

**Date:** 11/13/2025

**To:** FILE

**Through:** Brad Shultz (Cleanup Program Manager) and Bruce Scherzinger (Lead Worker)

**From:** Tina Elayer (Project Manager)  
Western Region

**Subject:** 7-Eleven Capitol LUST # 24-25-0543; Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ) recommended No Further Action (NFA) determination for the 7-Eleven Capitol site (Site) in Salem. As discussed in this report, contaminant concentrations in soil 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 360; 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 is presented at the end of this report.

## 1. BACKGROUND

### Site location.

The Site's location can be described as follows:

- Address: 1516 Capitol Street NE, Salem, Marion County, Oregon, 97301
- Latitude 44.95177° North, longitude -123.02154° West
- Map and Tax lot 073W23BA14300, Township 7 South, Range 3 West, Section 23

### Site setting.

The Site consists of an approximately 0.34-acre tract of land and is developed with a single-story, approximately 2,497-square-foot convenience store and 76-branded fueling station islands with associated approximately 1,330-square foot fueling canopy. In addition, two 12,000-gallon gasoline underground storage tanks (USTs) and one 12,000-gallon diesel UST are located on the southern portion of the Site. The remainder of the Site consists of paved driveways and parking areas. Zoning is 002 Market CMLSR Commercial Standard designation.

### Physical setting.

The Site is in Salem Oregon and is characterized by its varied topography (Figure 1). The city is primarily located at an elevation of around 177 feet but can span from approximately 120 to 800

feet above mean sea level (amsl). The Site is approximately 166 feet amsl that very gently slopes towards the north. The soil type is Woodburn Silt Loam which is a moderately well-drained silt loam and silty clay loam with 0 to 3 percent slopes. Subsurface soils consist of predominantly fine-grained brown silt and sand to an approximate depth of 9-10 feet bgs. From approximately 10-20 feet bgs, subsurface soil is gravelly and sandy. The depth to groundwater ranges from 5 to 10 feet bgs. Groundwater appears to flow west/southwest from the Site. The nearest surface water body is Mill Creek, approximately 2,440 feet southwest of the Site.

#### **Site history.**

The Site has been operating as a gasoline service station since approximately 1955. In 1987, the previous service station was removed and replaced with the current fueling station and convenience store. Four (4) steel underground storage tanks (USTs) were removed and replaced with three 12,000-gallon fiberglass USTs containing petroleum, which are currently in use at the Site.

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

#### **Land use.**

The Site has a 7-11 minimart with a 76-gas station. The use is not expected to change in the future.

#### **Groundwater use.**

The Site and surrounding properties obtain water from the City of Salem municipal water system. The nearest identified water well is located approximately 2,000 feet west of the Site.

#### **Surface water use.**

There are no surface water bodies within the locality of facility (LOF). Stormwater runoff is collected in a storm sewer located south and southwest of the Site (Figure 2).

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

There is a previously closed LUST incident on this Site. LUST 24-90-4278 was created in 1990 when a petroleum release was reported to DEQ. Four monitoring wells were installed to monitor and characterize the groundwater contaminant plume. Petroleum contaminants were detected in soil and groundwater along the western boundary of the Site, and near the pump islands and fuel lines from the USTs. In April 1991, a groundwater recovery well was installed on-site. In June 1991, petroleum-containing soil (PCS) was identified near the pump islands, and a remedial excavation removed soil in the area. In late 1991, three additional off-site monitoring wells were installed to determine the maximum extent of soil and groundwater impacts. In 1992, a soil vapor extraction (SVE) remediation system was installed and turned on at the Site. In June 1994, a second on-site groundwater recovery well was installed on-site and SVE was connected to MW-4 to enhance remedial efforts. In 1995, two air sparge (AS) wells were added to the remediation system. All remediation systems were deactivated in June 2000. Groundwater monitoring was performed from December 1991 through December 2002. Groundwater was

historically present at 3 to 12 feet below ground surface (bgs) and consistently measured to flow to the west/southwest.

