             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 6'                  | 0.0087      | 0.0104                  | 0.0027             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 8'                  | 0.0036      | 0.0023                  | 0.0022             | 0.0099          | ND (0.0005)       |
|                                                         | 10'                 | 0.0064      | 0.0050                  | 0.0035             | 0.0038          | ND (0.0005)       |
|                                                         | 12'                 | 0.0028      | 0.0020                  | 0.0011             | 0.0044          | ND (0.0005)       |
|                                                         | 14'                 | ND (0.0005) | ND (0.0005)             | 0.0005             | 0.0024          | ND (0.0005)       |
|                                                         | 16.5'               | 0.00879     | ND (0.0005)             | 0.0027             | ND (0.0005)     | ND (0.0005)       |
| Risk-Based Concentrations for Non-Residential Scenarios |                     |             |                         |                    |                 |                   |
| Soil Ingestion, Dermal<br>Contact, & Inhalation         | Occupational        | 26          | 34                      | 16                 | 51              | 1,000             |
|                                                         | Construction Worker | 410         | 320                     | 200                | 470             | 1,800             |
|                                                         | Excavation Worker   | 11,000      | 8,900                   | 5,600              | 13,000          | 50,000            |
| Occupational Volatilization to Outdoor Air              |                     | 17          | 65                      | 15                 | 96              | >Csat             |
| Occupational Vapor Intrusion into Buildings             |                     | 0.41        | 1.6                     | 1                  | 2.3             | 36                |

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| Boring ID                                               | Depth               | Chloroform | Carbon<br>Tetrachloride | 1,2-Dichloroethane | Trichloroethene | Tetrachloroethene |
|---------------------------------------------------------|---------------------|------------|-------------------------|--------------------|-----------------|-------------------|
| P17                                                     | 2'                  | 0.0088     | 0.00772                 | 0.0041             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 4'                  | 0.0175     | 0.0094                  | 0.013              | ND (0.0005)     | ND (0.0005)       |
|                                                         | 8'                  | 0.0069     | 0.0075                  | 0.0049             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 12'                 | 0.00236    | 0.0006                  | 0.0035             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 14'                 | 0.0021     | 0.003                   | 0.0008             | 0.0010          | ND (0.0005)       |
|                                                         | 16.5'               | 0.0586     | 0.029                   | 0.0264             | 0.0135          | ND (0.0005)       |
| P18                                                     | 2'                  | 0.161      | 0.0997                  | ND (0.5)           | ND (0.0005)     | ND (0.0005)       |
|                                                         | 4'                  | 0.0123     | 0.0096                  | 0.0654             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 6'                  | 0.0194     | 0.0182                  | 0.0525             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 8'                  | 0.0251     | 0.0260                  | 0.0505             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 10'                 | 0.0256     | 0.5130                  | 0.0255             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 12'                 | 0.0441     | 0.0616                  | 0.0297             | ND (0.0005)     | ND (0.0005)       |
|                                                         | 14'                 | 0.169      | 0.0057                  | 1.11               | ND (0.010)      | ND (0.0005)       |
|                                                         | 16'                 | 1.24       | 0.1660                  | 0.382              | ND (0.010)      | 0.0124            |
|                                                         | 17'                 | 5.76       | 10.6                    | 9.3                | ND (0.010)      | 0.617             |
| P19                                                     | 3'                  | 0.00313    | 0.00152                 | 0.00332            | ND (0.0005)     | ND (0.0005)       |
|                                                         | 5'                  | 0.001      | 0.00143                 | ND (0.0005)        | ND (0.0005)     | ND (0.0005)       |
|                                                         | 7.5'                | 0.00171    | 0.00201                 | ND (0.0005)        | ND (0.0005)     | ND (0.0005)       |
|                                                         | 10'                 | 0.00238    | 0.00203                 | 0.00083            | ND (0.0005)     | ND (0.0005)       |
|                                                         | 13'                 | 0.00249    | 0.00507                 | 0.00119            | ND (0.0005)     | ND (0.0005)       |
|                                                         | 15'                 | 0.00099    | 0.0005                  | 0.0029             | 0.0027          | ND (0.0005)       |
|                                                         | 17'                 | 0.0112     | ND (0.0005)             | 0.159              | ND (0.0005)     | ND (0.0005)       |
| Risk-Based Concentrations for Non-Residential Scenarios |                     |            |                         |                    |                 |                   |
| Soil Ingestion, Dermal<br>Contact, & Inhalation         | Occupational        | 26         | 34                      | 16                 | 51              | 1,000             |
|                                                         | Construction Worker | 410        | 320                     | 200                | 470             | 1,800             |
|                                                         | Excavation Worker   | 11,000     | 8,900                   | 5,600              | 13,000          | 50,000            |
| Occupational Volatilization to Outdoor Air              |                     | 17         | 65                      | 15                 | 96              | >Csat             |
| Occupational Vapor Intrusion into Buildings             |                     | 0.41       | 1.6                     | 1                  | 2.3             | 36                |

