A Report Prepared for:

SBOB LLC
c/o TC Northwest Development, Inc.
600 University Street, Suite 2912
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Attention: Mr. Harry Fuller

CONSTRUCTION COMPLETION REPORT
1916 BOREN AVENUE PROPERTY
1900 and 1916 BOREN AVENUE
SEATTLE, WASHINGTON 98004

April 17, 2025

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1.0 INTRODUCTION

NV5 Environmental, Inc. (NV5; formerly PES Environmental, Inc.), has prepared this Construction Completion Report (Report) on behalf of SBOB LLC (SBOB) to document environmental construction oversight and soil management activities conducted during the redevelopment of the property located at 1900 and 1916 Boren Avenue, Seattle, Washington (Property; Figure 1). SBOB owns the Property. The Property has been redeveloped with an eleven-story office tower and three and one-half levels of underground parking. The excavations associated with the redevelopment of the Property had the potential to encounter soil containing detectable petroleum hydrocarbons and/or carcinogenic polycyclic aromatic hydrocarbons (cPAHs) in known or previously undocumented areas. NV5 assisted SBOB by conducting construction oversight and soil management during the excavation phase of redevelopment work.

This report documents NV5's activities related to Property redevelopment, including: (1) profiling soil removed from the Property for waste disposal; (2) providing construction oversight, soil screening, and sampling during the planned excavations in areas where soil contained detectable petroleum hydrocarbons and cPAHs and when unexpected conditions were encountered; (3) overseeing the appropriate decommissioning of three underground storage tanks (USTs) encountered during excavation activities; and (4) documenting proper soil management and disposal during construction activities at the Property. NV5 conducted construction oversight activities from November 2022 through August 2024.

The scope of work for environmental construction oversight was based on the following NV5 documents developed for the project:

- *Phase I Environmental Site Assessment, Property, 1900/1916 Boren Development, 1900 and 1916 Boren Avenue, Seattle, Washington,* dated July 8, 2021 (Phase I ESA; PES, 2021); and
- *Contaminated Media Management Plan, 1900/1916 Boren Development, 1900 and 1916 Boren Avenue, Seattle, Washington*, dated March 24, 2022 (CMMP; PES 2022).

Soil at the Property was excavated as required to reach the designed subgrade elevation between approximately 89 to 94 feet relative to the North American Vertical Datum of 1988 (NAVD88). The excavation activities disturbed soil in several areas of the Property known to contain detectable petroleum hydrocarbons and cPAHs at concentrations above and below the applicable cleanup levels (CULs). Detectable concentrations of contaminants were limited to the upper 15 feet of soil (i.e., soil above approximately elevation 120 feet) across the Property. The development excavation continued over 30 ft below the depth where cPAHs and/or petroleum hydrocarbons were detected.

For purposes of this Report, the term "impacted soil" is used to describe soil with detectable concentrations of petroleum hydrocarbons and or cPAHs, whether the concentrations are above or below CULs. The term "soil exceeding CULs" is used to describe soil containing petroleum hydrocarbons at concentrations exceeding the applicable CULs. The excavation and disposal of soil with contaminant concentrations exceeding an applicable CUL was conducted consistent with the requirements of the Washington Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Cleanup Regulations (Chapter 173-340 of the Washington Administrative

Code [WAC]) (Ecology, 2021) and Ecology's *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology, 2016).

During development permitting, Ecology reviewed the State Environmental Policy Act (SEPA) checklist prepared for the project and submitted comments to the City of Seattle Department of Construction and Inspection (SDCI) in its letter dated December 29, 2021 (Ecology, 2021b). Ecology noted that a limited area of soil contamination was identified in the SEPA checklist and that the recommended CMMP would likely be sufficient to remove the contaminated soil during construction. Ecology also indicated that its learning of the contaminated soil through its review of the SEPA checklist would complete the MTCA reporting requirements and that Ecology would contact the property owner to begin its initial investigation. Ecology contacted SBOB in an email dated May 25, 2023, from Vance Atkins of Ecology to Mr. Mike Nelson of SBOB indicating it was conducting its initial investigation and requesting additional information regarding the further characterization and/or handling and disposal of contaminated soil. The email also indicated the possibility of obtaining a No Further Action (NFA) through the initial investigation process.

NV5 prepared this Report to document the excavation and disposal of soil exceeding an applicable CUL and impacted soil, and to present the results confirmation sampling. This Report was prepared in response to Ecology's request for additional information to support its initial investigation and as part of an independent action under MTCA and will be submitted to Ecology consistent with WAC 173-340-515(4).

1.1 Property Description and Background

The Property is located at 1900 and 1916 Boren Avenue and encompasses approximately 0.64 acres north of the intersection of Boren Avenue and Stewart Street in Seattle, Washington (Figure 1). The Property is comprised of two tax parcels: King County Assessor's Parcel Number (APN) 0660002155 (1900 Boren Avenue) and APN 0660002170 (1916 Boren Avenue). The Property lies at an elevation of approximately 134.6 feet to 135.5 feet (NAVD88). The Property is developed with one, eleven-story commercial structure that includes three and one-half levels of underground parking.

Detailed historical information for the Property is documented in the Phase I Environmental Site Assessment (ESA) by PES (PES, 2021). Former Property features are shown in Figure 2. On the 1900 Boren Avenue parcel, two single-family residences were present from at least 1893 to at least 1929. In 1906, a church building was constructed in the south portion of the parcel. The building was utilized as a church, store, social services center, and medical office. The church building was demolished in 1999. A previous Phase I ESA (not made available for review during PES's Phase I ESA) reportedly found evidence that the church used an oil-burning furnace (SES, 2017). A geophysical survey conducted in 1998 at the parcel did not identify the presence of USTs, and PES's Phase I ESA did not reveal information about the decommissioning of a heating oil UST on the 1900 Boren parcel. In 2003, a small building was constructed for Dollar Rental Car company at the south corner of the1900 Boren Avenue parcel. The remainder of the parcel was an asphalt-paved parking lot with a vehicle wash rack and oil-water separator in the north portion of the lot. The Dollar Rental Car building was demolished in 2021.

On the 1916 Boren Avenue parcel, two single-family residences were present from at least 1893 to at least 1929. In 1929, one commercial building was constructed in the south two-thirds of the parcel. The building was occupied by several tenants, including Bartell Drug Company, a warehouse, and a candy factory. The southeast portion of the building was demolished in 1977, and the northwest portion of the building was demolished in 2021 (Figure 2). Tax records indicated that two oil burners, steam boilers, and a 550-gallon gasoline UST were used historically on the 1916 Boren Avenue parcel. Architectural plans for the former 1916 Boren Avenue building depicted a 40-barrel (about 1,680-gallon) heating oil UST located 12 to 18 feet below ground surface (bgs) on the alley side of the former building. The exact location of the UST was unknown, but it was assumed to be located in or near the boiler room, which was in the partial basement in the northeast corner of the former building (Figure 2). PES's Phase I ESA identified a potential fill port for a tank but no records regarding decommissioning of the 40-barrel UST. Sanborn fire insurance maps identified "fuel gas" located in the southeast portion of the building; the area labeled as "fuel gas" in the Sanborn Maps is shown in Figure 2. After the southeast portion of the building was demolished (in 1977), the area was converted to a parking lot.

1.2 Geology and Hydrogeology

Based on observation during NV5's environmental construction oversight and a geotechnical engineering design report prepared by GeoEngineers (GeoEngineers, 2020) for the Property, soils encountered at the Property consisted of relatively shallow fill and recent deposits overlying competent glacially consolidated soils. The fill consisted of:loose to medium dense silty sand with gravel and variable construction debris; and soft to medium stiff sandy silt with variable gravel content, construction debris and organic matter. The GeoEngineers report indicated that the fill extended to approximately 7 feet bgs. Recent deposits were encountered below the fill and extended to approximately 13 feet bgs; these deposits consisted of stiff sandy silt with variable gravel content. Glacially consolidated soils were encountered beneath the recent deposits and extended to below the maximum explored depth of approximately 91 feet bgs. The glacially consolidated soils consisted of dense to very dense silty sand with variably gravel content.

The depth to water was 76.24 feet below the top of the well casing (TOC) in Property monitoring well GEI-1-18 during groundwater sampling PES conducted on July 6, 2021 (Figure 2; PES, 2021). Based on PES's data and previous work by others, the groundwater elevation in monitoring well GEI-1-18 ranges from approximately 56 to 59 feet NAVD88. GeoEngineers (2020) interpreted groundwater in monitoring well GEI-1-18 to be perched above the deep groundwater that is present below an elevation of 44 feet (NAV88). Shallow perched groundwater was encountered at depths ranging from approximately 13 feet to 32 feet bgs during drilling at the Property (Earth Solutions NW, LLC [ESNW], 2016). These small areas of discontinuous, perched groundwater were reported to be present in isolated sand layers beneath the Property.

Based on a bottom of excavation elevation of 89 to 94 ft (NAVD88), the perched groundwater is approximately 30 feet or more below the bottom of the development excavation and over 60 feet below the deepest detection of cPAHs and/or petroleum hydrocarbons found at the Property (i.e., no detectable contamination was found below elevation 120 feet).

1.3 Overview of Completed Redevelopment Activities

The completed redevelopment activities include demolition of the existing site structures and redevelopment of the Property with one new, eleven-story, commercial building with three and a half levels of below grade parking. The building construction began in November 2022 and was completed in early 2025. The footprint of the new structure is shown on Figure 2.

Redevelopment excavation activities were conducted by SBOB's General Contractor Lease Crutcher Lewis (LCL) and its earthworks contractor Hos Bros Construction, Inc. (Hos Bros). For purposes of this document, "Contractor" refers to both LCL and Hos Bros.

Redevelopment of the Property required excavation for the portion of the new structure that included underground parking. The parking garage construction required the installation of shoring (soldier piles and timber lagging) along the eastern (adjacent to the alley), southern, and western (adjacent to Boren Avenue) sides. Along the northern extent of the planned parking garage, the existing soldier piles installed for the adjacent property (1930 Boren Avenue) were used to build the northern wall of the garage, resulting in the removal of all of the soil between the two developments (i.e., 1930 Boren and 1916 Boren). The Property was excavated to an elevation of approximately 93.6 feet (NAVD88) at the south end of the subgrade parking garage and an elevation of approximately 89 feet at the northern Property boundary. These elevations range from approximately 41 to 47 feet below the original grade. The excavation required shoring adjacent to the Property boundaries. As described in this report, a portion of the excavated Property soil required special handling due the presence of contaminants at concentrations both above and below the regulatory CULs.

Because the base of the redevelopment excavations was well above the local perched groundwater table (which varies from 56 feet to 58 feet elevation beneath the Property), active dewatering was not required during redevelopment activities. Construction wastewater (primarily incident precipitation within the excavation) was managed by the Contractor and its subcontractors under King County Industrial Waste (KCIW) Wastewater Discharge Authorization No. 4599-01, effective July 6, 2022. Construction water was intermittently discharged to the sewer beginning in December 2022 and ending in April 2023. Construction wastewater management for the project was reported by others under separate cover. Copies of the discharge authorization and self monitoring reports are provided in Appendix F.

2.0 PREVIOUS INVESTIGATIONS AND EXTENT OF CONTAMINATION

Several Phase I ESAs and subsurface investigations were conducted from 1997 through 2021 at the Property. The previous investigations focused on accessible areas in the asphalt-parking lots and included soil and groundwater sampling. These investigations identified detectable concentrations of petroleum hydrocarbons and cPAHs and in soil at the Property.

Results of these investigations are reported in the following documents:

- *Limited Phase II Environmental Site Assessment, Concerto Investments Property, 1916 Boren Avenue, Seattle, Washington*, prepared by Earth Solutions NW, LLC, and dated December 16, 2016;
- *Soil and Groundwater Sampling Data Summary, 1900 Boren Property, 1900 Boren Avenue, Seattle, Washington, Project Number: 1242-002-01*, prepared by South Earth Strategies, Inc., and dated June 27, 2018;
- *Geotechnical Engineering Services Final Report, 1916 Boren Avenue, Seattle, Washington*, prepared by GeoEngineers and dated June 17, 2020; and
- *Phase I Environmental Site Assessment, 1900/1916 Boren Development, 1900 and 1916 Boren Avenue, Seattle, Washington*, prepared by PES and dated July 8, 2021.

This section summarizes the pertinent soil and groundwater results from previous investigations conducted at the Property. In addition, this section describes the locations where soil with detectable concentrations of petroleum hydrocarbons and/or cPAHs were known or suspected to be present at the Property, as identified in PES's Phase I ESA.

2.1 Summary of Previous Investigation Results

The results of previous investigations conducted at the Property are summarized in the following sections.

2.1.1 Earth Solutions NW, LLC Phase II Investigation (2016)

ESNW conducted a Phase II investigation at the Property in November 2016 (ESNW, 2016). The investigation included the advancement of six soil borings (B-1 through B-6) to depths between 15 and 40 feet bgs, and collection of soil and groundwater samples (Figure 2). Perched groundwater was encounter in B-2 (at 32 feet bgs), B-3 (at 17 feet bgs), and B-4 (at 13 feet bgs). Soil and groundwater samples were analyzed for gasoline-range organics (GRO), diesel-range organics (DRO), oil-range organics (ORO), volatile organic compounds (VOCs), and metals.

Acetone, 2-butanone, and chromium were detected in soil samples; however, none of the detections were above the applicable CULs. Acetone was the only analyte detected in the groundwater samples (detected in B-2); however, the concentration was below the applicable CUL. No other analytes were detected in the soil and groundwater samples. It should be noted that both acetone and 2-butanone can be related to the biodegradation of organic matter and/or introduced as laboratory contaminants.

2.1.2 GeoEngineers Geotechnical Investigation (2018)

GeoEngineers conducted a geotechnical study of the Property in 2020 (GeoEngineers, 2020) that included drilling two borings: GEI-1-18, which was advanced to a depth of 90.25 feet bgs at 1916 Boren Avenue; and GEI-2-18, which was advanced to a depth of 91 feet bgs on the 1900 Boren Avenue (Figure 2). Groundwater was encountered at approximately 79 feet bgs (an elevation of approximately 57 feet) in boring GEI-1-18 during drilling; however, GeoEngineers reported the groundwater as perched, stating that the regional groundwater occurred below an elevation of 44 feet (NAV88). Groundwater was not encountered in boring GEI-2-18.

GeoEngineers did not collect environmental samples as a part of their geotechnical study. However, SES collected soil and groundwater samples from the two geotechnical borings GEI-1-18 and GEI-2-18 during drilling, as summarized below.

2.1.3 Sound Earth Strategies Soil and Groundwater Sampling (2018)

Sound Earth Strategies (SES) performed soil and groundwater sampling at the Property during GeoEngineers' 2018 geotechnical study (SES, 2018). SES collected one soil sample from 5 feet bgs in GEI-1-18 and two soil samples from 5 and 10 feet bgs in GEI-2-18 (Figure 2). The soil samples were analyzed for GRO, DRO, ORO, and BTEX. The 5-foot sample from GEI-1-18 and the 7.5-foot sample from GEI-2-18 also were analyzed for cPAHs and metals.

The cPAHs benzo(a)anthracene, chrysene, and benzo(a)pyrene were detected in soil from both borings. Benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, and dibenz(a,h)anthracene were detected in the soil from GEI-2-18. The toxicity equivalent concentration in the sample from GEI-2-18 at 7.5 feet bgs was 0.420 milligrams per kilogram (mg/kg) which exceeded the MTCA Method A CUL of 0.1 mg/kg (due primarily to the benzo(a)pyrene concentration of 0.33 mg/kg). Arsenic, chromium, and lead were detected in the soil from GEI-1-18 at 5 feet bgs and in GEI-2-18 at 7.5 feet bgs; however, the concentrations were below the MTCA Method A CULs. GRO, DRO, ORO, and BTEX were not detected above the method reporting limits (MRLs) in any of the soil sample analyzed.

SES collected one reconnaissance groundwater sample from GEI-1-18 and analyzed it for GRO, DRO, ORO, BTEX, and chlorinated VOCs. The SES report does not indicate whether the well was properly developed prior to sampling or describe sampling procedures, other than to report that the sample was collected using a disposable bailer. The lack of proper well development prior to sampling and appropriate well purging during sampling can impact the quality and reliability of the data.

GRO, DRO, ORO, benzene, and total xylenes were detected in the groundwater; however, only the DRO concentration (610 micrograms per liter [µg/L]) slightly exceeded the MTCA Method A CUL (500 µg/L). SES reported that the DRO and ORO results were flagged by the laboratory as having characteristics not matching the standard used for quantitation and may be a result of non-petroleum organic matter or degraded petroleum. Chlorinated VOCs were not detected at or above the MRLs in the reconnaissance groundwater sample.

2.1.4 PES Phase I ESA (2021)

PES conducted a Phase I ESA for the Property in 2021 (PES, 2021). Based on the results of the Phase I ESA, PES identified four Recognized Environmental Conditions (RECs) associated with the Property, as described below.

- Based on the results of previous investigations conducted on adjacent former Arco Service Station/Budget Rent-A-Car property (1930 Boren Avenue), there is a potential for petroleum contaminants impacting the 1916 Boren subject property along the common property boundary at the northwest end of the subject property. The potential presence of petroleum hydrocarbons from the adjoining property to the north has been identified as a REC. Based on the previous findings, it is likely that if petroleum impacted soil is encountered, the concentrations are likely to be below applicable cleanup levels.