Concentrations of gasoline-range petroleum hydrocarbons (GRPH), benzene, toluene, ethylbenzene, and total xylenes (BTEX) were historically detected at the Site. Lead and halogenated volatiles were never detected. In 2002, quarterly groundwater monitoring indicated that all concentrations in groundwater were below applicable risk-based concentrations (RBCs). A risk-based evaluation was conducted for the Site as part of regulatory closure. It was concluded that ecological receptors would not be impacted from residual contamination, and that groundwater was not used for beneficial purposes in the vicinity of the Site. Volatilization of residual contaminants in soil and groundwater to indoor and outdoor air was deemed a potentially complete pathway, but a comparison of site concentrations in soil and groundwater to published RBCs showed that only detected concentrations of benzene and ethylbenzene in soil (1990) were above RBC concentrations. DEQ deemed that the concentrations had likely attenuated between 1990 and 2002 based on natural degradation and the operation of the AS/SVE remediation system at the Site.

In June 2012, DEQ issued a No Further Action determination for the Site, stating that the Site met current requirements for the Generic Remedy for Simple Risk-Based cleanups. DEQ stated that while contaminated soil and groundwater remain at the Site, the contaminated media did not represent a risk to human health, safety, welfare, or the environment. DEQ stated that if site conditions were to change (i.e. land use change), reevaluation of site conditions would be required at that time.

In July 2025, Terracon completed a Phase II Investigation at the Site as part of due diligence activities for a potential buyer. Five (5) soil borings (SB-1 through SB-5) were advanced to depths of 15 to 20 feet bgs. Soil and groundwater samples were collected at every location. Subsurface lithology generally consisted of sand and silt from 0-10 feet bgs, and gravel and sand from 10-20 feet bgs.

At soil boring SB-2, located west adjacent to the current fuel dispenser island, GRPH was detected at a concentration of 1,500 mg/kg in soil sample SB-2. BTEX and other associated volatile organic compounds were also detected at elevated concentrations in the soil sample. The groundwater sample collected from boring SB-2 (SB-2 GW) had detected concentrations of GRPH (8,470 µg/L), benzene (166 µg/L), toluene (537 µg/L), ethylbenzene (261 µg/L), total xylenes (1,460 µg/L), 1,2,4-Trimethylbenzene (437 µg/L), 1,3,5-Trimethylbenzene (110 µg/L), and naphthalene (59.1 µg/L). Diesel range petroleum hydrocarbons (DPRH) were detected, but was flagged as overlap from GRPH. Minor detected concentrations of GRPH and/or BTEX were also detected at SB-3 and SB-4.

Terracon concluded that it appeared that concentrations present at SB-3 and SB-4 were likely related to the historical LUST for the Site, but that elevated concentrations at SB-2 were indicative of a newer release based on concentrations and the relatively high concentrations of BTEX.

Terracon recommended additional subsurface investigation at the Site to investigate the source and magnitude of the impacts identified at SB-2 and recommended reporting the new release to DEQ. In August 2025, ACC reviewed available historical environmental reports and Terracon's reports and concluded that the petroleum contamination did appear to be caused by a previously undocumented release. A release report was submitted on behalf of the client by ACC on September 2, 2025. DEQ assigned the release as LUST #24-25-0543.

ACC conducted a subsurface investigation on September 15, 2025. The investigation included drilling four (4) borings (ACC1 through ACC4). Borings were drilled at two locations in the west northbound lane of Capitol Street, and northwest and southwest of Terracon boring location SB-2 along the western property boundary. Each boring was advanced in five-foot intervals to a maximum depth ranging between 15 and 20 feet bgs. Soil samples were collected continuously with selected soil samples submitted to the laboratory. After the soil samples were collected the borings were fitted with temporary groundwater wells. Despite purging of the temporary wells, the water remained slightly turbid.

A total of six (6) soil samples and four (4) groundwater samples were collected and analyzed for GRPH, ORPH, BTEX+N, VOCs, and PAHs. Laboratory results were compared to DEQ RBCs for occupational, construction, and excavation workers.

#### Soil results.

GRPH was detected at concentrations of 895 mg/kg and 101 mg/kg. DRPH was detected at concentrations of 21.5 mg/kg and 31.4 mg/kg in soil samples ACC4-10 and ACC4-13, respectively. ORPH was detected at a concentration of 66.9 mg/kg in soil sample ACC2-10. GRPH, DRPH, and ORPH were not detected above their respective laboratory method reporting limit (MRL) in any of the remaining soil samples.