# West Valley Farmers II

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## Table 3 – Monitoring Well Data

| Pre- and Post Injection Groundwater Analytical Results                                                                                                                                                                                                                                                                                                              |                |                      |            |       |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------|------------|-------|------------------|
| 342 S. Bridge Street, Sheridan, OR                                                                                                                                                                                                                                                                                                                                  |                |                      |            |       |                  |
| UNITS: All concentrations in micrograms per Liter (µg/L), or parts per billion (ppb).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated.<br>RPI: (Remediation Products Inc.) in Denver, Colorado.<br>Highlighted concentrations indicate value exceeding one or more of reasonably applicable risk-based concentrations (RBCs). |                |                      |            |       |                  |
| Sample Location                                                                                                                                                                                                                                                                                                                                                     | Sampling Date  | Carbon Tetrachloride | Chloroform | EDC   | Methane (by RPI) |
| MW1                                                                                                                                                                                                                                                                                                                                                                 | 11/02/15 (RPI) | 65,500               | 3,190      | 8,850 | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 2/25/16 (RPI)  | 291                  | 690        | 128   | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 4/11/16        | 299                  | 860        | 137   | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 7/06/16        | 684                  | 887        | 169   | 34.3             |
|                                                                                                                                                                                                                                                                                                                                                                     | 10/05/16       | 91.6                 | 392        | 115   | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 01/16/17       | 73.9                 | 294        | 24.4  | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 05/16/19       | 14.5                 | 75.3       | 9.16  | ND (<20)         |
| MW2                                                                                                                                                                                                                                                                                                                                                                 | 11/02/15 (RPI) | 3.74                 | 2.28       | 650 E | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 2/25/16 (RPI)  | ND (<0.5)            | 0.84       | 2.84  | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 4/11/16        | ND (<1.0)            | 0.52       | 5.12  | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 7/06/16        | ND (<1.0)            | ND (<1.0)  | 13.2  | 59               |
|                                                                                                                                                                                                                                                                                                                                                                     | 10/05/16       | ND (<1.0)            | ND (<1.0)  | 12.1  | 63.1             |
|                                                                                                                                                                                                                                                                                                                                                                     | 01/16/17       | ND (<1.0)            | ND (<1.0)  | 9.84  | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 05/16/19       | ND (<1.0)            | ND (<1.0)  | 6.05  | 93.5             |
| Groundwater in an Excavation                                                                                                                                                                                                                                                                                                                                        |                | 1,800                | 720        | 630   | Degradation      |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                                                                                         |                | 1,200                | 1,600      | 3,900 | Product          |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                                                                                          |                | 7,700                | 6,300      | 9,000 | (No RBC)         |