- A gasoline UST was reportedly used on the 1916 Boren property and a suspected heating oil UST may be present on the 1900 Boren property. Information regarding the removal and/or decommissioning of these tanks has not been discovered as part of this Phase I ESA. The potential presence of a heating oil UST and the reported use of a gasoline UST at the subject property is identified as a REC.

- A fuel oil UST was observed in historical drawings scanned from microfilm. These drawings indicated the tank to be approximately 18 feet below ground surface at the northeastern end of 1916 Boren Avenue adjacent to the alley. The capacity of the UST is approximately 1,700 gallons as depicted in the drawings. The documented presence of this UST is identified as a REC.

- The previous investigations have revealed the presence of cPAHs in soil at the 1900 Boren property exceeding the MTCA Method A cleanup level. The presence of cPAHs in soil above cleanup levels is identified as a REC.

Environmental activities conducted by others at the 1930 Boren Avenue property are described further in Section 2.1.6.

2.1.5 PES Groundwater Sampling (2021)

In July 2021, PES developed monitoring well GEI-1-18 and subsequently collected one sample from the well to confirm the quality of groundwater beneath the Property. The groundwater sample was analyzed for GRO, DRO, ORO, and BTEX (Fremont Analytical, 2021). No DRO, GRO, or BTEX were detected above the MRLs in the groundwater sample. Heavy oil (433 µg/L) was detected in the groundwater sample at a concentration below the MTCA Method A CUL (500 µg/L). These results were reported in PES' 2021 Phase 1 ESA.

2.1.6 Adjacent 1930 Boren Property

The property located at 1930 Boren Avenue (1930 Boren Property) is adjacent to the northwest side of the Property. The 1930 Boren Property was the location of a former Arco gasoline station/Budget Rent-A-Car. Multiple historical investigations identified soil containing

concentrations of petroleum hydrocarbons on the 1930 Boren Property. Redevelopment of the 1930 Boren Property occurred in 2019. During shoring activities for the 1930 Boren Property, petroleum hydrocarbon odors were noted in soldier pile borings located along the property line that adjoins the 1916 Boren Avenue parcel. DRO and/or GRO were detected at concentrations below the CULs in soil samples collected from 8 to 10 feet bgs in the soldier pile borings. Field screening during construction reportedly indicated the presence of petroleum hydrocarbon impacted soil along the southeast, southwest, and northwest excavation walls between elevation 130 and 113 feet (NAVD88), which is approximately 5 to 19 feet bgs. Groundwater was not encountered during any of the subsurface investigations or during redevelopment construction at the 1930 Boren Property.

Based on the results of the sampling and construction observation during redevelopment construction at 1930 Boren, there was the potential that soil with detectable petroleum hydrocarbon compounds could be encountered on the 1916 Boren Avenue property, along the common boundary with the 1930 Boren property (Figure 2).

2.2 Extent of Known or Suspected Impacted Media (Pre-Construction)

2.2.1 Soil

Results from the previous investigations conducted at the Property identified the presence of acetone, 2-butanone, metals, and cPAHs in soil beneath the Property. Concentrations of these compounds in soil were below applicable MTCA CULs, with the exception of the toxicity equivalent concentration (TEQ) for cPAHs in one sample, which exceeded the Method A CUL. Therefore, a portion of Property soil excavated during redevelopment would require special handling due to the known and potential presence of these compounds at concentrations both above and below the regulatory CULs.

NV5 identified five areas with known or potentially impacted soil on the Property, based on the results of the previous investigations and findings from PES's Phase I ESA. The five areas of known or potentially impacted soil are shown in Figure 2 and described below.

- **Area 1.** Area 1 was located in the northwestern portion of the Property around boring GEI-1-18 (Figure 2). Soil in Area 1 contained cPAHs at concentrations below the CULs in shallow fill near GEI-1-18, from ground surface to approximately 7 feet bgs (approximately 128 to 135 feet elevation). The extent of the cPAH-impacted soil in Area 1 was not defined prior to redevelopment.
- **Area 2.** Area 2 was located in the southeast portion of the Property and centered around boring GEI-2-18 (Figure 2). Analytical results from GEI-2-18 indicated soil in Area 2 contained cPAHs at concentrations above the CULs in shallow fill from the ground surface to approximately 10 feet bgs (approximately 125 to 135 feet elevation). The extent of the cPAH-impacted soil in Area 2 was not defined prior to redevelopment.
- **Area 3.** Area 3 was identified as the area along the shared property boundary with the 1930 Boren Avenue parcel, where soil had the potential to contain petroleum hydrocarbons (Figure 2). Petroleum-impacted soil was documented on the 1930 Boren Avenue parcel during its redevelopment. The location of the impacted soil at 1930 Boren

Avenue parcel suggested that petroleum hydrocarbon compounds could be encountered in Property soil from approximately 5 to 20 feet bgs (approximately 116 to 130 feet elevation) in Area 3.

- **Area 4.** Area 4 was located within the footprint of the former building at 1916 Boren Avenue, where a heating oil UST was suspected to be present (Figure 2). A Seattle Construction and Inspections plan for the former 1916 Boren Avenue building depicted a 40-barrel (approximately 1,680 gallon) oil UST located approximately 12 to 18 feet bgs at the northeastern end of the former building (alley side). No records were found regarding removal or decommissioning of the UST. The exact location of the suspected UST was not known; however, it was most likely located in or near the partial basement that contained the boiler room. Use of the heating oil UST historically may have caused impacts to soil in the vicinity of the tank. Soil from the ground surface to approximately 20 feet bgs in this area had the potential to contain petroleum hydrocarbons resulting from past UST usage.
- **Area 5.** Area 5 was located where Sanborn fire insurance maps identified "fuel gas" on the Property (Figure 2). In 1930 city directories, Service Station Gas & Oil is listed as an occupant at the former 1908 Boren Avenue address, which is currently identified as 1916 Boren Avenue. These historical documents indicate the potential presence of one or more USTs at 1916 Boren Avenue. Use of fuel USTs historically may have caused impacts to soil in the vicinity of the tank(s). Soil at undetermined depths in Area 5 had the potential to contain petroleum hydrocarbons resulting from past UST usage.

NV5 also identified the possible presence of a UST on the 1900 Boren Avenue parcel. Historical documents indicated that the church located on this parcel had an oil-burning furnace installed in 1973. A potential vent pipe for a heating oil UST reportedly was observed by others on the north side of the church building; however, a geophysical survey reportedly was conducted in the area in 1998, and no USTs were encountered. The exact location of the heating oil UST (if present) was unknown.

2.2.2 Groundwater

Results of previous investigations identified acetone in shallow perched water and heavy oil in the deeper groundwater beneath the Property. The acetone and heavy oil concentrations detected in groundwater were below the applicable CULs.

Dewatering was not anticipated during redevelopment excavation activities because groundwater beneath the Property occurs at about 56 feet to 59 feet elevation, which is below the deepest excavation required for the project. However, because discontinuous, shallow perched water was reported from about 13 to 32 feet bgs in several Property borings, some minor groundwater seepage was possible during excavation activities. Perched water (if encountered) had the potential to contain petroleum hydrocarbons and/or cPAHs at concentrations below the CULs. In addition, stormwater and precipitation accumulating in the redevelopment excavations had the potential to become impacted by contact with soil containing detectable petroleum hydrocarbons and/or cPAHs.

3.0 ENVIRONMENTAL CONSTRUCTION OVERSIGHT PROCEDURES

This section describes the procedures for environmental construction oversight and soil management used during redevelopment excavation activities at the Property. The work was performed consistent with the CMMP developed for the project (PES, 2021).

NV5's construction oversight and soil management activities during redevelopment included:

- Decommissioning the Property monitoring well;
- Assisting SBOB with waste profiling for Property soil and obtaining authorization for disposal of impacted soil removed during redevelopment;
- Overseeing excavation of exploratory test pits and collecting soil samples from the test pits to provide additional information regarding Property soil quality;
- Conducting oversight, soil screening, and sampling throughout redevelopment excavation activities in areas with known or potential impacted soil, including during:
    - Installation of soldier pile borings and shoring;
    - Mass excavation for the underground parking;
    - Installation of building foundations and footings;
    - Environmental excavation of impacted soil in areas of the Property known or suspected so have impacted soil;
    - Decommissioning of three USTs encountered at the Property during mass excavation;
    - Excavation of known impacted soil in the south portion of the Property, in landscaping/planter areas located outside the new shoring wall; and
    - Excavation in the location of utility connections in the Boren Avenue and Stewart Street rights-of-way;
- Documenting proper soil management and disposal during redevelopment activities in these areas; and
- Providing technical assistance to SBOB and its Contractor as needed during redevelopment.

Procedures for contaminated media management during SBOB's redevelopment activities are described in the following section.

Note: During the Property redevelopment activities, "project north" was defined as toward the adjacent 1930 Boren Avenue parcel (Figure 3). This convention has been maintained while describing NV5's construction oversight activities in Sections 3 through 5 of this report.

3.1 Areas of Soil Requiring Excavation and Management

Previous investigations conducted prior to redevelopment activities, including PES's Phase I Investigation, identified multiple areas on the Property with known or potential impacted soil. If

disturbed by redevelopment activities, this impacted soil required special handling. NV5 assisted the Contractor with proper handling of impacted soil (1) in areas of known or suspected potentially-impacted soil and (2) when unexpected conditions were encountered by the Contractor.

During NV5's environmental construction oversight activities, planned excavations were completed in Areas 1 through 5 to remove soil known or suspected to be impacted. During the excavation and test pitting activities conducted early in the project, previously unknown impacted soil was encountered that required additional environmental oversight and special handling. Figure 3 shows the areas of the Property where soil requiring special handling was found to be located.

The areas of known/suspected impacted soil and the unexpected conditions encountered during redevelopment excavation activities are described below.

- **Area 1.** Shallow fill near boring GEI-1-18 contained cPAHs at concentrations below the CULs from ground surface to approximately 7 feet bgs (approximately 128 to 135 feet elevation). This known impacted soil around GEI-1-8 was removed as planned.
- **Area 2.** Shallow fill near boring GEI-2-18 contained cPAHs at concentrations above the CULs from the ground surface to approximately 10 feet bgs (approximately 125 to 135 feet elevation) (Figure 2). The extent of the cPAH-impacted soil in Area 2 was not defined prior to redevelopment. This known impacted soil around GEI-2-18 was removed as planned. Field screening and performance sampling during the work identified additional cPAH impacted soil north, east, and west of the planned Area 2 excavation limits. This previously unknown impacted soil was also excavated.
- **Area 3.** Soil along the north Property boundary had the potential to contain petroleum hydrocarbons from approximately 5 to 20 feet bgs (approximately 116 to 130 feet elevation), due to the documented presence of impacted soil at the north-adjacent 1930 Boren Avenue property (Figure 2). The extent of the petroleum hydrocarbon impacted soil in Area 3 was not defined prior to redevelopment. The soil in Area 3 was removed as planned. Field screening and performance sampling during the work identified additional petroleum impacted soil east and south of the planned Area 3 excavation limits. This previously unknown impacted soil was also excavated.
- **Area 4 and UST-1 Excavations.** PES's Phase I ESA indicated that a heating oil UST was used at the 1916 Boren Avenue building historically, and that the UST might still be present on the Property (Figure 2). In addition, historical use of the UST may have caused petroleum hydrocarbon impacts to soil in Area 4. While removing the basement and foundation of the 1916 Boren Avenue building in Area 4, the Contractor encountered one unused heating oil tank and associated piping (designated UST-1). The tank was decommissioned and impacted soil surrounding UST-1 was removed during the Area 4 excavation activities.

  Results for test pit soil samples and field screening during redevelopment indicated that soil north of Area 4 was impacted by cPAHs and petroleum hydrocarbons, and that the soil contained abundant debris. This previously unknown impacted soil with debris was removed as part of the Area 4 excavation activities.

- **Area 5 Excavation.** PES's Phase I ESA indicated "fuel gas" was dispensed at the 1916 Boren Avenue building, suggesting that one or more USTs might still be present in this location (Figure 2). No USTs were identified during excavation in Area 5; however, shallow fill impacted by PAHs and abundant debris were encountered in excavated soil in this area. Soil containing PAHs and debris was removed as part of the Area 5 excavation activities.
- **UST-6 Excavation.** The Contractor encountered one unused UST (designated UST-2) and associated piping while removing the subsurface foundation in the southeast portion of the former 1916 Boren Avenue building. This previously unknown tank was decommissioned and impacted soil and debris that surrounded UST-2 was removed as part of the Area 6 excavation activities.
- **Area 7 and UST-3 Excavation.** PES's Phase I ESA indicated that a heating oil UST was used historically at the 1900 Boren Avenue building, and that the UST might still be present on the Property (Figure 2). The Contractor encountered one previously unknown UST (designated UST-3) while excavating for landscaping elements outside the shoring wall in the south portion of the of the 1900 Boren Avenue parcel (Figure 3). This previously unknown tank was decommissioned and impacted soil surrounding UST-3 was removed as part of the Area 7 excavation activities.
- **Shallow Fill Impacted by cPAHs.** The results from test pit and performance samples collected during construction oversight indicated that soil impacted with detectable cPAHs (generally at concentrations below the CULs) was more widespread than previously known. The cPAHs were identified in shallow fill across much of the Property, from the original ground surface to depths of approximately 6 to 7 feet bgs. The cPAH impacted fill was removed during redevelopment excavation activities. The cPAHs are not associated with a specific release at the Property; rather, the source of the cPAHs is believed to be the historically imported fill material.

The impacted soil removal activities and the results of confirmation sampling at each of the excavation areas are described in Sections 4.3.1 through 4.3.8. Figures showing sample locations in the excavation areas are shown in Figures 4 through 8.

3.2 Soil Categories and Waste Profiling

Soils excavated from the Property during redevelopment activities were identified as either impacted or clean. These soil categories are defined below.

- **Impacted Soil.** Impacted soil was soil that contained detectable cPAHs or petroleum hydrocarbon compounds (including GRO, DRO, and/or ORO), regardless of whether the concentrations were above or below the applicable MTCA Method A CULs. Impacted soil was managed as "contaminated soils" consistent with the Solid Waste Handling Standards (Chapter 173-350 WAC).
- **Clean Soil.** Clean soil was soil that did not contain petroleum hydrocarbons or cPAHs at concentrations above the MRLs. Clean soil exhibited all of the following characteristics:
    - No detectable/quantifiable levels of any contaminant except for metals;

- Total metals detections are equal to or less than natural background concentrations for the Property vicinity, as defined in Ecology's *Natural Background Soil Metals Concentrations in Washington State* (Ecology, 1994); and
- No odor, sheen, staining, or other field screening evidence of contamination is observed.

Clean soil is not regulated under MTCA and was handled consistent with Washington's Solid Waste Handling Standards.

Impacted soil excavated from the Property during redevelopment activities required special handling and disposal. NV5 assisted SBOB in preparing waste profiles and coordinating disposal of impacted soil removed from the Property during redevelopment excavation activities. SBOB obtained authorization from the following acceptable and permitted disposal facilities to accept impacted soil that was excavated from the Property:

- **Cadman Materials, Inc. (Cadman), of Everett, Washington.** Cadman (now known as Heidelberg Materials) categorizes soil as either Class 2 or Class 3 and approved the disposal of impacted Property soil according to its acceptance requirements, which are described below.
  - Class 2 Soil is soil that meets Cadman Class 2 Acceptance Limits (Appendix B). Class 2 acceptance limits for the contaminants of concern at the Property were 460 mg/kg for DRO or ORO and 0.1 mg/kg for cPAHs. Cadman accepted Class 2 soil from the Property for disposal at its permitted Class 2 Glenwood Landfill in Everett, Washington. Class 2 soil from the Property was accepted under Cadman Profile (Order Number) 101251172.
  - Class 3 Soil is soil that exceeds Cadman Class 2 Acceptance Limits and meets Cadman Class 3 Acceptance Limits (Appendix B). Cadman accepted Class 3 soil from the Property for incineration at its Thermal Treatment Facility in Everett, Washington. Class 3 soil from the Property was accepted under Cadman Profile (Order Number) 10124417.
- **Republic Services (Republic) of Seattle, Washington**. Republic authorized disposal of Property soil at its Roosevelt Regional Subtitle D Landfill in Roosevelt, Washington (via the transfer station at 3rd and Lander in Seattle). Republic accepted soil from the Property that contained petroleum hydrocarbons at concentrations above or below the MTCA Method A CULs and cPAHs at concentrations above and below the applicable CULs. Republic authorized disposal of the impacted soil under Waste Profile #41782215690 (TB-15690).
- **Waste Management, Inc. (Waste Management), of Seattle, Washington.** Waste Management authorized disposal of Property soil at its Columbia Ridge Subtitle D Landfill in Arlington, Oregon (via the Alaska Street Reload facility in Seattle). Waste Management accepted soil from the Property that contained petroleum hydrocarbons at concentrations above or below the MTCA Method A CULs and cPAHs at concentrations above and below the applicable CULs. Waste Management accepted the impacted soil under Waste Profiles #117744WA and #117649WA.

Authorizations for soil disposal at these permitted facilities and Cadman's Limits of Acceptance are included in Appendix B.

3.3 Excavation Oversight Procedures

This section describes general procedures for environmental construction oversight, including the field screening, soil segregation, and sample collection activities NV5 conducted to assist SBOB and the Contractor to appropriately manage soil generated during redevelopment excavation activities. The excavation oversight work was performed consistent with the CMMP (PES, 2021).

NV5 was present at the Property during planned excavation in areas where soil was known or suspected to be impacted based on results from previous investigations. NV5 also mobilized to the Property when unexpected conditions were encountered (e.g., discovery of previously unknown UST). In addition, NV5 was on-call to evaluate any soil suspected by the Contractor to be impacted, based on observations in the field.