Minor concentrations of benzene were detected at soil samples ACC4-10, ACC4-13, and ACC4-20. Benzene was not detected above the MRLs in the remaining soil samples. Remaining concentrations of VOCs were detected in soil samples ACC4-10 and ACC4-13. 1-Methylnaphthalene, 2-Methylnaphthalene, and Phenanthrene had minor detected concentrations in soil sample ACC4-13. All detected concentrations were below applicable DEQ RBC concentrations for occupational and construction/excavation workers.

#### Groundwater results.

Groundwater samples from ACC1 through ACC3 did not contain concentrations of any analytes above their respective MRLs. Groundwater sample ACC4 had multiple detected analytes with concentrations above the MRLs, including GRPH (8,200 µg/L), benzene (180 µg/L), and naphthalene (56.4 µg/L).

#### **Nature and extent of contamination.**

Groundwater appears to be the affected media with detected concentrations of GRPH, benzene, and naphthalene exceeding the chronic RBCwi concentrations for commercial receptors.

#### 4. RISK EVALUATION

##### Conceptual site model.

To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air. Table 1 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

**Table 1. Identification of applicable RBCs, based on pertinent pathways and receptors**

	Pathway	Receptor			
			Is pathway complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact, and Inhalation	Residential and/or Urban Residential	No	No	NA
		Occupational	No	No	NA
		Construction Worker	No	No	NA
		Excavation Worker	No	No	NA
	Volatilization to Outdoor Air	Residential and/or Urban residential	No	No	NA
		Occupational	No	No	NA
	Leaching to Groundwater	Residential and/or Urban residential	Yes	Yes	See Note 1.
		Occupational	Yes	Yes	See Note 1.
Groundwater	Ingestion & Inhalation from Tap Water	Residential and/or Urban residential	No	Yes	See Note 2.
		Occupational	No	Yes	See Note 2.
	Vapor Intrusion into Buildings	Residential	No	Yes	See Note 3.
		Commercial	No	Yes	See Note 3.
	Groundwater in Excavation	Occupational	Yes	No	
Soil Vapor	Vapor Intrusion into Buildings	Residential	No	Yes	See Note 3.
		Commercial	No	Yes	See Note 3.
Ecological		Terrestrial & Surface Water	No	NA	See Note 4.

Notes:

1. Soil samples from ACC4 with exceedances were collected from 10-13 feet. Soil sample collected from ACC4 at 20 feet bgs did not exceed RBCs.
2. Groundwater is not used for drinking. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's RBDM guidance.
3. Extent of the groundwater plume appears to be fully delineated in locality of facility (LOF). No buildings are located within 30 feet of the LOF; therefore, no complete exposure pathway exists.
4. Site is void of any ecological receptors.

### **Contaminant concentrations.**

Field screening and laboratory analytical results indicate the extended presence of petroleum hydrocarbons southwest adjacent to the current fueling pump canopy, at boring location ACC4. Significant petroleum impacts were not detected at the remaining three (3) borings completed by ACC. Based on historical review of the historical LUST file for the Site, groundwater at the Site has historically flowed to the west and southwest. Petroleum contaminants were not detected at boring locations ACC1 and ACC2 located to the west and southwest. These locations appear to represent points of compliance down-gradient of the Site. ACC3, located north adjacent in the presumed upgradient position, did not have petroleum hydrocarbons detected. The extent of the groundwater plume is depicted on Figure 3.

### **Human health risk.**

Multiple exceedances of RBCwi were detected at ACC boring location ACC4 and Terracon boring location SB-2. The extent of the groundwater plume appears to have been fully defined, and it does not appear that any buildings are located within 30 feet of the groundwater contamination plume. This buffer distance is outlined in DEQ's Vapor Intrusion guidance document. Based on this information, RBCwi doesn't appear to have a complete exposure pathway to potential receptors. No other exceedances of applicable RBCs for volatilization to outdoor air or excavation/construction work were identified in sample results.

### **Ecological risk.**

Site is void of any ecological habitat and receptors.

## **5. RECOMMENDATION**

The responsible party provided ACC with the most recent line testing tightness report from February 2025. It reports that the product lines passed tightness testing, and no active releases are suspected. The client explained to ACC that the product lines were replaced in approximately 2022, and that perhaps the old product lines are the source of subsurface contamination near the fueling island.

Following removal of contamination and based on sample results for soil and groundwater, acceptable risk levels are not exceeded, and a No Further Action determination is recommended for this site.