| Pre- and Post Injection Groundwater Analytical Results                                                                                                                                                                                                                                                                                                              |                |                      |             |             |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------|-------------|-------------|------------------|
| 342 S. Bridge Street, Sheridan, OR                                                                                                                                                                                                                                                                                                                                  |                |                      |             |             |                  |
| UNITS: All concentrations in micrograms per Liter (µg/L), or parts per billion (ppb).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated.<br>RPI: (Remediation Products Inc.) in Denver, Colorado.<br>Highlighted concentrations indicate value exceeding one or more of reasonably applicable risk-based concentrations (RBCs). |                |                      |             |             |                  |
| Sample Location                                                                                                                                                                                                                                                                                                                                                     | Sampling Date  | Carbon Tetrachloride | Chloroform  | EDC         | Methane (by RPI) |
| MW3                                                                                                                                                                                                                                                                                                                                                                 | 11/02/15 (RPI) | 105                  | 169         | 674 E       | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 2/25/16 (RPI)  | ND (<0.5)            | 22.3        | 19.4        | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 4/11/16        | ND (<1.0)            | 17.1        | 13.3        | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 7/06/16        | ND (<1.0)            | 14.3        | 9.09        | 17.1             |
|                                                                                                                                                                                                                                                                                                                                                                     | 10/05/16       | ND (<1.0)            | 4.41        | 8.48        | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 01/16/17       | ND (<1.0)            | 1.96        | 9.80        | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 05/16/19       | ND (<1.0)            | ND (<1.0)   | 8.28        | 102              |
| MW4                                                                                                                                                                                                                                                                                                                                                                 | 11/02/15 (RPI) | ND (<0.5)            | 1.19        | 146         | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 2/25/16 (RPI)  | Not Sampled          | Not Sampled | Not Sampled | no analysis      |
|                                                                                                                                                                                                                                                                                                                                                                     | 4/11/16        | ND (<1.0)            | ND (<0.5)   | 1.42        | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 7/06/16        | ND (<1.0)            | ND (<1.0)   | 1.94        | 38.1             |
|                                                                                                                                                                                                                                                                                                                                                                     | 10/05/16       | ND (<1.0)            | ND (<1.0)   | 3.31        | 50.2             |
|                                                                                                                                                                                                                                                                                                                                                                     | 01/16/17       | ND (<1.0)            | ND (<1.0)   | 4.62        | ND (<1.0)        |
|                                                                                                                                                                                                                                                                                                                                                                     | 05/16/19       | ND (<1.0)            | ND (<1.0)   | 4.05        | 118              |
| Groundwater in an Excavation                                                                                                                                                                                                                                                                                                                                        |                | 1,800                | 720         | 630         | Degradation      |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                                                                                         |                | 1,200                | 1,600       | 3,900       | Product          |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                                                                                          |                | 7,700                | 6,300       | 9,000       | (No RBC)         |

Red Font in Table – denotes presence of methane indicating degradation is occurring.

**Table 4 – Post-injection Confirmation Groundwater Samples May 2019**

| <b>Table 4: Confirmation Groundwater Analytical Results - May 16, 2019</b><br>342 S. Bridge Street, Sheridan, OR<br><br>UNITS: All concentrations in micrograms per Liter (µg/L), or parts per billion (ppb).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated.<br>RPI: (Remediation Products Inc.) in Denver, Colorado.<br>Highlighted concentrations indicate value exceeding one or more of reasonably applicable risk-based concentrations (RBCs).<br>** Indicates analytical result prior to injection treatment. Shown for Pre- and Post-Treatment Comparison. |                      |            |           |                          |                       |                |                       |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|--------------------------|-----------------------|----------------|-----------------------|------------------|
| Sample Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Carbon Tetrachloride | Chloroform | EDC       | Tetrachloro-ethene (PCE) | 1,1,2-Trichloroethane | Vinyl Chloride | Bromodichloro-methane | Methane (by RPI) |
| P21 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1.26                 | ND (<1.0)  | 14.8      | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | 30.9             |
| MW1 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 14.5                 | 75.3       | 9.16      | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | ND (<20)         |
| P22 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ND (<1.0)            | ND (<1.0)  | 24.7      | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | 152              |
| **P18 - GW (11/02/15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1,520,000            | 10,900     | 501       | ND (<500)                | Not analyzed          | Not analyzed   | Not analyzed          | Not Analyzed     |
| P23 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 25,100               | 4,090      | 5,930     | 0.443                    | 0.561                 | 3.87           | 7.88                  | 42.7             |
| P23D - GW (duplicate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 24,400               | 5,830      | 6,490     | ND (<0.4)                | ND (0.4)              | 2.39           | 6.25                  | Not analyzed     |
| **P7 - GW (6/12/15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 71.1                 | 9.96       | 11.1      | ND (<0.5)                | ND (<0.5)             | ND (<0.5)      | ND (<1.0)             | Not analyzed     |
| P24 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 41.4                 | 10.4       | ND (<0.4) | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | ND (<20)         |
| **P10 - GW (8/03/15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ND (<0.5)            | ND (<1.0)  | 1.41      | ND (<0.5)                | ND (<0.5)             | ND (<0.5)      | ND (<0.5)             | Not analyzed     |
| P25 - GW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ND (<1.0)            | ND (<1.0)  | 2.29      | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | ND (<20)         |
| Rinse H2O                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ND (<1.0)            | ND (<1.0)  | ND (<0.4) | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | Not analyzed     |
| Trip Blank                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ND (<1.0)            | ND (<1.0)  | ND (<0.4) | ND (<0.4)                | ND (<0.5)             | ND (<0.4)      | ND (<1.0)             | Not analyzed     |
| Groundwater in an Excavation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1,800                | 720        | 630       | 5,600                    | 49                    | 960            | 450                   | Degradation      |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1,200                | 1,600      | 3,900     | 48,000                   | 11,000                | 880            | 2,300                 | Product          |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 7,700                | 6,300      | 9,000     | >S                       | 21,000                | 5,900          | 6,000                 | (No RBC)         |