NV5 assisted the Contractor during soil removal by:

- Field screening soil to evaluate for the presence of petroleum hydrocarbons, cPAHs, or other contaminants;
- Collecting soil samples to characterize removed soil and help direct excavation of impacted soil;
- Observing and documenting the impacted soil removal work;
- Assisting with appropriate handling of impacted soil, including segregating soil as impacted or clean, and collecting samples to confirm that soil beyond an excavation limit could be managed as clean soil; and
- Collecting soil samples to confirm that impacted soil was removed and document the quality of soil left in place during Property redevelopment.

Procedures for excavation oversight are described in the following sections.

3.3.1 Field Screening and Sampling

A NV5 field geologist performed oversight and conducted field screening of soil as needed during excavation activities. Field screening was used to help direct removal and handling of soil, identify and segregate impacted soil, and confirm the lack of impacted soil in clean areas. Property soils were field screened using visual and olfactory observations to evaluate for the presence of soil staining, sheen, and/or odors and using a photoionization detector (PID) to evaluate for the presence of volatile organic vapors. PID screening was performed by placing a representative sample of soil in a plastic bag, sealing it, and allowing the air in the bag to equilibrate before measuring the accumulated vapors with the PID. Field screening observations, including PID readings, sample locations, and soil sampling information, were recorded on a NV5 Daily Field Report. The results of field screening were used to direct excavation and soil handling activities and assess whether removal of impacted soil was complete prior to confirmation sampling.

Soil samples were collected and submitted for laboratory analysis at the discretion of NV5 based on project needs. Soil samples were collected using clean hand tools or directly from the excavator bucket. Samples were placed directly into laboratory-prepared containers labeled with the project name, sample name, and date and time of collection. Soil samples collected for GRO analysis were collected using EZ Plunge samplers in accordance with EPA Method 5035 protocol. Samples collected for all other analytes were collected using laboratory supplied glass jars. Decontaminated metal bowls and spoons were used to composite samples where field composite samples were collected. Samples were placed into a cooler containing ice to await transport to the analytical laboratory. The samples were maintained using chain-of-custody protocol.

3.3.2 Excavated Soil Handling

During redevelopment excavation activities, excavated soil was designated as clean or impacted, as described in Section 3.2. Soil was classified using a combination of previous investigation results, field screening, and analytical results from samples collected during redevelopment excavation activities.

During excavation of soil known to be impacted (based on previous laboratory analytical results), soil was either stockpiled or direct-loaded into trucks for transport to the disposal facility. Soil suspected of being impacted (based on field observations such as odor, staining, or elevated PID reading) was segregated as potentially impacted and then sampled for waste characterization purposes. Stockpiles of impacted or potentially impacted soil were placed on and covered with plastic sheeting while awaiting profiling and/or off-site disposal.

All impacted soil removed from the Property during redevelopment activities was transported to one of the approved facilities for disposal, as described in Section 3.2. Disposal documentation is included in Appendix B.

3.3.3 Sample Nomenclature and Grid Sampling

Each soil sample collected during construction oversight was assigned a unique name. In some excavation areas (e.g., Areas 1 and 2), soil samples were named using the convention [Excavation Area] – [Unique Identifier] – [Depth]. So, a sample designated "A2-NorthSW-3.5" would be a sample collected from the Area 2 excavation's north sidewall at a depth of 3.5 feet bgs.

The sample results from Area 1, Area 2, and test pits excavated early in the redevelopment suggested that soil across most of the Property would require special handling due to cPAH impacts and/or petroleum hydrocarbon impacts. Because of this widespread distribution, a decision was made to remove most of the impacted soil during mass excavation activities rather than removing it by excavating planned areas, sampling, and then "chasing" impacted soil if it was found to extend beyond planned environmental excavation areas.

A grid sampling procedure was developed to manage removal of the Property-wide impacted soil and subsequent confirmation sampling. A 30-foot grid was superimposed on the area of mass excavation within the redevelopment shoring wall (Figure 3). The grid rows were identified using the letters B through E across the east-west axis and the numbers 1 through 7 across the

north-south axis, so that each 30-foot by 30-foot grid square could be identified with a unique letter-number coordinate. For example, C3 was the grid square that corresponded to the intersection of the "C" row and the "3" row.

Once the sampling grid was established, soil samples collected within the grid were named using the convention [Grid Coordinate] – [Consecutive Number] – [Depth]. For example, a sample designated "C3-4-7.5" would be the fourth sample collected in the C3 grid square at a depth of 7.5 feet bgs. Excavation sidewall samples were collected from either the shoring wall prior to lagging or a vertical surface created by a depth change within the excavation; sidewall samples typically included the letters "SW" in the sample name (e.g., C3-SW5-8).

3.3.4 Performance Sampling

Performance samples were collected to monitor the progress of impacted soil removal, assess the extent of impacted soil, classify soil for disposal, or evaluate other conditions observed in the field. In most but not all cases, performance samples were removed during subsequent excavation activities due to their location within the redevelopment.

In some instances, a confirmation sample was collected but subsequent laboratory analysis showed that the sample contained petroleum hydrocarbon or cPAHs at concentrations exceeding applicable CULs or waste disposal criteria. In these cases, the sample was re-categorized as a performance sample and the sample location was excavated, additional field screening was performed, and the area was re-sampled.

Performance samples are listed in Tables 1 and 2. Performance samples for each soil removal area are shown on Figure A-1 in Appendix A.

3.3.5 Confirmation Sampling

Impacted soil removal was deemed complete when field screening, pre-determined excavation bounds (i.e., perimeter shoring walls), and/or the results of performance sampling indicated that impacted soil was removed. Confirmation samples were collected to confirm that remaining soil could be managed as clean soil. Confirmation samples were collected from the vertical and lateral limits of the excavation (i.e., from the floor and sidewalls), from the locations where contamination was most likely to be present based on field screening observations and/or analytical results. In most cases, a confirmation sample location was later removed because further excavation was required as part of the redevelopment design. For example, the confirmation samples collected from the excavation floor within the shoring wall were later removed as the Contractor excavated deeper to reach the final elevation of the underground parking garage.

Confirmation samples were collected at the discretion of the NV5 field geologist and were generally collected at approximately 30-foot intervals across the mass excavation floor (an approximate frequency of one sample per 30-foot grid square). On the excavation sidewalls, confirmation samples generally were collected at approximately 30-foot intervals laterally and approximately 5- to 10-foot intervals vertically.

Confirmation samples and select bounding characterization samples (i.e., samples with detections below the CUL or no detectable concentrations of contaminants) represent soil left in place at the Property after remedial excavation was completed. Confirmation samples are listed in Tables 1 and 2. Confirmation samples for excavation of Areas 1 through 7 are shown on Figures 4 through 7.

3.3.6 Unexpected Conditions

When unexpected conditions were encountered during excavation activities, NV5 assisted the Contractor to manage material that was excavated. NV5 conducted field screening and sampling as needed to help direct the removal, segregation, and classification of the suspect material based on the screening and sampling results. NV5 also coordinated analysis to characterize the stockpiled material for handling and disposal purposes. NV5 provided the Contractor with disposal requirements and assisted with the correct management of unexpected materials excavated from the Property. Additional details regarding unexpected conditions encountered during environmental construction oversight are provided in Section 4.

3.3.7 UST Decommissioning Procedures

Three USTs were identified during redevelopment excavation activities in areas of the Property where historical research indicated unused USTs could be present. The three USTs were decommissioned by removal. UST decommissioning was conducted by a licensed UST decommissioning contractor and overseen by a certified UST assessor, consistent with the Underground Storage Tank Regulations (WAC 173-360) and City of Seattle Fire Code. The UST decommissioning tasks included:

- Submitting the required notifications and obtaining required approvals prior to UST removal;
- Pumping residual liquids from the tank and triple rinsing the tank in preparation for removal;
- Coordinating a marine chemist to inert the tank and the Fire Marshal to inspect the tank prior to removal; and
- Properly disposing of tank contents and hauling the removed tank as scrap.

NV5 oversaw tank decommissioning activities and performed the environmental UST assessment. Although residential heating oil USTs are exempt from the Ecology UST regulations, the decommissioning activities were conducted in general accordance with Ecology's *Guidance for Remediation of Petroleum Contaminated Sites, Publication No. 10-09-057* (PCS Guidance) (Ecology, 2016). Field screening, soil segregation and removal, and sampling was conducted per the PCS Guidance and the CMMP (PES, 2021).

3.4 Laboratory Analysis

Soil and/or waste characterization samples were analyzed by: Fremont Analytical (Fremont) in Seattle, Washington; OnSite Environmental, Inc. (OnSite) in Redmond, Washington; and Rainier

Environmental (Rainier) in Tacoma, Washington. All facilities are Washington-accredited laboratories. The samples were maintained using standard chain-of-custody procedures.

Selected soil samples collected during field activities were analyzed for one or more of the following:

- GRO using Ecology Method NWTPH Gx;
- DRO and ORO using Ecology Method NWTPH Dx;
- VOCs using USEPA Method 8260D;
- PAHs using USEPA Method 8270-SIM; and
- RCRA 8 total metals using USEPA Methods 200.8/6020B.

Additional analyses were performed on selected samples for waste characterization purposes only, including:

- Hydrocarbon Identification by Ecology Method NWTPH-HCID;
- Total metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc) by USPEA Methods 6020B/7471B;
- Percent moisture by USEPA Method 8000D;
- pH by EPA Method 9045; and
- Acute fish toxicity test for dangerous waste characterization by Ecology Publication 80-12.

Laboratory analytical reports are included in Appendix C.

3.5 Data Validation

NV5 reviewed the soil analytical reports to evaluate the laboratory's performance in meeting the QC criteria outlined in the USEPA's *Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review,* (USEPA, 2020a) and *Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review*.(USEPA, 2020b) Data completeness, holding times, laboratory instrument calibrations, surrogate recoveries, matrix spike and matrix spike duplicates, laboratory control samples, quantitation limits, method blanks, and trip blanks were reviewed.

NV5 assigned the following data qualifiers, as needed:

- J- qualifier: result is an estimated quantity and may be biased low.

The usability of the data was determined based on the data validation and the EPA guidelines. Based on the data quality review, NV5 judged all of the data to be valid with qualification, and acceptable for its intended use in determining whether soil cleanup levels had been achieved. Laboratory reports and memoranda summarizing the data quality review are presented in Appendix C.

4.0 EXCAVATION OVERSIGHT AND SAMPLING

This section documents the environmental construction oversight and soil management activities conducted by NV5 from November 2022 through August 2024, during redevelopment at the Property. NV5 provided oversight and sampling during planned excavations in areas where soil was known or suspected to contain detectable petroleum hydrocarbons and/or cPAHs and when unexpected conditions were encountered (including decommissioning of three USTs encountered during the construction oversight activities). Soil management activities were performed consistent with the CMMP (PES, 2022).

NV5's construction oversight activities are described in Sections 4.1 through 4.5 below. The areas of soil requiring management where NV5 conducted construction oversight and sampling are shown in Figure 3. Details of the excavation areas are shown in Figures 4 through 7. Soil sample analytical results are summarized in Table 1 for petroleum hydrocarbons and Table 2 for cPAHs. Laboratory analytical reports and the data validation memoranda for the samples collected during environmental construction oversight are included in Appendix C.

4.1 Well Decommissioning

One monitoring well (GEI-1-18) was located within the footprint of the planned redevelopment (Figure 2). The well was decommissioned prior to the start of excavation activities. NV5 coordinated and oversaw the decommissioning activities. The monitoring well was decommissioned by a Washington State licensed well driller consistent with the requirements of the Washington Minimum Standards for Construction and Maintenance of Wells (WAC 173-160-460) by filling the well casing from the bottom to ground surface with bentonite. The driller's decommissioning log is provided in Appendix D.

4.2 Oil-Water Separator Decommissioning

One oil-water separator (OWS) related to the Dollar Rental Car company operations was present in the southeast portion of the Property and required decommissioning as part of redevelopment activities. On November 16, 2022, PES collected one water sample (WCHAR-111622) and one OWS solids sample (OW-S-111622) from the contents of the OWS for waste characterization purposes.

The water characterization sample was analyzed for hydrocarbon identification (HCID) and diesel (fuel oil) was identified in the sample. The OWS solids sample was analyzed for total metals (RCRA-8 metals plus copper, nickel, and zinc) and a fish bioassay was conducted consistent with the requirements of the Dangerous Waste regulations (WAC 173-303-100). Laboratory results for the OWS solids sample demonstrated that the OWS solids did not designate as a Hazardous Waste or Dangerous Waste and could be disposed of accordingly. Laboratory results for the waste characterization samples are summarized in Table 3 and laboratory reports are included in Appendix C. Waste disposal documentation is included in Appendix D.

The Contractor coordinated Marine Vacuum Service, Inc. (Marvac), to clean the OWS prior to its decommissioning. Marvac pumped the water and solids from the OWS and the OWS was decommissioned by removal on December 14, 2022.

4.3 Exploratory Test Pits

Prior to the start of mass excavation activities at the Property, fourteen exploratory test pits were excavated to help evaluate shallow soil quality on the Property and off-Property in the rights-of-way (ROWs) near future subsurface water utility work (Figure 3). Laboratory results for soil samples collected from the exploratory test pits were used to update the pre-construction estimates of the locations and volumes of Property soil that would require special handling.

Exploratory test pits were excavated on November 11, November 16, November 17, and December 1, 2022. Test pits were designated TP-1 through TP-6, PH-1 through PH-4, PH-10, PH-12, Area 4, and Area 5 (Figure 3). Not all planned test pits were completed due to time constraints. Some test pits were excavated for field screening purposes only and no soil samples were collected. For the test pits that were sampled, NV5 collected up to two soil samples per test pit and analyzed the samples for cPAHs. Soil samples collected in areas with known or suspected petroleum hydrocarbons were also analyzed for DRO, ORO, GRO, and BTEX.

The rationale for advancing the exploratory test pits, the results of the test pits sampling, and the implications regarding the oversight and management of soil excavated during redevelopment activities are described below. Test pit locations are shown in Figure 3. Laboratory results for the test pit soil samples are presented in Tables 1 and 2.

- **Area 3 Test Pits.** Test pits PH-1, PH-2, PH-3, and PH-4 were advanced near the north Property boundary to assess soil quality and determine disposal options for soil excavated in Area 3 (Figure 3). Soil samples collected from PH-1, PH-2, and PH-3 were representative of the soil located between the 1916 Boren and 1930 Boren developments. As indicated previously this soil was removed in its entirety durin the construction of the parking garage.

  Laboratory results for the Area 3 test pit soil samples showed that only one test pit sample, collected from 3 feet bgs in test pit PH-1, contained detectable cPAHs. Soil from test pits PH-1 and PH-2 contained detectable DRO (up to 1,360 mg/kg), ORO (131 mg/kg), and/or GRO (up to 347 mg/kg) (Table 1). These test pit results indicated that:

  - Soil in the northeast corner of the Property was clean; therefore, this area was excluded from the pre-construction estimates of Area 3 extent; and
  - Petroleum hydrocarbon impacted soil was present as deep as 11 feet bgs in Area 3.

- **Stewart Street Property Line/ROW Test Pits.** Test pit PH-10 (initially designated TP4) and test pit PH-12 were advanced on the south Property line (where Property soil met the Stewart Street ROW), to assess the quality of soil in the locations of subsequent water utility work (Figure 3).

  Laboratory results for the Stewart Street test pit soil samples showed that the samples collected from 3 feet and 5.5 feet bgs in test pit PH-10 contained cPAHs at concentrations less than the applicable Method B CUL of 0.19 mg/kg (Table 2). The soil sample collected from 3.5 feet bgs in test pit PH-12 did not contain detectable cPAHs. These results demonstrated that:

- cPAHs were not present at concentrations exceeding the applicable CUL in the planned Stewart Street water utility work areas; and
- Soil near test pit PH-10, if disturbed as part of redevelopment excavation, could require special handling.

- **Boren Avenue Property Line/ROW Test Pits.** Test pits PH-20, PH-4, and TP-6 were advanced near or just outside the west Property line (i.e., near or in the Boren Avenue ROW), to assess the quality of soil in the locations of subsequent water utility work (Figure 3).

  Laboratory results for the Boren Avenue test pit soil samples showed that the samples collected at 3 feet bgs from test pit PH-20 (within the ROW), at 7 feet bgs in test pit PH-4 (located near the Boren Avenue Property line in Area 3), and at 6 feet bgs in test pit TP-6 (near the Property line in the southwest portion of the Property) did not contain detectable concentrations of cPAHs. The soil sample collected from 3 feet in TP-6 contained cPAHs at concentrations less than the MTCA Method B CUL of 0.19 mg/kg (Table 2). These test out results demonstrated that:

  - cPAHs were not present at concentrations exceeding the applicable CUL in the planned Boren Avenue water utility work areas; and
  - Shallow soil (0 to at least 3 feet bgs) near TP-6, if disturbed as part of redevelopment excavation, could require special handling because it contains detectable concentrations of cPAHs (less than the CUL).

- **Property-wide Test Pits.** Test pits designated TP-1, TP-2, TP-3, and TP-5 were advanced in other locations throughout the Property to assess soil quality and determine disposal options for soil that would be excavated during redevelopment (Figure 3). In addition, test pits designated Area 4 and Area 5 were advanced in excavation Area 4 and Area 5, respectively.