The No Further Action determination will be recorded in Your DEQ Online (YDO), Facility No. 6128 and LUST No. 24-25-0543.

A public comment opportunity will be provided to the City of Salem since a portion of the LOF is located under the city's ROW, Capitol Street NE.

## **6. ADMINISTRATIVE RECORD**

Phase I Environmental Site Assessment, Capitol Market Purchase, 1516 Capitol Street NE, Salem, Marion County, Oregon. Terracon. 08-08-2025.

Site Characterization Report, Retail Service Station, 1516 Capitol Street NE, Salem, Marion County, Oregon. ACC. 10-7-2025.

## **7. ATTACHMENTS**

1. Figure 1. Vicinity Map
2. Figure 2. Site Map with storm sewer collection points
3. Figure 3. Locality of Facility Map

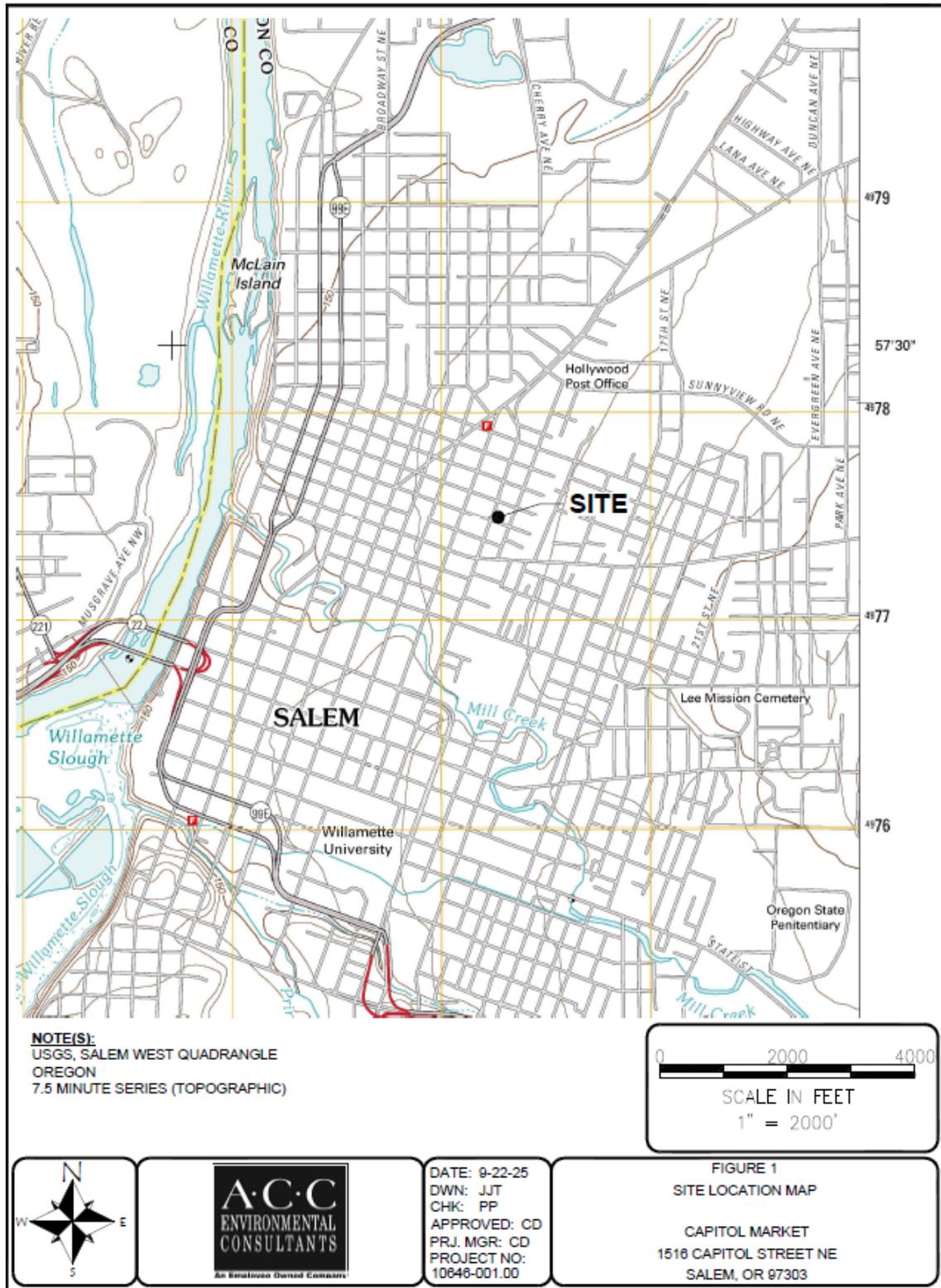


Figure 1. Site Map (retrieved from ACC Site Characterization Report, 10/7/2025)