Red Font in Table – denotes presence of methane indicating degradation is occurring.

**Table 5 – Post-injection Confirmation Soil Samples August 2019**

| <b>Table 1: Confirmation Soil Analytical Results – August 26, 2019</b><br>342 S. Bridge Street, Sheridan, OR<br><br>UNITS: All concentrations in milligrams per Kilogram (mg/Kg), or parts per million (ppm).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated.<br>>Max: The constituent RBC for this pathway is greater than 100,000 mg/Kg.<br>>Csat: Soil RBC exceeds three-phase equilibrium partitioning. |                     |                      |            |            |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|------------|------------|----------------|
| Sample Location - Depth                                                                                                                                                                                                                                                                                                                                                                                                                            |                     | Carbon tetrachloride | Chloroform | EDC        | All Other VOCs |
| P26 – 2'-3'                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     | 0.198                | 0.139      | ND (<0.43) | Not Detected   |
| P26 – 15'                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     | 22.2                 | 0.556      | 0.617      | Not Detected   |
| P27 – 2'-3'                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     | 1.02                 | 2.16       | 0.104      | Not Detected   |
| P27 – 15'                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     | 1.75                 | 0.393      | 0.263      | Not Detected   |
| RBCs from DEQ's Guidance Document: <i>Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites</i> .                                                                                                                                                                                                                                                                                                                         |                     |                      |            |            |                |
| Soil Ingestion, Dermal Contact & Inhalation                                                                                                                                                                                                                                                                                                                                                                                                        | Construction Worker | 320                  | 410        | 200        | Various        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Excavation Worker   | 8,900                | 11,000     | 5,600      | Various        |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                                                                                                                                                                         |                     | 65                   | 17         | 15         | Various        |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                                                                                                                                                                        |                     | 1.6                  | 0.41       | 1.0        | Various        |

**Table 6 – Post-injection Confirmation Groundwater Samples August 2019**

| Groundwater Results – August 2019<br>(ug/L) |                      |            |       |              |
|---------------------------------------------|----------------------|------------|-------|--------------|
| Location                                    | Carbon Tetrachloride | Chloroform | EDC   | Other VOCs   |
| P26                                         | 586                  | 337        | 103   | Not detected |
| P27                                         | 111                  | 237        | 82.6  | Not detected |
| Occupational Volatilization to Outdoor Air  | 7,700                | 6,300      | 9,000 |              |
| Occupational Vapor Intrusion into Buildings | 1,200                | 1,600      | 3,900 |              |
| GW in Excavation                            | 1,800                | 720        | 630   |              |