  Laboratory results for these test pits showed that the soil sample collected from 3 feet bgs in test pit TP-2 contained GRO (40.9 mg/kg), DRO (62.2 mg/kg), and ORO (17,700 mg/kg) (Table 1). In addition, soil samples collected between 3 feet and 4.5 feet bgs in test pits TP-1, TP-2, TP-4, and TP-5 contained detectable cPAHs (Table 2). The samples collected between 6 feet and 7 feet bgs in those test pits did not contain detectable cPAHs.

  Results for the Property-wide test pit sampling demonstrated that:

  - Soil impacted with petroleum hydrocarbons above the CUL was present in the northeast portion of the Property, north of Area 4 (based on TP-2 results). This was identified as an unexpected condition, as this was an area where impacted soil had not been identified previously. Area 4 was expanded north approximately 50 feet to include this previously-unknown impacted soil identified at test pit TP-2.
  - The cPAH concentration in soil collected from 3 feet bgs in test pit TP-2 exceeded Cadman's Class 3 criteria and therefore required disposal at either Republic's or Waste Management's facility.

- Soil containing abundant debris was encountered in Area 4 and Area 5 (and later in new area designated Area 6). The presence of debris in soil requiring special handling necessitated disposal of the soil at either Republic's or Waste Management's facility.
- Soil impacted with detectable cPAHs was more widespread than previously known. The cPAHs were associated with the shallow fill placed on the Property, based on soil sample results and observations from the test pit activities and previous work on the Property. The widespread distribution of cPAHs in Property soil was identified as an unexpected condition and not specifically the result of a release at the Property.

  Although cPAHs were not identified in the shallow fill at test pit TP-3 and portions of Area 3, the test pit sample results confirmed the presence of cPAHs in the northeast (TP-2 and Area 4 test pit), southeast (Area 5 test pit), south (TP-5), and central (TP-1) parts of the Property.

  The cPAH impacted fill was present from the original ground surface to depths of between approximately 4.5 feet and 6 feet bgs across most of the Property, based on the results of the test pit sampling.

Figure 3 shows the estimated extent of soil requiring special handling at the Property, reflecting the results of test pit sampling and the resulting understanding of impacted soil and debris distribution. In summary, the extents of Area 2, Area 3, and Area 4 were enlarged; two new excavation areas, Area 6 and Area 7, were added; and the extent of impacted soil was modified to show that special handling would be required for shallow soil across the Property due to the distribution of cPAH and petroleum hydrocarbon impacted fill.

4.4 CONSTRUCTION OVERSIGHT EXCAVATIONS

This section documents environmental construction oversight excavation activities completed by NV5 during redevelopment. NV5 conducted environmental oversight during excavation in area where soil was known or suspected to be impacted and when unexpected conditions were encountered. The following activities required environmental construction oversight:

- Planned environmental excavations in Areas 1 through 5;
- Excavation of additional impacted soil beyond the planned limits of Area 2, Area 3, and Area 4;
- Decommissioning one UST (UST-1) suspected and ultimately encountered in Area 4;
- Decommissioning one heating oil UST (UST-2) encountered in an unexpected location designated as Area 6;
- Decommissioning one heating oil UST (UST-3) suspected and ultimately encountered in an area designated as Area 7;
- Decommissioning one OWS near the southeast corner of the Property (Figure 2);
- Managing the cPAH impacted fill that was found to be present across the majority of the Property.

As described in Section 3.3.3 and shown in Figure 3, shallow soil on most of the Property was required special handling due to cPAH and/or petroleum hydrocarbon impacts. Most of the cPAH impacted shallow fill was removed during mass excavation activities, rather than removing it by excavating planned areas, sampling, and then "chasing" impacted soil if it was found to extend beyond planned environmental excavation areas. During mass excavation, the cPAH impacted fill was removed across the entire area located within the shoring wall. The vertical limit (floor) of the cPAH- and petroleum hydrocarbon-impacted soil excavation (i.e., the depth at which cPAHs and petroleum hydrocarbons were no longer detected) varied across the Property but generally ranged from approximately 8 to 11 feet bgs. Excavation for the parking garage required removal of soil to a total depths ranging from approximately 41 to 47 feet bgs within the shoring wall, which is at least 30 feet below the final vertical limit of the environmental excavation.

Environmental construction oversight is described in Sections 4.4.1 through 4.4.8. Final lateral limits and confirmation samples for the seven excavation areas are shown in Figure 3. Figure 4 is a detail showing the Area 1 and Area 3 excavations. Figure 5 is a detail showing the Area 2 and Area 7 excavations. Figure 6 is a detail showing the Area 4 and Area 5 excavations. Figure 7 is a detail showing the Area 6 excavation. Figure 8 shows the mass excavation grid samples. Soil sample analytical results for petroleum hydrocarbons and PAHs (including cPAHs) are summarized in Table 1 and Table 2. Laboratory analytical reports and data validation memoranda for the samples collected during environmental construction oversight are included in Appendix C. Figure A-1 included in Appendix A shows the location of all soil samples (performance and confirmation) collected at the Property.

4.4.1 Area 1 Excavation

Soil in Area 1 was known to contain cPAHs at concentrations below the CULs in shallow fill (0 to approximately 7 feet bgs), based on previous analytical results from GEI-1-18. Impacted soil removal in Area 1 was conducted on November 16 and 18, 2022. NV5 initially directed the excavation of soil within a pre-determined area approximately 20 feet by 20 feet laterally and about 10 feet deep centered around boring GEI-1-18, to remove soil known to contain PAHs (Figure 2). Following excavation, NV5 collected soil samples from the north, east, and west sidewalls and the floor of the Area 1 excavation and analyzed the samples for PAHs. Laboratory results for the samples indicated that soil remaining in the west sidewall and the bottom (at 10 feet bgs) of the Area 1 excavation was clean soil, but that detectable PAHs were still present in soil from the north and east sidewalls of the Area 1 excavation. No south sidewall samples were collected in Area 1, since the soil removed from Area 1 had been stockpiled in that area.

Field observations and laboratory results for Area 1 showed that PAHs were associated with shallow fill present from the ground surface to between 7 and 8 feet bgs in Area 1. The shallow fill with PAHs generally consisted of approximately 3 feet of yellow-brown silty sand with debris, underlain by 3 to 4 feet of gray silty sand and sandy silt. The fill with PAHs was underlain by native material consisting of blue-gray sandy silt and silt, to a depth of at least 10 feet bgs.

The results for Area 1 and test pit samples collected by this stage of construction oversight activities indicated that PAH impacted fill was present in shallow fill across much of the Property. As noted above, a decision was made to address removal of the remaining PAH-

impacted soil in Area 1 during mass excavation activities. The removal of PAH-impacted soil and confirmation sampling during mass excavation activities are described in Section 4.4.8.

Mass excavation eliminated any existing sidewalls in the Area 1 excavation; however, six confirmation soil samples were collected during the Area 1 and mass excavation activities to confirm the removal of PAH-impacted soil. The Area 1 confirmation samples are shown on Figure 4. No PAHs were detected above the MRLs in the Area 1/mass excavation confirmation samples. These results indicate that PAH-impacted soil, including soil with detectable concentrations of PAHs above and below the applicable CULs, was successfully removed from Area 1.

Impacted soil removed from the Area 1 excavation was transported off the Property for disposal at Republic.

4.4.2 Area 2 Excavation

Soil in Area 2 was known to contain cPAHs at concentrations above the CULs in shallow soil (0 to approximately 8 feet bgs), based on previous analytical results from GEI-2-18. Impacted soil removal in Area 2 was conducted in multiple phases from December 13, 2022, through August 9, 2024. NV5 initially directed the excavation of soil within a pre-determined area 15 feet by 20 feet laterally and 8 feet deep centered around boring GEI-2-18, to remove soil known to contain cPAHs (Figure 2).

On December 13, 2022, NV5 collected soil samples from the floor and sidewalls of the Area 2 excavation and analyzed the samples for PAHs. Results for the Area 2 samples indicated that soil remaining in the south wall and the bottom of the Area 2 excavation was clean soil, but that detectable PAHs were still present in soil from the north, east, and west sidewalls of the Area 2 excavation (Table 2; Figure 5). Field observations and laboratory results showed that the PAHs were associated with the horizon of shallow fill present from the ground surface to between 6 and 7 feet bgs in Area 2.

On December 19, 2022, NV5 directed the removal of additional PAH impacted soil 10 feet toward the east and west of the initial Area 2 excavation limits, to a depth of 8 feet bgs. A horizon of gray-black soil containing debris and exhibiting a hydrocarbon-like odor was encountered in the north portion of the east sidewall excavation, and an additional 10 feet of soil was excavated toward the east to due to these field observations. Soil samples were collected at the new east and west limits of the Area 2 excavation. Results for the December 19 soil samples indicated that PAH concentrations in soil from the west sidewall of the Area 2 excavation were less than the applicable CULs, and thus no further excavation was required (Table 2; Figure 5). Concentrations of cPAHs exceeding the TEQ CULs were still present in soil from 3.5 to 7 feet bgs in the east sidewall of the Area 2 excavation. DRO and HO were also detected in soil from the east sidewall. The presence of DRO and HO in the east part of Area 2 was identified as an unexpected condition, as petroleum hydrocarbon compounds had not been identified in Area 2 soil previously.

On December 20 and 21, 2022, NV5 directed the removal of PAH impacted soil identified in the north sidewall of the initial Area 2 excavation limits. Soil was excavated laterally approximately

15 feet north from the original Area 2 excavation. Soil in this area was excavated to depths between 4 and 6 feet bgs to remove the PAH impacted soil, based on the results of performance sampling in Area 2. Performance soil samples collected from the new north sidewall and floor limits of the Area 2 excavation indicated that PAH impacted soil exceeding the TEQ CUL remained from 0 to 4 feet bgs in the north sidewall of the Area 2 excavation at sample A2-NWall-3-3 (Table 2; Figure 5). The final Area 2 excavation extended north to the planned shoring wall. No additional soil was removed laterally to the north, since the subsequent shoring and mass excavation activities would remove the remaining PAH impacted soil in this location.

On March 11, 2024, the remaining soil that contained PAHs exceeding the TEQ CULs at sample A2-EWALL2-7N (Figure 5) was removed as part of the Area 7/UST-3 excavation activities (see Section 4.3.7). Two confirmation samples (S-1-03112024 from 4 feet bgs and S-2-03112024 from 8 feet bgs; Figure 5) were collected from the southwest sidewall of the Area 7 excavation (near the location of A2-EWALL2-7N). No PAHs were detected above the MRLs in the March 2024 samples (Table 2). DRO was detected in the March 2024 samples at concentrations less than the cleanup level of 2,000 mg/kg (Table 1).

On August 9, 2024, the remaining shallow soil that contained PAHs exceeding the TEQ CULs (near sample A2-EWALL2-3.5 at 3.5 feet bgs; Figure 5) was excavated and the new limits of the Area 2 excavation were sampled. The area of excavation was approximately 8 feet by 10 feet and 4 feet deep. One sample (S-4-4-08092024) was collected from the floor and one sample (S-5-3-08092024) was collected from the south sidewall of the excavation and analyzed for PAHs. The floor sample contained detectable PAHs; however, the Total TEQ for cPAHs in the sample did not exceed the CUL of 0.19 mg/kg (Table 2). No PAHs were detected above the MRLs in the sample collected from the south sidewall.

The final results of the Area 2 soil removal are summarized below.

- Soil samples collected from the final floor of the Area 2 excavation either contained no detectable PAHs or contained detectable PAHs at concentrations below the applicable CULs. The final floor of the Area 2 excavation ranged from 4 to 8 feet bgs, depending on the location within the excavation. These results indicate that PAH-impacted soil exceeding the CUL was successfully removed vertically in the Area 2 excavation.
- PAH impacted soil exceeding the TEQ CUL was present from approximately 0 to 4 feet bgs in the north wall of the Area 2 excavation. Because the final Area 2 excavation extended north to the planned shoring wall, further excavation in Area 2 was not necessary, since the subsequent shoring and mass excavation activities removed the remaining PAH impacted soil in this location. The excavation and management of this impacted soil during mass excavation activities is described in Section 4.4.8.
- No PAHs were detected in soil collected from 3 feet and 7 feet in the final south sidewall of the Area 2 excavation. These results indicate that PAH-impacted soil was successfully removed to the south and that the soil remaining in place in south sidewall of the Area 2 excavation is clean.

- PAH concentrations in soil from the final west sidewall of the Area 2 excavation were less than the applicable CULs. These results indicate that PAH impacted soil exceeding CULs was successfully removed to the west.
- PAH concentrations in soil from the final east sidewalls of the Area 2 excavation were less than the applicable CULs. This was documented by: two confirmation samples collected from Area 7 in March 2024, following removal of soil at sample A2-EWALL2-7N; and two confirmation samples collected from Area 2 in August 2024, following removal of soil at sample A2-EWALL2-3.5. These results indicate that PAH impacted soil exceeding CULs was successfully removed to the east.

The final Area 2 excavation was a roughly rectangular area approximately 30 feet north to south, a maximum of 50 feet east to west, and between 4 and 8 feet deep. Confirmation samples and the final limits of the Area 2 excavation are shown in Figure 5.

PAH and petroleum hydrocarbon impacted soil removed from Area 2 during redevelopment activities was transported to Cadman for disposal as Class 3 soil.

4.4.3 Area 3 Excavation

Soil in Area 3, along the north Property boundary, had the potential to contain petroleum hydrocarbons, due to the documented presence of hydrocarbon impacted soil along the south boundary of the adjacent 1930 Boren Avenue property (Figure 2). The extent of the petroleum impacted soil in Area 3 was not defined prior to redevelopment; however, the results for test pits samples collected in Area 3 helped refine the area of soil requiring special handling. The approximate area of soil that required special handling is shown in Figure 3. Based on the results of samples collected from test pits PH1 through PH4, Area 3 soil contained cPAHs (at about 3 feet bgs) and petroleum hydrocarbons (from approximately 5 feet to 12.5 feet bgs) at concentrations meeting Cadman's Class 3 criteria.

Impacted soil removal in Area 3 was conducted in several phases from January 17 through February 8, 2023. On January 17, the majority of Area 3 was excavated to a depth of approximately 5 feet. On January 26 and February 8, 2023, soil was excavated from 5 feet to 11 feet bgs in Area 3. Following soil removal, NV5 collected confirmation samples from the Area 3 excavation limits to confirm the removal of impacted soil within the shoring walls in Area 3. Confirmation samples were collected from the Area 3 floor at 11 feet bgs and sidewalls between 3.5 feet and 7 feet deep. The confirmation samples were analyzed for DRO, ORO, GRO, BTEX, and/or PAHs. The Area 3 confirmation samples, including the test pit samples that document soil quality at the shoring walls, are shown in Figure 4. Laboratory analytical results for the Area 3 confirmation samples are presented in Table 1 for petroleum hydrocarbons and in Table 2 for PAHs. The confirmation sampling results for Area 3 are summarized below.

- Confirmation soil samples collected from the floor, east sidewall, and south sidewall of the Area 3 excavation did not contain detectable DRO, ORO, GRO, BTEX, or PAHs (Table 1; Figure 4). These results indicate that petroleum hydrocarbon- and PAH-impacted soil in Area 3 was successfully removed vertically and laterally within the redevelopment shoring wall. As such, any additional soil removed vertically to reach the

final elevation of the underground parking garage in Area 3 could be managed as clean soil.

- Confirmation soil samples collected along the north and west sidewalls of the Area 3 excavation (i.e., at the north and west Property boundaries) indicated the following:
    - Confirmation soil samples collected from the north sidewall of the Area 3 excavation (in test pits PH1, PH2, and PH4 along the north Property boundary) contained detectable DRO and/or ORO at concentrations below the applicable CUL of 2,000 mg/kg (Table 1; Figure 4).
    - One confirmation soil sample (B1-SW1-7.5) collected from 7.5 feet bgs in the west shoring wall contained DRO (4,190 mg/kg) and ORO (2,350 mg/kg) at concentrations exceeding the CUL (Table 1; Figure 4).
    - GRO was also quantified in five of the Area 3 confirmation samples collected from the north and west Area 3 sidewalls; however, the analytical laboratory reported that the GRO detections were due to overlap with diesel-range material and therefore not GRO. Consequently, these results were not compared to the GRO cleanup level for purposes of determining compliance with regulatory CULs.
- One soil sample (A3-1-3) collected from 3 feet bgs in the north shoring wall (at test pit PH-1) contained detectable cPAHs (Table 1; Figure 4). The concentration of benzo(a)pyrene (1.84 mg/kg) in the sample exceeded the applicable CULs of 0.19 mg/kg. The Total TEQ also exceeded the CUL for the sample. As indicated previously, this sample was collected prior to the beginning of the Area 3 excavation very near the north Property boundary adjacent to the 1930 Boren subgrade parking garage wall. This sample represented soil located within the 2-foot space between the subgrade parking garage walls of the 1930 Boren and 1916 Boren developments and was removed during the Area 3 excavation. Soil represented by sample A3-1-3 has been effectively removed and does not represent post construction conditions.

In summary, the Area 3 confirmation sample results indicate that petroleum hydrocarbon- and cPAH-impacted soil was successfully removed within the redevelopment shoring wall in Area 3. One area of DRO- and ORO- impacted soil exceeding the CUL is present at the northwest Property boundary at/near sample B1-SW1-7.5 and is limited to a horizon between approximately 4 feet and 11 feet bgs in this location. The DRO and ORO present in this area is believed to be associated with petroleum hydrocarbon impacts to soil on the north-adjacent 1930 Boren property.

The final Area 3 excavation was a rectangular area approximately 15 to 20 feet north to south, 100 feet east to west, and 11 to 12 feet deep. Confirmation samples and the final limits of the Area 3 excavation are shown in Figure 4.