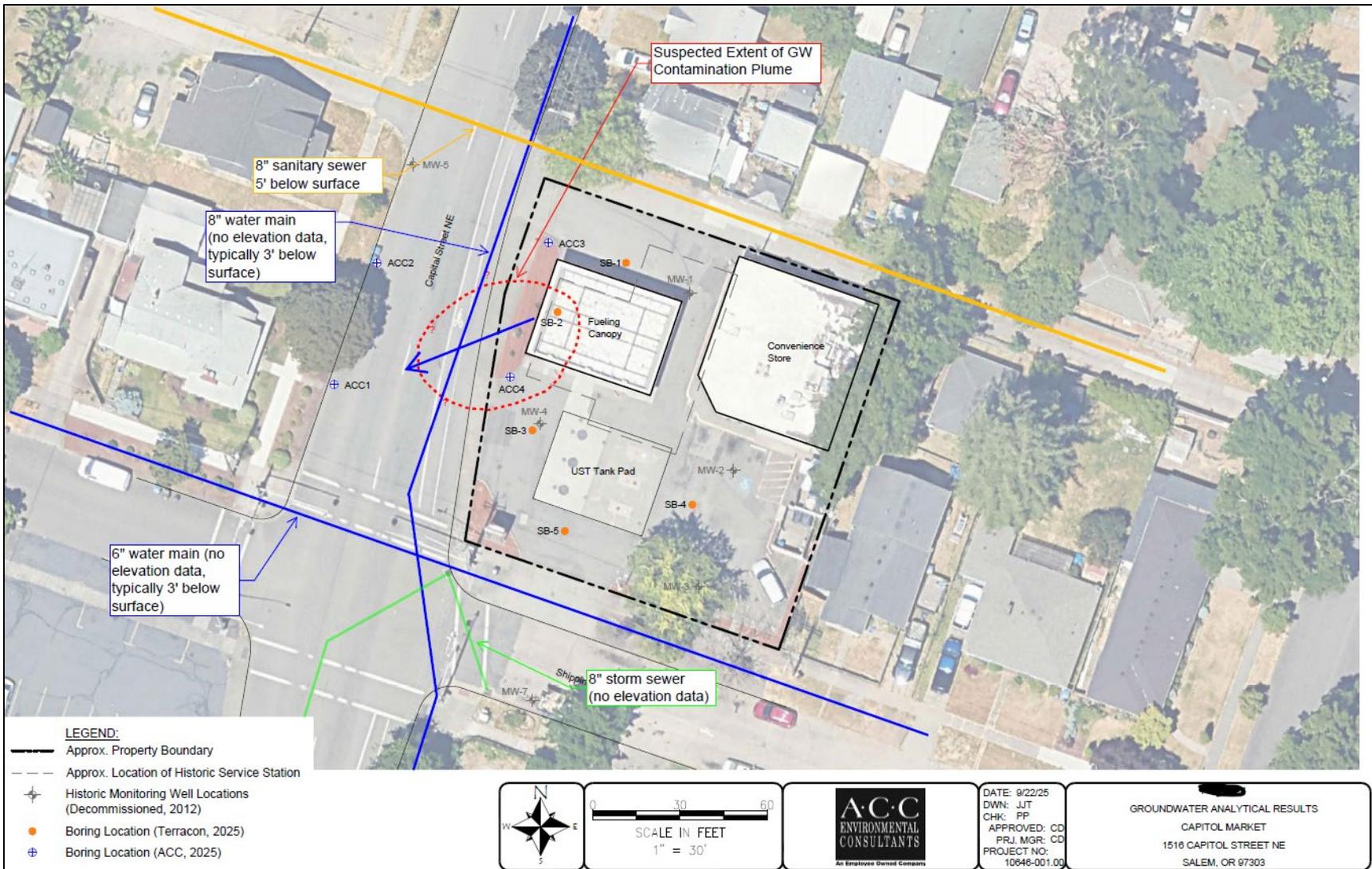


Figure 2. Site Map with storm sewer collection points (provided by ACC, 10/28/2025).