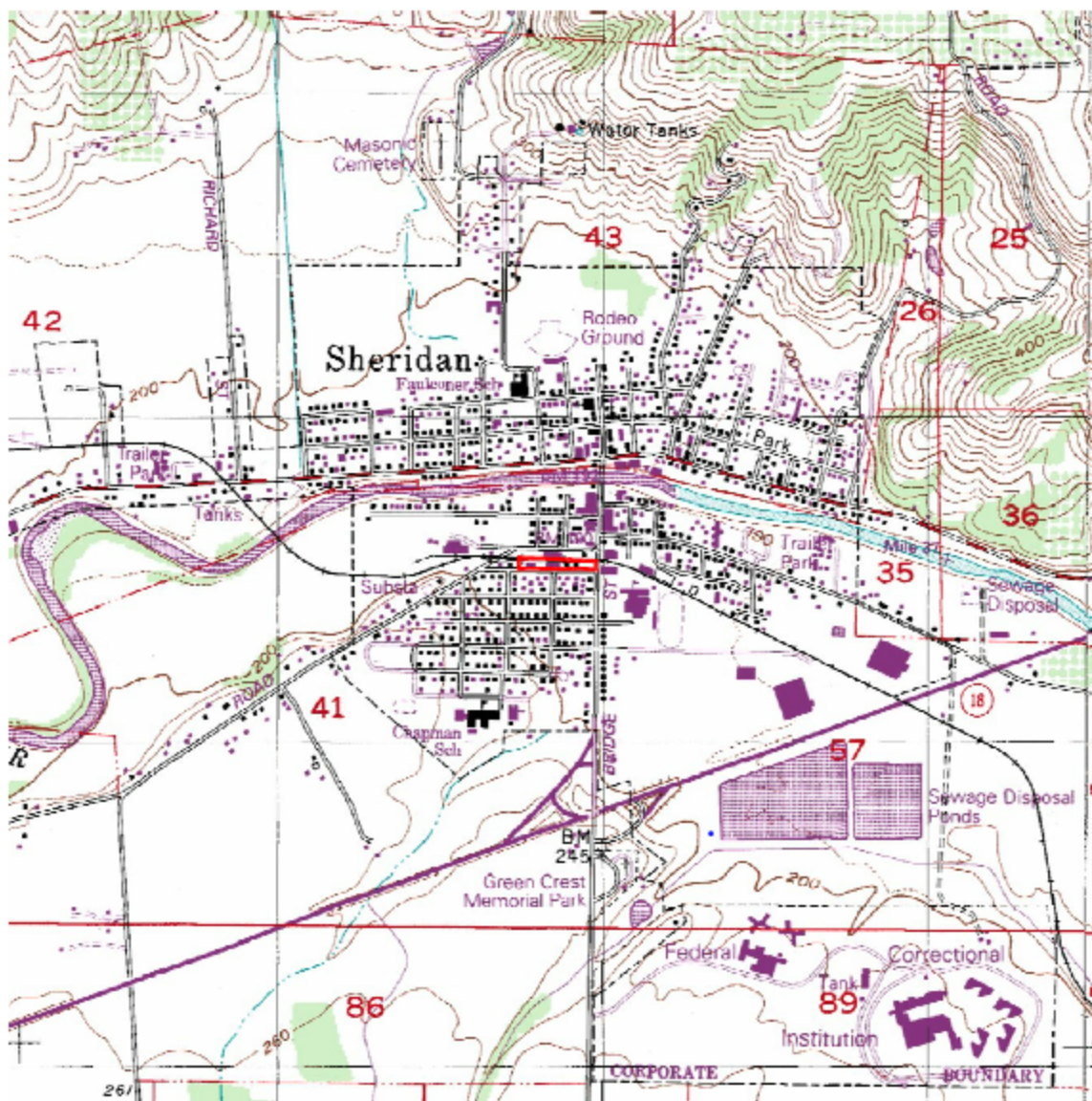
**Table 7 – Confirmation Soil Samples from Excavation July 2020**

| <b>Table 2: Confirmation Soil Analytical Results – July 20, 2020</b><br>342 S. Bridge Street, Sheridan, OR<br><br>UNITS: All concentrations in milligrams per Kilogram (mg/Kg), or parts per million (ppm).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated. |                                     |                      |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------|-------------|
| Sample Location - Depth                                                                                                                                                                                                                                                                            |                                     | Carbon tetrachloride | Chloroform  |
| N - EX - 36"                                                                                                                                                                                                                                                                                       | (North side wall at 36" BLS)        | ND (<0.078)          | ND (<0.078) |
| S - EX - 36"                                                                                                                                                                                                                                                                                       | (South side wall at 36" BLS)        | ND (<0.113)          | ND (<0.113) |
| W - EX - 32"                                                                                                                                                                                                                                                                                       | (West side wall at 32" BLS)         | ND (<0.096)          | ND (<0.096) |
| E - EX - 32"                                                                                                                                                                                                                                                                                       | (East side wall at 32" BLS)         | ND (<0.131)          | ND (<0.131) |
| NW - EX - 48"                                                                                                                                                                                                                                                                                      | (Northwest floor sample at 48" BLS) | 0.309                | 0.138       |
| NE - EX - 48"                                                                                                                                                                                                                                                                                      | (Northeast floor sample at 48" BLS) | 0.273                | 0.517       |
| SE - EX - 48"                                                                                                                                                                                                                                                                                      | (Southeast floor sample at 48" BLS) | ND (<0.098)          | ND (<0.098) |
| SW - EX - 48"                                                                                                                                                                                                                                                                                      | (Southwest floor sample at 48" BLS) | 0.0878               | ND (<0.078) |
| RBCs from DEQ's Guidance Document: <i>Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites.</i>                                                                                                                                                                          |                                     |                      |             |
| Soil Ingestion, Dermal Contact & Inhalation                                                                                                                                                                                                                                                        | Construction Worker                 | 320                  | 410         |
|                                                                                                                                                                                                                                                                                                    | Excavation Worker                   | 8,900                | 11,000      |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                         |                                     | 65                   | 17          |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                        |                                     | 1.6                  | 0.41        |