PAH and petroleum hydrocarbon impacted soil removed from Area 3 during construction oversight was transported to Cadman for disposal as Class 3 soil.

4.4.4 Area 4 and UST-1 Excavation

Soil in Area 4, along the east Property boundary, had the potential to contain petroleum hydrocarbons related to historical use of a heating oil UST at the former 1916 Boren Avenue building. The UST was suspected to still be present (Figure 2). The extent of the petroleum impacted soil in Area 4 was not defined prior to redevelopment; however, the results for test pit samples (A4-1-4, TP2-3) collected during redevelopment documented the presence of petroleum hydrocarbon and cPAH impacted soil, identified debris in the Area 4 soil, and helped refine the area of soil requiring special handling (Figure 3). The laboratory results for test pit and performance samples also showed that Area 4 soil did not meet Cadman's acceptance criteria due to contaminant concentrations and the presence of debris; therefore, soil excavated from Area 4 was exported to Republic for disposal.

Impacted soil removal in Area 4 was conducted in several phases from November 16, 2022, through February 6, 2023. Initial excavation activities focused on removing remaining building foundations/basement structures for the former 1916 Boren Avenue building and locating the UST that was suspected to be present near the former boiler room. On November 16, 2022, while the Contractor was removing rubble related to the 1916 Boren Avenue building demolition, water with a petroleum hydrocarbon sheen was observed flowing out of the former basement structure. The water was precipitation that accumulated in the basement/foundation of the 1916 Boren Avenue building after aboveground structures were demolished in 2021. One sample (WCHAR-111622) was collected to characterize the wastewater; the sample characterized the petroleum product in the water as diesel (fuel oil). Marvac pumped the water from the basement structure on November 29, 2022, and transported the wastewater off the Property for disposal. The wastewater disposal documentation is included in Appendix D.

One heating oil UST, designated UST-1, was encountered during excavation activities on January 26, 2023. The Contractor discovered the tank and associated piping in a below-grade crawl space immediately north of the boiler room of the former 1916 Boren Avenue building. The top of UST-1 was approximately 8 feet below the original Property grade. On January 30, the top of the tank was exposed and Marvac pumped and cleaned UST-1.

UST-1 was permanently closed by removal on February 6, 2023. NV5 was present when the tank was removed, observing the UST in the field for evidence of leaks or releases. UST-1 was approximately 12 feet long and 5 feet in diameter, with an estimated capacity of approximately 1,760 gallons. The tank was observed to be in poor condition. Small holes and heavy rust and pitting were observed on the sides and bottom of the tank. The sides and end of the tank were separating in one place; however, this was likely caused by the excavator during excavation of UST-1. The tank was transported off the Property for disposal as scrap metal. The UST decommissioning documents are included in Appendix D.

Field screening indicated the presence of petroleum hydrocarbon impacted soil in the vicinity of UST-1. Following removal of the tank, NV5 directed the excavation of the impacted soil around UST-1. The final UST-1 excavation was approximately 10 to 12 feet north to south, 15 feet east to west, and 15 feet deep. NV5 collected confirmation samples from the final limits of the UST-1 excavation. One sample was collected below the former location of the UST at approximately 15 feet bgs and one sample each was collected from the north, south, east, and

west sidewalls of the excavation at 12 to 13 feet bgs (Figure 6). The UST-1 excavation confirmation samples were submitted to the laboratory to be analyzed for DRO, ORO, GRO, BTEX, and PAHs. No GRO, DRO, ORO, BTEX, or PAHs were detected in the confirmation samples from the UST-1 Excavation Area, documenting that PCS was removed from the UST-1 Excavation Area and the remaining soil could be managed as clean soil (Table 1; Figure 6).

From February 6 to 8, 2023, additional impacted soil and debris in Area 4 was removed from the area north of UST-1. Excavation continued within the shoring wall in Area 4 until all petroleum hydrocarbon- and PAH-impacted soil and debris was removed. The final Area 4 excavation extended approximately 70 feet north of the former UST-1 location and approximately 25 feet west of the east shoring wall (Figure 3).

NV5 collected confirmation samples from the floor and sidewall limits of Area 4 during the Area 4 excavation activities and the grid confirmation sampling described in Section 4.4.8. Sixteen confirmation soil samples were collected during the Area 4/mass excavation activities and analyzed for DRO, ORO, and PAHs. This total includes five confirmation soil samples collected to confirm the removal of petroleum hydrocarbon impacted soil in the UST-1 excavation. The Area 4 confirmation samples are shown on Figure 6. Laboratory analytical results for the Area 4 confirmation samples are presented in Table 1 for petroleum hydrocarbons and in Table 2 for PAHs. The confirmation sampling results for Area 4 are summarized below.

- Confirmation soil samples collected from the final floor and sidewalls of the Area 4 excavation contained no detectable petroleum hydrocarbons. These results indicate that petroleum hydrocarbon impacted soil was successfully removed vertically and laterally in the Area 4 excavation.
- Soil samples collected from the final floor and sidewalls of the Area 4 excavation contained no detectable PAHs, except for one location. PAHs were detected in one sample (E2-SW1-3) collected from 3 feet bgs in the east sidewall (at the east Property boundary); however, the detected concentrations were below the applicable CULs. These results indicate that PAH impacted soil exceeding the CUL was successfully removed vertically and laterally in the Area 4 excavation, and that any additional soil removed vertically to reach the final elevation of the underground parking garage in Area 4 could be managed as clean soil.

The final Area 4 excavation was a roughly rectangular area approximately 100 feet north to south, 25 feet east to west, and 10 to 15 feet deep. Confirmation samples and the final limits of the Area 4 excavation are shown in Figure 6.

Impacted soil and soil with debris removed from the Area 4 and UST-1 excavations during environmental construction oversight activities was transported off site for disposal at Republic.

4.4.5 Area 5 Excavation

Soil in Area 5, along the east Property boundary, had the potential to contain petroleum hydrocarbons related to historical use of a gasoline UST that reportedly operated at the former 1916 Boren Avenue building (Figure 2). No USTs were identified in Area 5 during redevelopment. However, results for one of the Area 5 test pit samples (A5-1-3.5, collected at

3.5 feet bgs) documented the presence of PAHs in shallow fill. Results for the deeper Area 5 test pit samples (A5-2-6 and A5-3-9.5, collected at 6 feet and 9.5 feet bgs, respectively) indicated that the PAH impacted fill was limited to depths less than 6 feet bgs in Area 5. In addition, debris was identified in soil from Area 5. As in Area 4, the presence of abundant debris necessitated that the soil excavated from Area 5 be exported to Republic for disposal (Figure 3).

PAH impacted soil and debris were excavated from Area 5 on January 27 and 28, 2023. The Area 5 excavation connected with the south side of the Area 4 excavation and the north side of the Area 6 excavation (see Section 4.4.6). The final Area 5 excavation was approximately 35 feet north to south, 25 feet east to west, and 8 to 10 feet deep. Field screening observations and the results of the two deeper Area 5 test pit samples (A5-2-6 and A5-3-9.5) documented that PAH impacted fill was limited to the shallow soil less than 6 feet bgs in Area 5; therefore, the excavation activities in Area 5 were successful in removing PAH impacted soil. These confirmation samples and the final limits of the Area 5 excavation are shown in Figure 6.

Impacted soil removed from the Area 5 excavation during environmental construction oversight activities was transported off site for disposal at Republic.

4.4.6 Area 6 and UST-2 Excavation

On December 8, 2022, the Contractor was excavating subsurface foundation elements in the southeast corner of the 1916 Boren Avenue parcel. The subsurface foundation elements appeared to be a former basement structure associated with historical residences that were present on the Property historically. During the excavation activities, the Contractor observed abundant debris in soil and encountered water exhibiting an oily sheen and hydrocarbon odor. NV5 mobilized to the Property to evaluate the subsurface conditions in this location. The water appeared to be precipitation that had accumulated into void spaces present within the soil/debris. The water was seeping into the excavation at approximately 6 feet bgs. As no impacted soil had been previously identified in this location, the excavation was designated as a new area requiring environmental oversight, Area 6 (Figure 3).

NV5 collected two waste characterization samples from Area 6: one soil sample (A6-Nwall-6) and one water sample (A6-water-120822) from the water that had accumulated in the Area 6 excavation. The excavation was backfilled with removed soil to await waste characterization sample results, develop a process for removal of the soil/debris in Area 6, and allow the shoring contractor to work in the area. The shoring contractor was instructed to segregate any soil removed from Area 6 as impacted. Results of the waste characterization samples showed that DRO and ORO were present in the soil and accumulated water in Area 6. The laboratory results and field observations showed that Area 6 soil did not meet Cadman's acceptance criteria due to contaminant concentrations and/or the presence of debris; therefore, soil excavated from Area 6 was exported to Republic for disposal (Figure 3).

Excavation activities resumed in Area 6 on February 3, 2023. While excavating in the former basement structure, the Contractor encountered a previously-unknown UST, designated UST-2, at approximately 10 feet bgs. The tank was damaged by the excavator and was leaking water with an oily sheen. The Contractor excavated a small pit in the underlying native clay/silt layer to contain the water until the tank could be pumped. NV5 collected two samples for waste

characterization: one soil sample (UST2-S-CHAR) and one water sample (UST2-W-CHAR). Marvac mobilized to the Property, pumped the water accumulated in the pit and the contents of UST-2, and transported the wastewater off the Property for disposal. Wastewater disposal documentation is included in Appendix D.

UST-2 was permanently closed by removal on February 6, 2023. Prior to tank removal, Marvac cleaned and triple-rinsed the tank. NV5 was present when the tank was removed, observing the UST in the field for evidence of leaks or releases. UST-2 was approximately 6 feet long and 3 feet in diameter, with an estimated capacity of 320 gallons. The tank was observed to be in moderate condition, with corrosion and pitting on the tank walls. Except for the hole created by the excavator, no holes were observed in the UST. The tank was transported off the Property for disposal as scrap metal. The UST decommissioning documents are included in Appendix D.

Field screening indicated the presence of petroleum hydrocarbon impacted soil in the vicinity of UST-2. The impacted soil was observed primarily within a soil horizon at 11 to 12 feet bgs around UST-2. NV5 directed the excavation of the impacted soil around the former tank location and collected confirmation samples from the limits of the UST-2 excavation. One sample was collected below the former UST-2 at approximately 13 feet bgs and one sample was collected from each of the UST excavation sidewalls at 12 feet bgs (Figure 7). The UST-2 excavation confirmation samples were submitted to the laboratory to be analyzed for DRO, ORO, GRO, and PAHs. No DRO, ORO, GRO, or PAHs were detected above the MRLs in the UST-2 confirmation samples. These results document that impacted soil surrounding UST-2 was removed and the soil remaining could be managed as clean soil.

The remaining soil containing debris was removed from Area 6 following completion of the UST-2 excavation activities. NV5 collected confirmation samples from the floor and sidewall limits of Area 6 during the Area 6 excavation activities and the grid confirmation sampling described in Section 4.4.8. The Area 6 confirmation samples are shown on Figure 7. Twelve confirmation soil samples were collected during the Area 6/mass excavation activities and analyzed for DRO, ORO, and/or PAHs. This total includes five confirmation soil samples collected to confirm the removal of petroleum hydrocarbon impacted soil in the UST-2 excavation. Laboratory analytical results for the Area 6 confirmation samples are presented in Table 1 for petroleum hydrocarbons and in Table 2 for PAHs. The confirmation sampling results for Area 6 are summarized below.

- Confirmation soil samples collected from the final floor and north sidewall of the Area 6 excavation contained no detectable petroleum hydrocarbons or PAHs (Table 1 and Table 2; Figure 7). These results document that petroleum hydrocarbon- and PAH-impacted soil exceeding the CUL was successfully removed vertically, and laterally toward the north, within the shoring wall in Area 6. As such, any additional soil removed vertically to reach the final elevation of the underground parking garage in Area 6 could be managed as clean soil.
- The soil samples collected from the final east and south sidewalls of the Area 6 excavation (the east and south shoring walls before lagging was installed) either contained no detectable PAHs or contained PAHs at concentrations below the applicable CULs, except for one location. Sample E6-SW1-3.5, collected from 3.5 feet bgs at the

east Property boundary, contained benzo(a)pyrene (0.471 mg/kg) at a concentration that exceeded the CUL of 0.19 mg/kg. The Total TEQ for the sample also exceeded the CUL. Given that the PAH impacts on the Property are associated with the historically imported shallow fill, the area of soil exceeding the CUL is likely limited to a horizon less than about 6 feet bgs.

The final Area 6 excavation was a rectangular area approximately 30 feet by 25 feet laterally and 9 feet to 13 feet deep. Area 6 extended from the south side of the Area 5 excavation to the south shoring wall. Confirmation samples and the final limits of the Area 6 excavation are shown in Figure 7.

Impacted soil removed from the Area 6 excavation during environmental construction oversight activities was transported off site for disposal at Republic.

4.4.7 Area 7 and UST-3 Excavation

In late January and February 2024, the Contractor excavated soil along the south side of the south shoring wall to expose and cut the tops off the south soldier piles and install utilities and landscaping. NV5 was on site to oversee the excavation activities. This new excavation area was identified as Area 7.

During the excavation activities on February 27, 2024, one previously unknown heating oil UST, designated UST-3, was encountered immediately south of the south shoring wall. The location of UST-3 is shown in Figure 5. Soil surrounding UST-3 was excavated to expose the top of the tank. Approximately 23 inches of liquid was present in the tank. One sample was collected from the contents of the tank and analyzed using Ecology Method NWTPH-HCID for waste characterization purposes. The analysis identified diesel fuel in the sample; however, the analytical laboratory indicated that the sample analyzed was primarily water mixed with a small amount of diesel fuel.

Marvac pumped the tank contents and triple-rinsed the tank on March 4, 2024. UST-3 was inerted and permanently closed by removal on March 5, 2024. The tank was constructed of single-wall steel and was approximately 10 feet long and 4 feet in diameter, with an estimated capacity of 1,000 gallons. The tank exhibited moderate rusting and pitting; however, no holes were observed in UST-3 upon removal. The tank was transported off the Property for disposal as scrap metal. Tank decommissioning documentation is included in Appendix D.

NV5 directed the excavation of soil around UST-3 that was suspected to contain residual petroleum hydrocarbons from the tank. Confirmation samples were collected to confirm that no soil exceeding the applicable CULs remained at the limits of the UST-3 excavation. Area 7 confirmation samples were submitted to the laboratory to be analyzed for DRO, ORO, and/or PAHs. Due to space constraints and construction sequencing requirements, excavation of the impacted soil and confirmation sampling for the Area 7 and UST-3 excavation occurred in several phases between February 27 and March 11, 2024. These activities are summarized below.

- Two confirmation soil samples (UST-1-030524 and UST-2-030524) were collected from the excavation floor beneath the former tank and analyzed for DRO and ORO. Sample

UST-2 was collected at 9.5 feet bgs from a horizon of blue-gray soil that appeared to be impacted by petroleum hydrocarbons; this sample contained 1,480 mg/kg ORO, which is below the cleanup level of 2,000 mg/kg. Sample UST-1 was collected at 11.5 ft bgs from soil beneath the blue gray discolored soil horizon and sample UST-2; no DRO or ORO was detected above the MRLs in soil sample UST-1. These results document that residual impacted soil exceeding the CUL was removed from the floor of the UST-3 excavation.

- Confirmation soil samples were collected from the east and west sidewalls of the excavation following removal of the impacted soil surrounding UST-3, as described below.
    - At the north end of UST-3, two soil samples (S-1-022724 and S-2-022724) were collected from the east and west sidewalls of the tank excavation at 7 feet bgs (Figure 5). Heavy oil was detected in samples S-1-022724 and S-2-022724 (147 mg/kg and 1,150 mg/kg, respectively) at concentrations below the applicable CUL of 2,000 mg/kg (Table 1). The samples also contained detectable PAHs; however, the concentrations were well below their respective cleanup levels (Table 2).
    - At the south end of UST-3, one sample (S-3-03112024 from 4 feet bgs) was collected from the east sidewall and two soil samples (S-1-03112024 from 4 feet bgs and S-2-03112024 from 8 feet bgs) were collected southwest of the UST-3 excavation (Figure 5). DRO (from 237 mg/kg to 877 mg/kg) was detected in all three samples at concentrations less than the cleanup level of 2,000 mg/kg.
    - All soil on the north side of UST-3 was removed between the tank and the shoring wall when UST-3 was discovered; consequently, no north sidewall sample could be collected.

  These sidewall sample results document that the residual soil exceeding the CUL was removed from the UST-3 excavation.

- Results from the Area 2 sampling (Section 4.3.2) showed that soil with PAHs exceeding the Total TEQ CUL was still present in the east sidewall of Area 2 following excavation. The impacted soil was documented in soil from 3.5 to 7 feet bgs in the location of sample A2-EWALL2-7N (Figure 5). Impacted soil in these locations was removed as part of the Area 7 excavation activities. The two Area 7 confirmation samples collected following soil removal in these areas (S-1-03112024 from 4 feet bgs and S-2-03112024 from 8 feet bgs) documented that the soil exceeding CULs was successfully removed from Area 2.

In summary, the Area 7 confirmation sample results documented that no soil exceeding the CULs remained in place at the north, south, east, or west lateral limits or at the vertical limit of the excavation. In addition, Area 7 excavation activities removed soil remaining in the east wall of the Area 2 excavation that contained cPAHs exceeding the Total TEQ CUL; thus, remediation of soil exceeding CULs in Area 2 was complete.

The final Area 7 excavation was approximately 30 feet by 25 feet laterally and 8 feet to 11.5 feet deep. Confirmation samples and the final limits of the Area 7 excavation are shown in Figure 5.