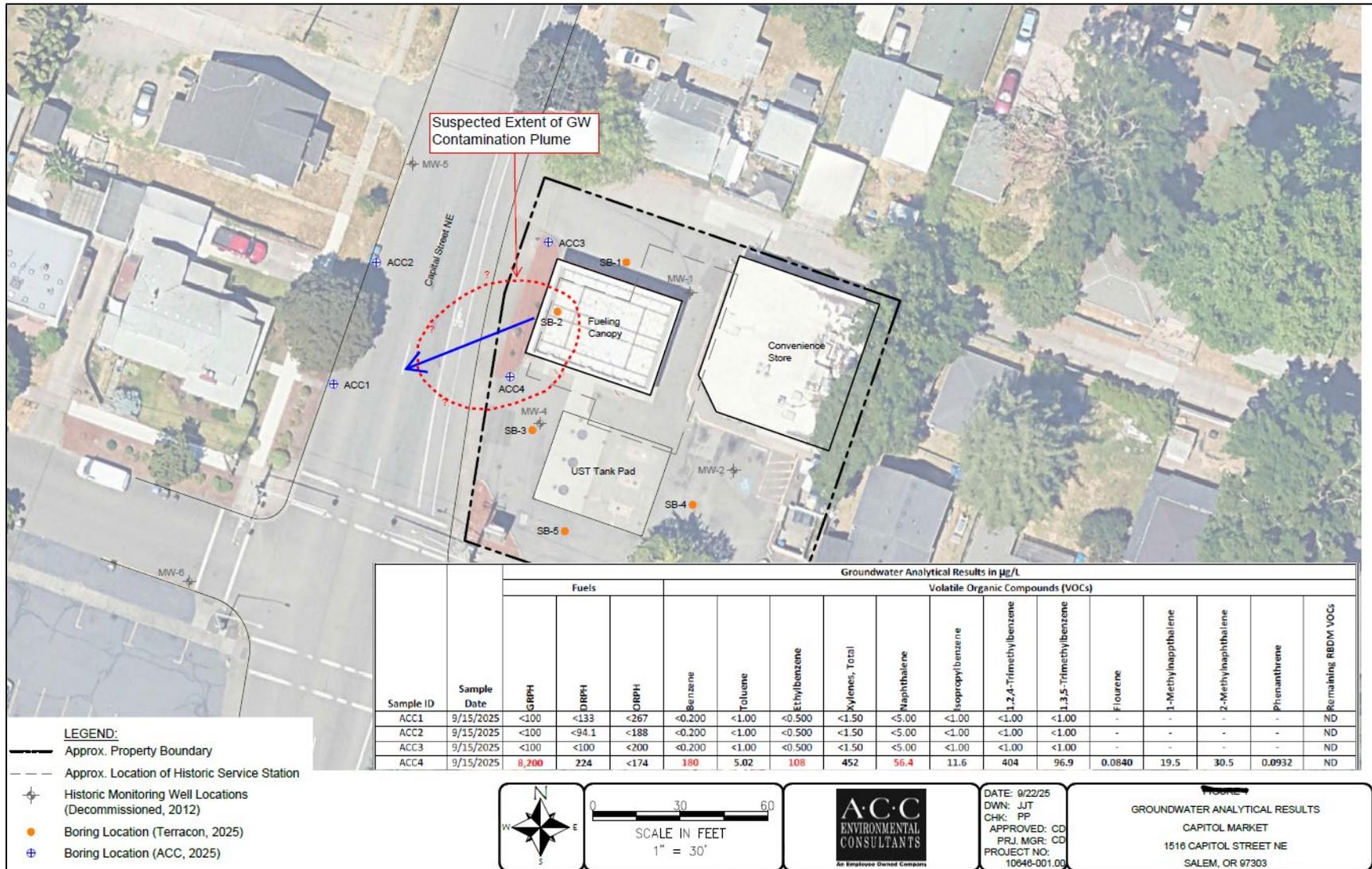


Figure 3. Locality of Facility (retrieved from ACC Site Characterization Report, 10/07/2025).