**Table 8 – Follow-up Confirmation Soil Samples from Excavation July 2020**

| <b>Table 3: Confirmation Soil Analytical Results – July 30, 2020</b><br>342 S. Bridge Street, Sheridan, OR<br><br>UNITS: All concentrations in milligrams per Kilogram (mg/Kg), or parts per million (ppm).<br>ND<0.05) Indicates contaminant not detected above method-reporting limit indicated. |                                     |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------|
| Sample Location - Depth                                                                                                                                                                                                                                                                            |                                     | Chloroform  |
| NE2 - EX - 48"                                                                                                                                                                                                                                                                                     | (Northeast floor sample at 48" BLS) | ND (<0.081) |
| C - EX - 48"                                                                                                                                                                                                                                                                                       | (Center floor sample at 48" BLS)    | ND (<0.082) |
| NE3 - EX - 60"                                                                                                                                                                                                                                                                                     | (Northeast floor sample at 60" BLS) | ND (<0.104) |
| RBCs from DEQ's Guidance Document: <i>Risk-Based Decision Making for the Remediation of Petroleum-Contaminated Sites</i> .                                                                                                                                                                         |                                     |             |
| Soil Ingestion, Dermal<br>Contact & Inhalation                                                                                                                                                                                                                                                     | Construction Worker                 | 410         |
|                                                                                                                                                                                                                                                                                                    | Excavation Worker                   | 11,000      |
| Occupational Volatilization to Outdoor Air                                                                                                                                                                                                                                                         |                                     | 17          |
| Occupational Vapor Intrusion into Buildings                                                                                                                                                                                                                                                        |                                     | 0.41        |