Impacted soil removed from the Area 7 excavation during environmental construction oversight was transported off site for disposal at Cadman.

4.4.8 Shallow Fill Impacted by cPAHs

As described in Section 3.3.3 and shown in Figure 3, sampling during construction oversight showed that shallow soil impacted with low-level cPAHs (typically below the CULs) was present in shallow fill across much of the Property, from the original ground surface to depths of approximately 6 feet to 7 feet bgs. All of the cPAH impacted fill was removed within the redevelopment shoring wall during mass excavation for the underground parking, and all soil impacted by cPAHs above a CUL was removed from the area outside of the shoring wall, at the south end of the Property (in Area 2, near GEI-2-18 and in Area 7, near former UST-3).

NV5 conducted construction oversight and confirmation sampling of the cPAH impacted shallow fill within the shoring wall in January and February 2023. Field screening observations and performance sampling results were used to guide the soil removal and identify the base of the impacted fill as mass excavation progressed. Once NV5 determined that the cPAH impacted fill was removed in an area of the excavation, grid confirmation samples were collected. The grid confirmation samples were submitted to the analytical laboratory to be analyzed for PAHs. In areas where petroleum hydrocarbons were identified in soil, grid confirmation samples were also analyzed for DRO, ORO, and GRO (selected samples).

As described in Section 3.3.3, a 30-foot sampling grid was utilized to help manage confirmation sampling. Confirmation samples were collected at approximately 30-foot intervals across the mass excavation floor to document the removal of impacted soil vertically within the excavation. On the excavation sidewalls, confirmation samples generally were collected at approximately 30-foot intervals laterally and approximately 5- to 10-foot intervals vertically. The sidewall confirmation samples were collected at various depth horizons to document the quality of soil remaining in place in the sidewalls of the mass excavation area (behind the shoring walls). The grid confirmation samples collected to document the removal of shallow cPAH impacted fill and, where applicable, petroleum hydrocarbon impacted soil within the redevelopment shoring wall are shown in Figure 8.

The grid confirmation sample results also were compared to MTCA Method B CULs (for PAHs) and Method A CULs (for DRO and ORO) to evaluate regulatory compliance at the vertical and lateral limits of the mass excavation (Table 1 and Figure 8). Results for the grid confirmation samples are summarized below.

- No PAHs, DRO, ORO, or GRO were detected above the respective RLs in the grid confirmation samples collected at the vertical limits (floor) of the mass excavation (Tables 1 and 2; Figure 8). These results documented that soil impacted by cPAHs and petroleum hydrocarbons was successfully removed from the area within the shoring wall. Based on these results, the remaining soil excavated vertically to reach the final elevation of the underground parking structure could be managed as clean soil.
- Except for three samples, PAHs, DRO, ORO, and/or GRO were not detected above the respective CULs in the grid confirmation samples collected at the lateral limits of the mass excavation (i.e., at the excavation sidewalls behind the redevelopment shoring

walls) (Tables 1 and 2; Figure 8). The three locations where concentrations of PAHs or petroleum hydrocarbons exceeded the applicable CUL were described in Sections 4.4.3 and 4.4.6, and included the following:

- Sample E6-SW1-3.5, collected from 3.5 feet bgs at the east Property boundary (Area 6). This soil sample contained benzo(a)pyrene (0.471 mg/kg) at a concentration that exceeded the CUL of 0.19 mg/kg (Table 2; Figures 7 and 8). The Total TEQ for the sample also exceeded the CUL. The PAH impacted soil on the Property is associated with the historically imported shallow fill and are not associated with a release from the Property. The area of PAH impacted soil exceeding the CUL is likely limited to a horizon less than about 6 feet thick (the typical depth to the bottom of the fill in this area).
- Sample B1-SW1-7.5, collected from 7.5 feet bgs at the northwest Property boundary (Area 3). This soil sample contained DRO (4,190 mg/kg) and ORO (2,350 mg/kg) at concentrations exceeding the CUL (Table 1; Figures 4 and 8). The area of DRO- and ORO- impacted soil exceeding the CUL present at/near sample B1-SW1-7.5 is limited to a horizon between approximately 4 feet and 11 feet bgs in this location. The DRO and ORO present in this area is believed to be associated with petroleum hydrocarbon impacts to soil on the north-adjacent 1930 Boren property.

  GRO was reported in five of the Area 3 confirmation samples collected from the north and west Area 3 sidewalls; however, the analytical laboratory reported that the GRO detections were due to overlap with diesel-range material and therefore not representative of GRO in those locations.
- Sample A3-1-3, collected from 3 feet bgs at the north Property boundary (Area 3). This soil sample contained benzo(a)pyrene (1.84 mg/kg) at a concentration that exceeded the applicable CULs of 0.19 mg/kg (Table 2; Figures 4 and 8 As described above, the cPAH impacted soil represented by sample A3-1-3 was removed in its entirety and does not represent post construction conditions.

Locations of the grid confirmation samples collected from the lateral limits of the mass excavation are shown in Figure 8. Laboratory analytical results are summarized in Table 1 and Table 2.

Shallow, cPAH impacted fill (not located within Areas 1 through 7) that was removed from the area within the shoring wall during mass excavation activities was transported off the Property for disposal at Cadman as Class 2 Soil. The cPAHs identified at the Property are believed to be associated with the historically imported fill material and not associated with a specific release at the Property.

4.5 Impacted Soil Disposal

The Contractor reported that 21,831.21 tons of PAH- and/or petroleum hydrocarbon-impacted soil were excavated from the Property during redevelopment and transported off the Property for proper disposal. This included:

- A total of 16,591.54 tons of PAH- and/or petroleum hydrocarbon-impacted soil exported to the Cadman facility in Everett, Washington, as Class 2 for landfilling, consistent with its operating permit;
- A total of 2,417.77 tons of PAH- and/or petroleum hydrocarbon-impacted soil exported to the Cadman facility in Everett, Washington, as Class 3 for incineration, consistent with its operating permit;
- A total of 1,754.8 tons of cPAH and petroleum hydrocarbon impacted soil that exceeded the Cadman Class 3 criteria and/or contained debris that was exported to Republic Services Roosevelt Regional Subtitle D Landfill in Roosevelt, Washington, for disposal consistent with the landfill's operating permit; and
- A total of 1,067.1 tons of cPAH and petroleum hydrocarbon impacted soil that exceeded the Cadman Class 3 criteria and/or contained debris that was transported to the Waste Management Columbia Ridge Subtitle D Landfill in Arlington, Oregon, for disposal consistent with the landfill's operating permit.

Soil disposal documentation is included in Appendix B.

Construction wastewater was managed by the Contractor and its subcontractor. Construction wastewater was discharged to the sanitary sewer under KCIW Wastewater Discharge Authorization No. 4599-01, effective July 6, 2022. Construction wastewater was intermittently discharged to the sewer beginning in December 2022 and ending in April 2023. Details of the construction wastewater management were reported by others under separate cover. Copies of the discharge authorization and self monitoring reports are provided in Appendix F.

5.0 SUMMARY AND CONCLUSIONS

SBOB LLC is redeveloping the Property located 1900 and 1916 Boren Avenue in Seattle, Washington, with one eleven-story office tower that has three and a half levels of underground parking. Construction of the new building is ongoing. Redevelopment excavation activities generated soil containing detectable petroleum hydrocarbons and cPAHs at concentrations both above and below the applicable CULs. NV5 assisted SBOB LLC by conducting construction oversight and directing soil management during the excavation phase of redevelopment work. Environmental construction oversight was conducted from November 2022 through August 2024.

As documented in this Construction Completion Report, NV5 provided environmental construction oversight during excavation in areas of the Property where soil with detectable petroleum hydrocarbon and/or cPAH was identified. Impacted soil was identified in seven areas, designated Area 1 through Area 7, and in shallow fill present across much of the Property. In addition, three unused heating oil USTs were encountered during the redevelopment excavation activities. Impacted soil was encountered from the original ground surface to as deep as approximately 11 feet below bgs on the Property. In accordance with the CMMP, NV5 conducted field screening and collected soil samples during redevelopment excavation activities to determine the vertical and lateral limits of the impacted soil and direct its removal and appropriate disposal.

5.1 Summary of Construction Oversight

Results of the construction oversight, tank decommissioning, soil removal, and sampling are summarized by excavation area in the following sections.

5.1.1 Area 1 Excavation

Impacted soil removal in Area 1 was conducted on November 16 and 18, 2022. NV5 initially directed the excavation of soil within a pre-determined area around boring GEI-1-18, to remove soil known to contain PAHs (Figure 2). Following excavation, detectable PAHs were still present in soil from the north and east sidewalls of the Area 1 excavation. Field observations and the results for soil samples collected by this stage of construction oversight activities indicated that fill material impacted with low levels of cPAHs (generally below the CULs) was present in shallow fill across much of the Property. The removal of the remaining cPAH-impacted soil in Area 1 and across much of the Property was addressed during subsequent mass excavation activities.

Six confirmation soil samples were collected to confirm the removal of PAH-impacted soil during the Area 1 and mass excavation activities. No PAHs were detected above the RLs in the Area 1/mass excavation confirmation samples. These results indicate that PAH-impacted soil, including soil with detectable concentrations of PAHs above and below the applicable CULs, was successfully removed from Area 1.

5.1.2 Area 2 Excavation

Impacted soil removal in Area 2 was conducted in multiple phases from December 13, 2022, through August 9, 2024, to remove soil known to contain cPAHs (Figure 2). Following initial soil excavation activities, detectable cPAHs were still present in soil from the north, east, and west sidewalls of the Area 2 excavation (Table 2; Figure 5). Field observations and laboratory results showed that the PAHs were associated with the shallow fill present from the ground surface to between 6 and 7 feet bgs in Area 2. Additional impacted soil was excavated laterally toward the west, east, and north until cPAH concentrations were found to be below the applicable CULs. An area of petroleum hydrocarbon impacted soil was identified in soil from the east sidewall during the Area 2 work. This DRO- and ORO-impacted soil and a final area of soil containing cPAHs exceeding the CULs, both located in the east sidewall of the Area 2 excavation, were removed as part of the Area 7/UST-3 excavation activities.

The confirmation sampling results for Area 2 soil are summarized below.

- Confirmation soil samples collected from the final floor and the final south sidewall, east sidewall, and west sidewall limits of the Area 2 excavation either contained no detectable PAHs or contained detectable PAHs at concentrations below the applicable CULs.
- cPAH impacted soil exceeding the TEQ CUL was present from approximately 0 to 4 feet bgs in the initial north wall of the Area 2 excavation. The final Area 2 excavation extended north to the shoring wall thereby removing the soil exceeding the cPAH TEQ CUL in this location.

These results indicate that PAH-impacted soil exceeding the CUL was successfully removed vertically and laterally in the Area 2 excavation.

5.1.3 Area 3 Excavation

Impacted soil removal in Area 3 was conducted in several phases from January 17 through February 8, 2023, to remove petroleum hydrocarbon impacted soil that was present along the north Property boundary. The majority of Area 3 was excavated to a depth of approximately 11 feet bgs. Following soil removal, NV5 collected confirmation samples from the Area 3 excavation limits. The confirmation samples included test pit samples collected along the north sidewall of Area 3 that document the quality of soil at the north lateral limits (north shoring wall) of Area 3. The confirmation sampling results for Area 3 are summarized below.

- Confirmation soil samples collected from the floor, east sidewall, and south sidewall of the Area 3 excavation did not contain detectable DRO, ORO, GRO, BTEX, or PAHs (Table 1; Figure 4).
- Confirmation soil samples collected along the west and north sidewalls of the Area 3 excavation (i.e., at the northwest and north Property boundaries) indicated the following:
    - One confirmation soil sample (B1-SW1-7.5) collected from 7.5 feet bgs in the west shoring wall contained DRO (4,190 mg/kg) and ORO (2,350 mg/kg) at concentrations exceeding the CUL (Table 1; Figure 4).

GRO was reported in five of the Area 3 confirmation samples collected from the north and west Area 3 sidewalls; however, the analytical laboratory reported that the GRO detections were due to overlap with diesel-range material and therefore not representative of GRO in those locations.

- One soil sample (A3-1-3) collected from 3 feet bgs in the north shoring wall (at test pit PH-1) contained benzo(a)pyrene (1.84 mg/kg) at a concentration exceeded the applicable CUL of 0.19 mg/kg. The Total TEQ also exceeded the CUL for the sample. Soil represented by this sample has been removed in its entirety and does not represent post construction conditions.
- The remaining confirmation soil samples collected from the north and west sidewalls of Area 3 did not contain detectable DRO, ORO, GRO, BTEX, or PAHs or contained these constituents at concentrations less than the CULs.

The Area 3 confirmation sample results indicate that petroleum hydrocarbon- and cPAH-impacted soil was successfully removed within the redevelopment shoring wall in Area 3. One area of DRO- and ORO-impacted soil exceeding the CUL is present at the northwest Property boundary at/near sample B1-SW1-7.5 and is limited to a horizon between approximately 4 feet and 11 feet bgs in this location. The DRO and ORO present in this area is believed to be associated with petroleum hydrocarbon impacts to soil on the north-adjacent 1930 Boren property. The cPAHs identified in Area 3 are believed to be associated with the historically imported fill material and not with a specific release at the Property

5.1.4 Area 4 Excavation and UST-1

Impacted soil removal in Area 4 was conducted in several phases from November 16, 2022, through February 8, 2023, to remove PAH-impacted soil and locate a UST that was suspected to be present at the former 1916 Boren Avenue building. One heating oil UST, designated UST-1, was encountered in a basement immediately north of the boiler room of the former building.

UST-1 was permanently closed by removal on February 6, 2023. Following removal of the tank, NV5 directed the excavation of petroleum hydrocarbon impacted soil around UST-1. The final UST-1 excavation was approximately 10 to 12 feet north to south, 15 feet east to west, and 15 feet deep. No GRO, DRO, ORO, BTEX, or PAHs were detected in the confirmation samples from the UST-1 Excavation Area, documenting that PCS was successfully removed from the UST-1 excavation.

Additional impacted soil and debris in Area 4 was excavated from the area north of UST-1 until petroleum hydrocarbon- and PAH-impacted soil and debris was removed. The final Area 4 excavation extended approximately 70 feet north of the former UST-1 location and approximately 25 feet west of the east shoring wall (Figure 3). The confirmation sampling results for Area 4 are summarized below.

- Confirmation soil samples collected from the final floor and sidewalls of the Area 4 excavation contained no detectable petroleum hydrocarbons. These results indicate that petroleum hydrocarbon impacted soil was successfully removed vertically and laterally in the Area 4 excavation.

- Soil samples collected from the final floor and sidewalls of the Area 4 excavation either contained no detectable PAHs or contained PAHs at concentrations below the applicable CULs (at one sample location only). These results indicate that PAH impacted soil exceeding the CUL was successfully removed vertically and laterally in the Area 4 excavation.

5.1.5 Area 5 Excavation

Area 5 had the potential to contain petroleum hydrocarbons related to historical use of a gasoline UST that reportedly operated at the former 1916 Boren Avenue building (Figure 2). No USTs were identified in Area 5 during redevelopment; however, PAHs were detected in shallow fill (less than 6 feet deep) in the area and debris was identified in soil from Area 5. Impacted soil and debris were excavated from Area 5 on January 27 and 28, 2023, in an area approximately 35 feet north to south, 25 feet east to west, and 8 to 10 feet deep. Field screening and the results of two Area 5 test pit samples (A5-2-6 and A5-3-9.5) were used to document that the excavation activities were successful in removing shallow, PAH impacted soil in Area 5.

5.1.6 Area 6 and UST-2 Excavation

On December 8, 2022, impacted soil and debris was encountered in the southeast portion of the 1916 Boren Avenue Parcel. As no impacted soil had been previously identified in this location, the excavation was designated Area 6 (Figure 3). While excavating in Area 6 on February 3, 2023, the Contractor encountered a previous-unknown heating oil UST, designated UST-2, at approximately 10 feet bgs.

UST-2 was permanently closed by removal on February 6, 2023. Field screening indicated the presence of petroleum hydrocarbon impacted soil from 11 to 12 feet bgs in the vicinity of UST-2. NV5 directed the excavation of the impacted soil around the former tank location and collected five confirmation samples from the limits of the UST-2 excavation. No DRO, ORO, GRO, or PAHs were detected above the MRLs in the UST-2 confirmation samples. These confirmation sampling results document that impacted soil surrounding UST-2 was successfully removed.

The remaining soil containing debris was removed from Area 6 following completion of the UST-2 excavation activities. The final Area 6 excavation area was approximately 30 feet north to south, 25 feet east to west, and 9 to 13 feet deep. NV5 collected confirmation samples from the floor and sidewall limits of Area 6 during the Area 6 excavation and grid confirmation sampling activities. The confirmation sampling results for Area 6 are summarized below.

- Confirmation soil samples collected from the final floor and north sidewall of the Area 6 excavation contained no detectable petroleum hydrocarbons or PAHs (Table 1 and Table 2; Figure 7). These results document that petroleum hydrocarbon- and PAH-impacted soil exceeding the CUL was successfully removed vertically, and laterally toward the north, within the shoring wall in Area 6.
- The soil samples collected from the final east and south sidewalls of the Area 6 excavation (the east and south shoring walls before lagging was installed) either contained no detectable PAHs or contained PAHs at concentrations below the applicable

CULs, except for one location. Sample E6-SW1-3.5, collected from 3.5 feet bgs behind the shoring wall at the east Property boundary (essentially off the Property), contained benzo(a)pyrene (0.471 mg/kg) at a concentration that exceeded the CUL of 0.19 mg/kg. The Total TEQ for the sample also exceeded the CUL. The results indicate that all of the cPAH soil exceeding the CUL has been removed from the Property in Area 6. The cPAH impacts in sample E6-SW1-3.5, located off of the Property, are associated with the historically imported shallow fill documented in this area and are not due to a release from the Property.