 SITE LOCATION

FIGURE 1

SOURCE: USGS TOPOGRAPHIC QUADRANGLE  
SERIES: 7.5 MINUTES, SHERIDAN, OR

# SITE VICINITY MAP

COMMERCIAL PROPERTY, 342 S BRIDGE STREET, SHERIDAN, OREGON



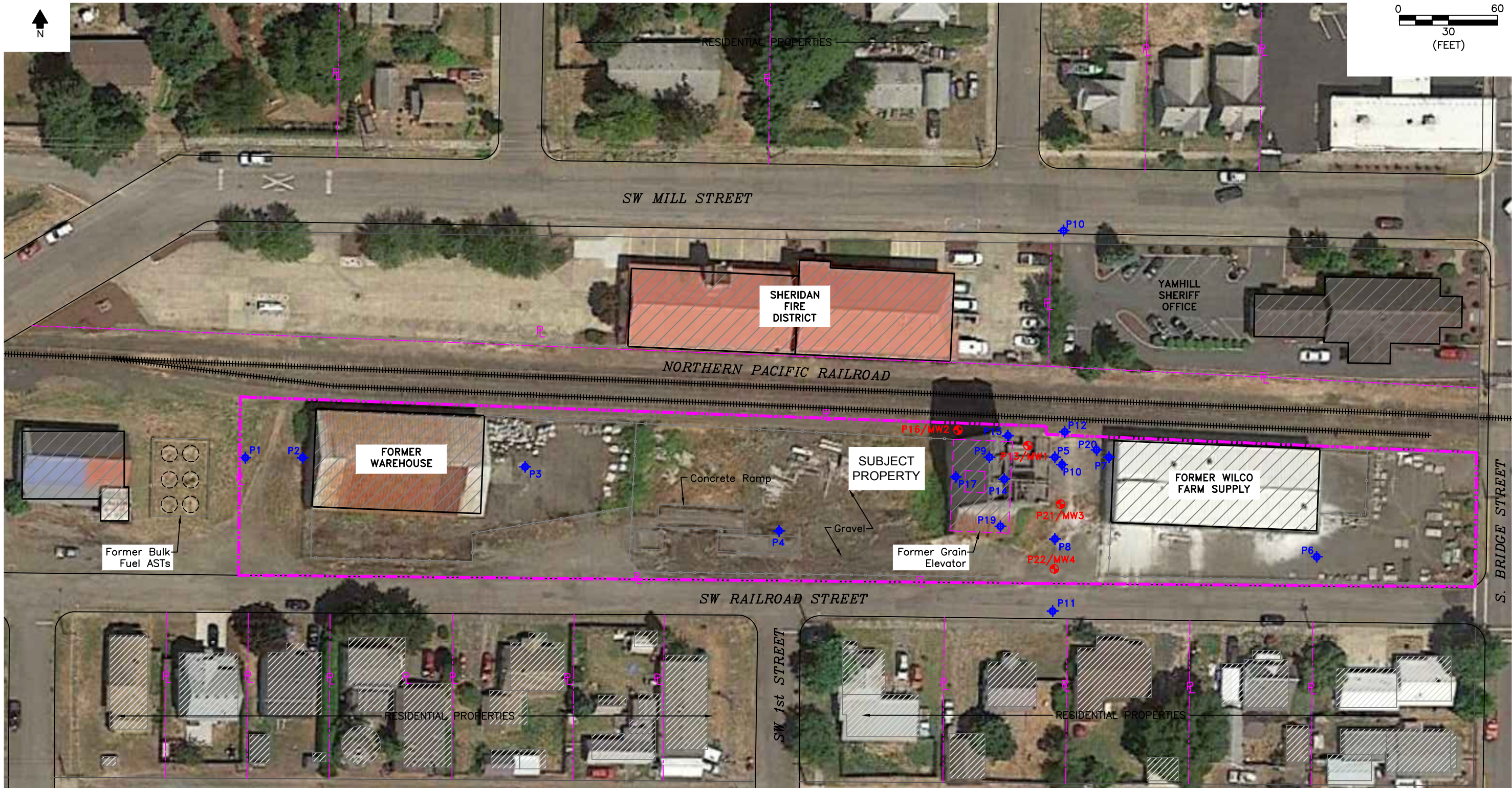
EUGENE OFFICE  
32986 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

PORTLAND OFFICE  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484

www.BBAENV.COM

|                              |
|------------------------------|
| Job Code: WC11PH1/2.15E      |
| CADD File: WC11PH1/2.15E     |
| Scale: AS SHOWN              |
| Drawn: KATHRYN DAVIS DESIGNS |
| Checked: STEVE OMO           |
| Date: 05/21/15               |





LEGEND

MW-16

Monitoring Well Location  
and Identification Number

P17

Push Probe Location and Identification  
Number (By BBA-ENV, 11/2/15)

P1

Push Probe Location and Identification  
Number (By BBA-ENV, 6/12/15)



Building



Property Line



Fence Line

EUGENE OFFICE  
32886 Roberts Ct.  
Coburg, OR  
ph: 541.484.9484

PORTLAND OFFICE  
25195 SW Parkway Ave., #207  
Wilsonville, OR  
ph: 503.570.9484



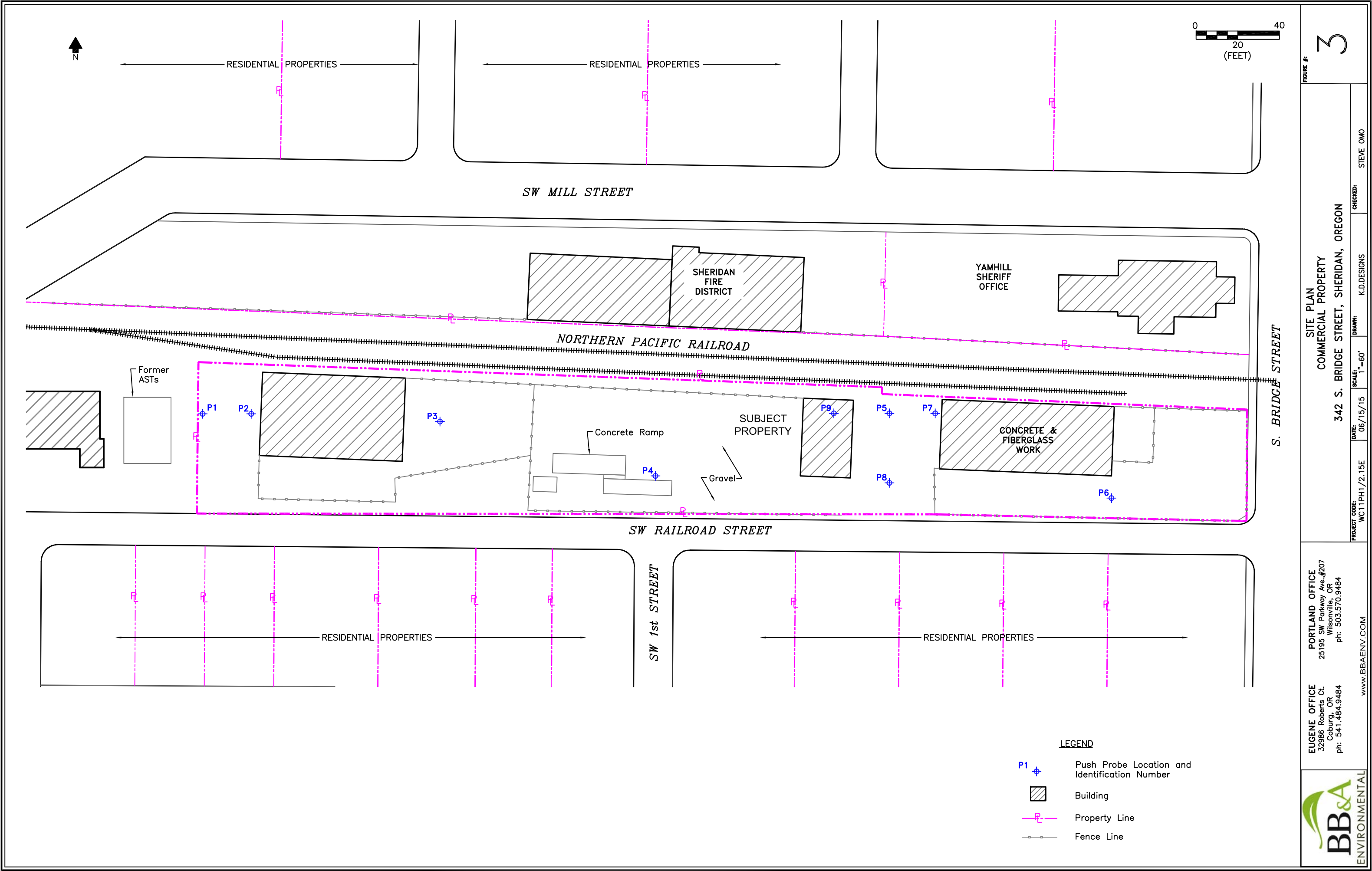
SITE PLAN SHOWING PUSH PROBE LOCATIONS  
COMMERCIAL PROPERTY  
342 S. BRIDGE STREET, SHERIDAN, OREGON

PROJECT CODE: WC11PH1/2.15E  
DATE: 06/10/16  
SCALE: 1"=60'  
DRAWN: K.D.DESIGNS  
CHECKED: STEVE OMO

FIGURE #

3





|                                                                                       |                                                                                              |                           |                      |                           |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------|----------------------|---------------------------|
|  | <b>EUGENE OFFICE</b><br>32986 Roberts Ct.<br>Coburg, OR<br>ph: 541.484.9484                  |                           |                      |                           |
|                                                                                       | <b>PORTLAND OFFICE</b><br>25195 SW Parkway Ave., #207<br>Wilsonville, OR<br>ph: 503.570.9484 |                           |                      |                           |
| <b>PROJECT CODE:</b> WC11PH1/2.15E                                                    |                                                                                              | <b>DATE:</b> 06/15/15     | <b>SCALE:</b> 1"=60' | <b>DRAWN:</b> K.D.DESIGNS |
| <b>FIGURE #</b> 3                                                                     |                                                                                              | <b>CHECKED:</b> STEVE OMO |                      |                           |

**SITE PLAN**  
**COMMERCIAL PROPERTY**  
**342 S. BRIDGE STREET, SHERIDAN, OREGON**