5.1.7 Area 7 and UST-3 Excavation

The Contractor encountered one previously unknown heating oil UST on February 27, 2024, while excavating for landscaping element south of the redevelopment shoring wall. The tank was designated UST-3.

UST-3 was permanently closed by removal on March 5, 2024. NV5 directed the excavation of soil around UST-3 that was suspected to contain residual petroleum hydrocarbons from the tank. Due to space constraints and construction sequencing requirements, excavation of the impacted soil and confirmation sampling for the Area 7 and UST-3 excavation occurred in several phases between February 27 and March 11, 2024. The final Area 7 excavation was approximately 30 feet by 25 feet laterally and 8 feet to 11.5 feet deep. Following each phase of soil removal, confirmation samples were collected to confirm impacted soil was removed from the limits of the UST-3 excavation. Confirmation samples from Area 7 were analyzed for DRO, ORO, and PAHs.

The confirmation sampling results for Area 7 are summarized below.

- Confirmation soil sample collected from the vertical (floor) limits and the south, east, and west lateral (sidewall) limits of the UST-3 excavation either did not contain detectable DRO, ORO, or PAHs or contained these constituents at concentrations less than the applicable CULs. These results document that residual impacted soil exceeding the CUL was removed from the floor and sidewalls of the UST-3 excavation.
- All soil on the north side of UST-3 was removed between the tank and the shoring wall when UST-3 was discovered; consequently, no north sidewall sample could be collected.

The Area 7 confirmation sample results documented that no soil exceeding the CULs remained in place at the vertical limit of the excavation or at the north, south, east, or west lateral limits of the Area 7 excavation. In addition, Area 7 excavation activities removed soil remaining in the east wall of the Area 2 excavation that contained cPAHs exceeding the Total TEQ CUL; thus, remediation of soil exceeding CULs in Area 2 was complete.

5.1.8 Shallow Fill Impacted by cPAHs

Shallow soil impacted with low-level cPAHs (typically below the CULs) was present in shallow fill across much of the Property, from the original ground surface to depths of approximately 6 to 7 feet bgs. All of the cPAH impacted fill was removed within the redevelopment shoring wall during mass excavation, and all soil impacted by cPAHs above a CUL was removed from the area outside of the shoring wall, at the south end of the Property.

NV5 conducted construction oversight and confirmation sampling of the cPAH impacted shallow fill in January and February 2023. Field screening observations and performance sampling results were used to guide the soil removal and identify the base of the cPAH impacted fill as mass excavation progressed. Once NV5 determined that the cPAH impacted fill was removed in an area of the excavation, confirmation samples were collected (Figure 8). Results for the grid confirmation samples are presented on Tables 1 and 2 and summarized below.

- No PAHs, DRO, ORO, or GRO were detected above the respective RLs in the grid confirmation samples collected at the vertical limits (floor) of the mass excavation. These results documented that soil impacted by cPAHs and petroleum hydrocarbons was successfully removed from the area within the shoring wall.
- PAHs, DRO, ORO, and/or GRO were not detected above the respective CULs in the grid confirmation samples collected at the lateral limits of the mass excavation (i.e., at the shoring walls) except for the three locations that are described in Section 5.1.3 (Area 3 Excavation) and Section 5.1.6 (Area 6 Excavation). As described previously, the soil exceeding a CUL in Area 3 is attributed to releases that occurred at the north adjacent 1930 Boren property and is of limited extent. The soil exceeding the CUL in the Area 6 confirmation sample is attributed to the imported fill material and is not associated with a release from the Property.

5.2 Conclusions

Soil impacted by cPAHs and petroleum hydrocarbons was removed from the Property during redevelopment excavation activities from November 2022 to August 2024. Impacted soil was removed from seven designated excavation areas during the work. The work also included removal of shallow fill impacted by cPAHs (generally at concentrations less than CULs), which was placed on the Property and adjacent areas historically. Three heating oil USTs were encountered at the Property during the redevelopment excavation activities. The three USTs were decommissioned by removal during the redevelopment work. The impacted soil excavated from the Property was managed and the USTs were decommissioned consistent with the MTCA Cleanup regulations, Underground Storage Tank Regulations, Ecology's PCS guidance, and other applicable environmental regulations.

Results for the confirmation soil samples collected during environmental construction oversight indicated that cPAH- and petroleum hydrocarbon-impacted soil was successfully removed vertically, both within the redevelopment shoring walls and in the area south of the shoring wall (in Area 2, near GEI-2-18 and in Area 7, near former UST-3).

PAH- and petroleum hydrocarbon-impacted soil was successfully removed at the lateral limits of the excavation areas, except three locations. One very limited area of cPAH-impacted shallow fill remain at the off the Property at sample E6-SW1-3.5, where the cPAH impacted soil is likely limited vertically to between 0 and 6 feet bgs outside the east shoring wall (off the Property). The cPAHs identified in Property soil are associated with the historically imported fill material and not with a specific release at the Property. One area of DRO- and ORO- impacted soil exceeding the CUL is present at the northwest Property boundary at sample B1-SW1-7.5 and is limited to a horizon between approximately 4 feet and 11 feet bgs in this location. The DRO and ORO present in this area is believed to be associated with petroleum hydrocarbon impacts to soil

on the north-adjacent 1930 Boren property. These confirmation sampling results indicate that all soil exceeding a CUL has been removed from the Property. .

A total of 21,831.21 tons of petroleum hydrocarbon- and/or PAH- impacted soil was excavated during redevelopment and transported off the Property for appropriate disposal. Excavated soil that met the Cadman Class 2 disposal criteria (16,591.54 tons) or the Cadman Class 3 disposal criteria (2,417.77 tons) was exported to the Cadman facility in Everett, Washington, for disposal. Excavated soil that exceeded the Cadman Class 3 criteria and/or contained debris was exported to either the Republic Services Roosevelt Regional Subtitle D Landfill in Roosevelt, Washington (1,754.8 tons) or the Waste Management Columbia Ridge Subtitle D Landfill in Arlington, Oregon (1,067.1 tons) for disposal.

Previous investigations at the Property indicated that groundwater did not contain concentrations of contaminants at concentrations exceeding CULs. Based on the results of the work performed at the Property, future impacts to groundwater are not anticipated for the following reasons:

- Soil containing detectable levels of petroleum hydrocarbons within the parking garage footprint has been removed and an additional 30 feet of soil below the parking garage was removed;

- Soil containing concentrations of petroleum hydrocarbons and cPAHs exceeding CULs in the area south of the parking garage (Areas 2 and 7) has been removed. and

- Perched groundwater is 30 feet or more below the bottom of the development excavation and over 60 feet below the deepest detection of cPAHs and/or petroleum hydrocarbons found at the Property. Given that all soil containing detectable levels of petroleum hydrocarbons and cPAHs was removed from within the exceeding cleanup levels

NV5 concludes that (1) soil exceeding CULs was effectively removed from the Property during environmental construction oversight activities, (2) there is no risk of future impacts to groundwater, and (3) no further cleanup actions are required to address the cPAH impacted shallow fill or the impacted soil associated with three USTs discovered at the Property.

6.0 REFERENCES

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ILLUSTRATIONS

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NV5

SITE LOCATION
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

Figure
1

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EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- 06000-2155 — APPROXIMATE PARCEL BOUNDARY WITH LOT DESIGNATION SUFFIX
- APPROXIMATE FOOTPRINT OF NEW BUILDING BASEMENT AND SHORING WALL
- FORMER PROPERTY STRUCTURE
- GEI-1-18 — MONITORING WELL (GEOENGINEERS, 2018)
- GEI-2-18 — SOIL BORING (GEOENGINEERS, 2018)
- B-1 — SOIL BORING (ESNW, 2016)
- NEW BUILDING FOOTPRINT

PRECONSTRUCTION ESTIMATED AREAS OF SOIL REQUIRING SPECIAL HANDLING

- POTENTIAL PETROLEUM HYDROCARBON IMPACTED SOIL
- POTENTIAL CARCINOGENIC POLYCYCLIC AROMATIC HYDROCARBONS IMPACTED SOIL

N

0 15 30

SCALE IN FEET

Aerial Photo: August 14, 2020 (Google 2021)

NV5

FORMER SITE FEATURES AND KNOWN/SUSPECTED AREAS OF IMPACTED SOIL (PRE-CONSTRUCTION)
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE 2

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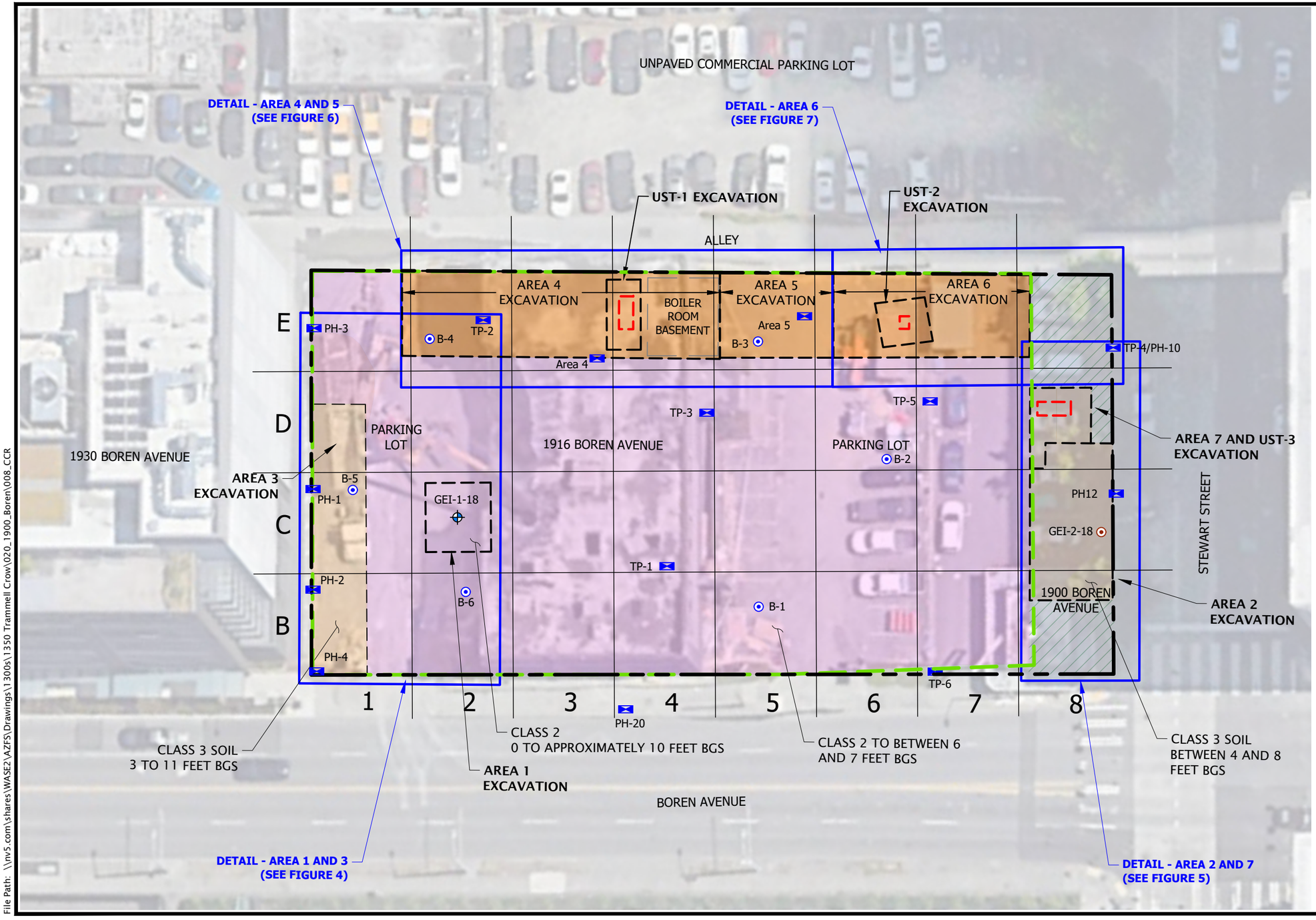

EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE LOCATION SHORING WALL AND FOOTPRINT OF NEW BUILDING BASEMENT
- S7 — SOLDIER PILE WITH I.D.
- B-1 — SOIL BORING (ESNW, 2016)
- GEI-2-18 — SOIL BORING (GeoEngineerrs, 2018)
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- FORMER UNDERGROUND STORAGE TANK (UST) REMOVED DURING CONSTRUCTION OVERSIGHT
- PH-1 — EXPLORATORY TEST PIT (PES, 2022-2024)
- A3-9-7 — SOIL SAMPLE LOCATION (PES, 2022-2024)
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION FOR AREAS 1 - 7 (PES, 2022-2024)
- B-1 — MASS EXCAVATION SAMPLING GRID
- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- SOIL EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (TRANSPORTED TO REPUBLIC OR WASTE MANAGEMENT FOR DISPOSAL)
- AREA OF LIMITED REDEVELOPMENT EXCAVATION. WHEN SOIL WAS REMOVED (E.G. FOR SILVA CELLS, PLANTER, ETC.) SOIL WAS DISPOSED AS CADMAN CLASS 2 SOIL

TRUE NORTH

PROJECT NORTH

0 15 30

SCALE IN FEET

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NV5

OVERVIEW OF FINAL EXCAVATION AREAS AND SOIL DISPOSAL CATEGORIES
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE 3

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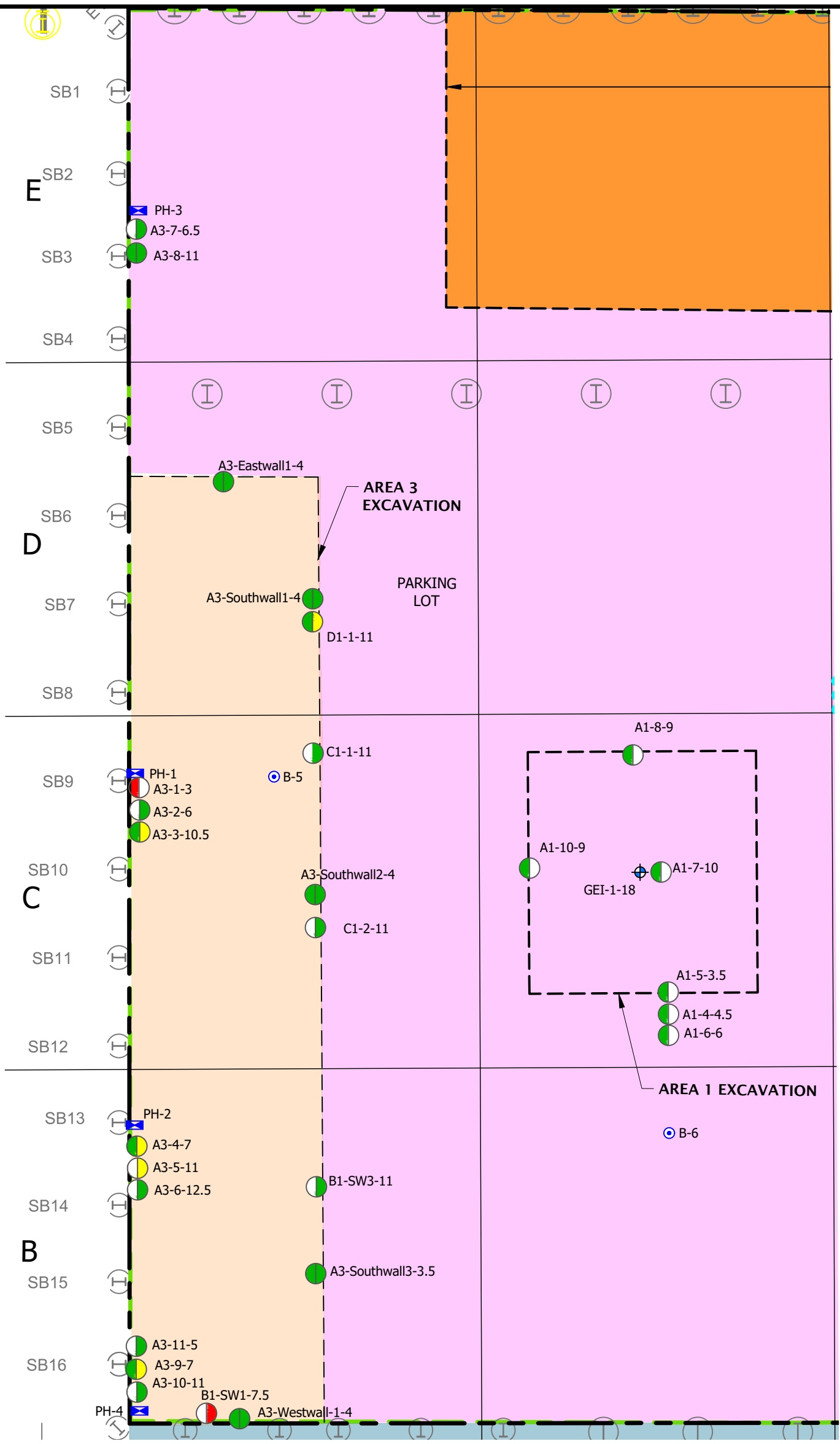

EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF SHORING WALL AND FOOTPRINT OF NEW BUILDING BASEMENT
- S7 — SOLDIER PILE WITH I.D.
- B-1 — SOIL BORING (ESNW, 2016)
- GEI-2-18 — SOIL BORING (GeoEngineerrs, 2018)
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- FORMER UNDERGROUND STORAGE TANK (UST) REMOVED DURING CONSTRUCTION OVERSIGHT
- PH-1 — EXPLORATORY TEST PIT (PES, 2022-2024)
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION FOR AREAS 1 - 7 (PES, 2022-2024)
- B / 1 — MASS EXCAVATION SAMPLING GRID

- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- SOIL EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (TRANSPORTED TO REPUBLIC OR WASTE MANAGEMENT FOR DISPOSAL)

CONFIRMATION SAMPLE LOCATION AND RESULTS

- A3-9-7 — CONFIRMATION SOIL SAMPLE LOCATION AND I.D. (PES, 2022-2024)

0 5 10
SCALE IN FEET

COLOR INDICATES ANALYTICAL RESULTS:
LEFT SIDE OF CIRCLE INDICATES PAH RESULTS AND
RIGHT SIDE OF CIRCLE INDICATES PETROLEUM HYDROCARBON RESULTS

GREEN INDICATES THAT ANALYTE WAS NOT DETECTED ABOVE THE REPORTING LIMIT (RL); **YELLOW** INDICATES THAT ANALYTE CONCENTRATION WAS AT OR BELOW THE APPLICABLE CLEANUP LEVEL (CUL); **RED** INDICATES THAT ANALYTE CONCENTRATION WAS ABOVE THE APPLICABLE CUL; AND **WHITE** INDICATES THAT THE SAMPLE WAS NOT ANALYZED FOR THAT CONSTITUENT

NV5

DETAILS OF AREA 1 AND AREA 3
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE
4

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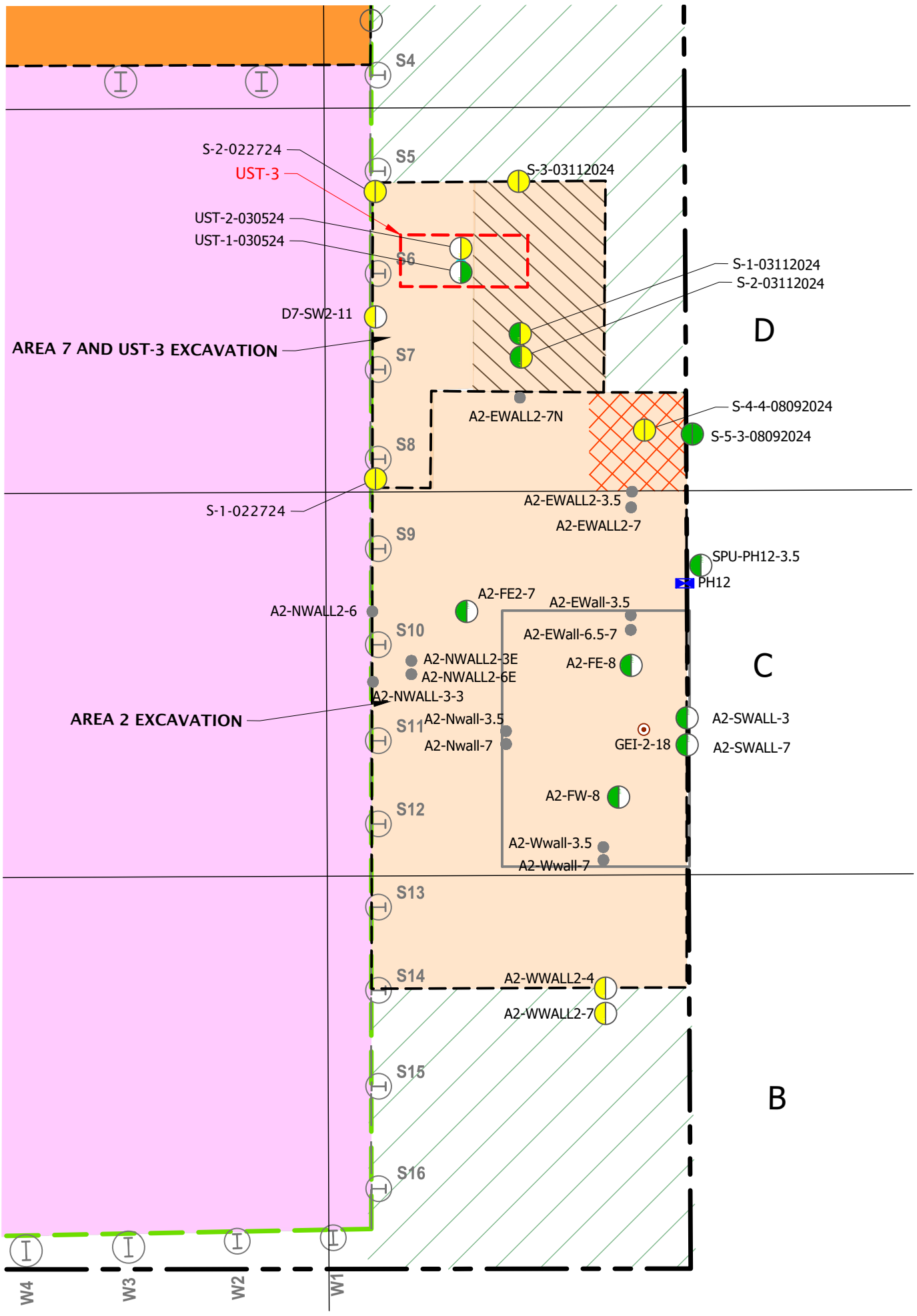

EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE LOCATION OF SHORING WALL AND FOOTPRINT OF NEW BUILDING BASEMENT
- S7 — SOLDIER PILE WITH I.D.
- B-1 — SOIL BORING (ESNW, 2016)
- GEI-2-18 — SOIL BORING (GeoEngineerrs, 2018)
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- FORMER UNDERGROUND STORAGE TANK (UST) REMOVED DURING CONSTRUCTION OVERSIGHT
- PH-1 — EXPLORATORY TEST PIT (PES, 2022-2024)
- A2-Wwall-3.5 — PERFORMANCE SOIL SAMPLE LOCATION, SUBSEQUENTLY REMOVED (PES, 2022-2024)
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION FOR AREAS 1 - 7 (PES, 2022-2024)
- B / 1 — MASS EXCAVATION SAMPLING GRID
- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- SOIL EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (TRANSPORTED TO REPUBLIC OR WASTE MANAGEMENT FOR DISPOSAL)
- ROW

CONFIRMATION SAMPLE LOCATION AND RESULTS

- CONFIRMATION SOIL SAMPLE LOCATION AND I.D. (PES, 2022-2024)

COLOR INDICATES ANALYTICAL RESULTS:
LEFT SIDE OF CIRCLE INDICATES PAH RESULTS AND RIGHT SIDE OF CIRCLE INDICATES PETROLEUM HYDROCARBON RESULTS

GREEN INDICATES THAT ANALYTE WAS NOT DETECTED ABOVE THE REPORTING LIMIT (RL); **YELLOW** INDICATES THAT ANALYTE CONCENTRATION WAS AT OR BELOW THE APPLICABLE CLEANUP LEVEL (CUL); **RED** INDICATES THAT ANALYTE CONCENTRATION WAS ABOVE THE APPLICABLE CUL; AND **WHITE** INDICATES THAT THE SAMPLE WAS NOT ANALYZED FOR THAT CONSTITUENT

- INITIAL AREA 2 EXCAVATION
- PORTION OF AREA 7 EXCAVATED TO 8 FEET BGS ON MARCH 11, 2024
- PORTION OF AREA 2 EXCAVATED TO 4 FEET BGS ON AUGUST 9, 2024
- AREA OF LIMITED REDEVELOPMENT EXCAVATION. WHEN SOIL WAS REMOVED (e.g., FOR SILVA CELLS, PLANTER, ETC.), SOIL WAS DISPOSED AS CADMAN CLASSS 2 SOIL

TRUE NORTH
PROJECT NORTH

0 5 10
SCALE IN FEET

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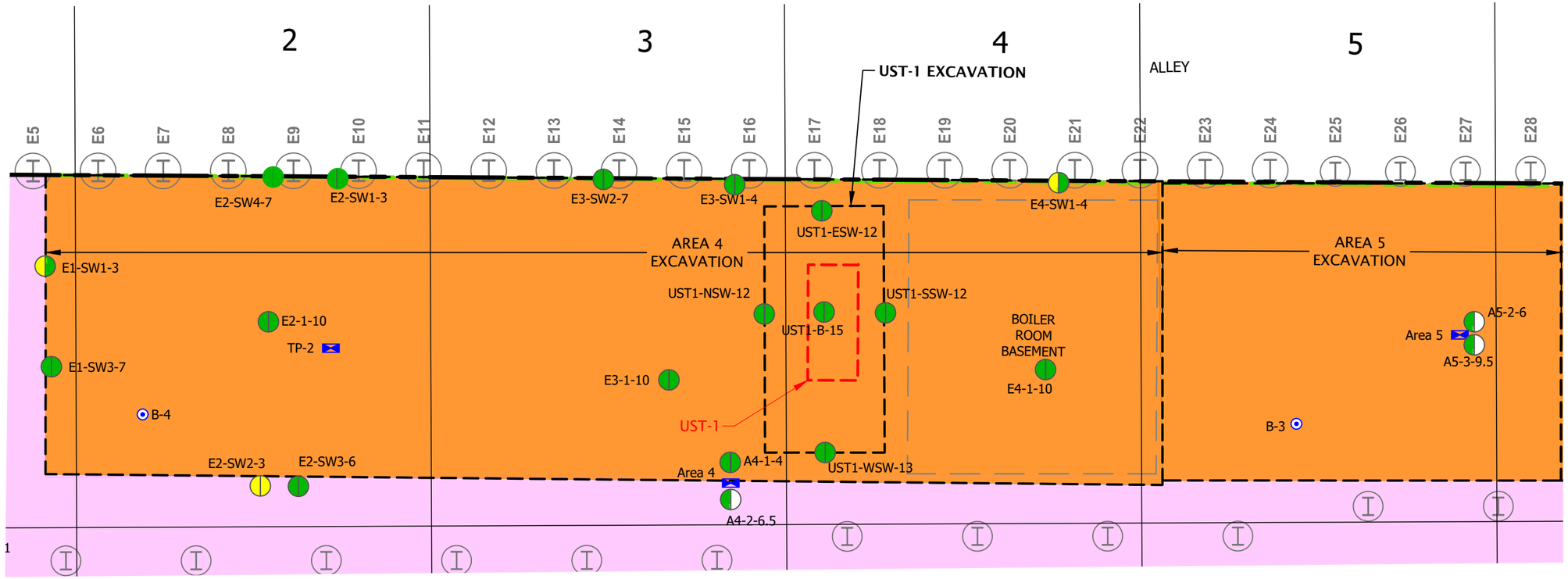
DETAILS OF AREAS 2 AND AREA 7 (UST-3)
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE
5

1350-020-008	135002001008_CCR_2_7+_DFCR.dwg	DAB	4/2025
JOB NUMBER	FILE NAME	REVIEWED BY	DATE



EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE LOCATION SHORING WALL AND FOOTPRINT OF NEW BUILDING BASEMENT
- FORMER PROPERTY FEATURE
- S7 — SOLDIER PILE WITH I.D.
- B-1 — SOIL BORING (ESNW, 2016)
- GEI-2-18 — SOIL BORING (GeoEngineerrs, 2018)
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- FORMER UNDERGROUND STORAGE TANK (UST) REMOVED DURING CONSTRUCTION OVERSIGHT
- PH-1 — EXPLORATORY TEST PIT (PES, 2022-2024)
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION FOR AREAS 1 - 7 (PES, 2022-2024)
- B / 1 — MASS EXCAVATION SAMPLING GRID

- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- SOIL EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (TRANSPORTED TO REPUBLIC OR WASTE MANAGEMENT FOR DISPOSAL)

CONFIRMATION SAMPLE AND LOCATION RESULTS

E2-SW2-3 — CONFIRMATION SOIL SAMPLE LOCATION AND I.D. (PES, 2022-2024)

COLOR INDICATES ANALYTICAL RESULTS:
LEFT SIDE OF CIRCLE INDICATES PAH RESULTS AND
RIGHT SIDE OF CIRCLE INDICATES PETROLEUM HYDROCARBON RESULTS

GREEN INDICATES THAT ANALYTE WAS NOT DETECTED ABOVE THE REPORTING LIMIT (RL); **YELLOW** INDICATES THAT ANALYTE CONCENTRATION WAS AT OR BELOW THE APPLICABLE CLEANUP LEVEL (CUL); **RED** INDICATES THAT ANALYTE CONCENTRATION WAS ABOVE THE APPLICABLE CUL; AND **WHITE** INDICATES THAT THE SAMPLE WAS NOT ANALYZED FOR THAT CONSTITUENT

TRUE NORTH

PROJECT NORTH

0 5 10
SCALE IN FEET

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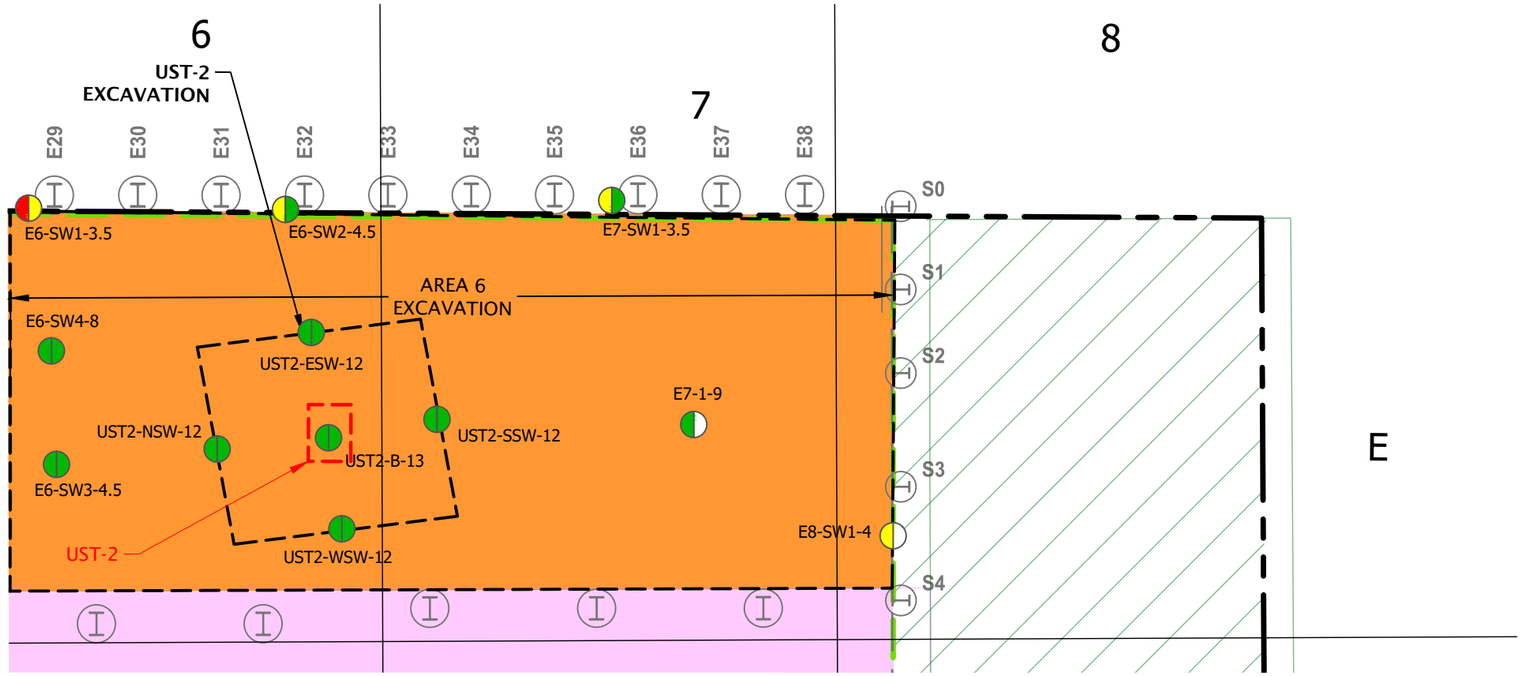
DETAILS OF AREA 4 AND AREA 5
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE
6

1350-020-008	135002001008_CCR_2_7+_DFCR.dwg	DAB	4/2025
JOB NUMBER	FILE NAME	REVIEWED BY	DATE



EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE LOCATION SHORING WALL AND FOOTPRINT OF NEW BUILDING BASEMENT
- S7 — SOLDIER PILE WITH I.D.
- B-1 — SOIL BORING (ESNW, 2016)
- GEI-2-18 — SOIL BORING (GeoEngineerrs, 2018)
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- FORMER UNDERGROUND STORAGE TANK (UST) REMOVED DURING CONSTRUCTION OVERSIGHT
- PH-1 — EXPLORATORY TEST PIT (PES, 2022-2024)
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION FOR AREAS 1 - 7 (PES, 2022-2024)
- B-1 — MASS EXCAVATION SAMPLING GRID

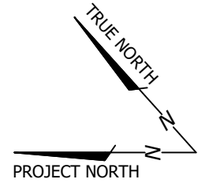
- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- SOIL EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (TRANSPORTED TO REPUBLIC OR WASTE MANAGEMENT FOR DISPOSAL)
- AREA OF LIMITED REDEVELOPMENT EXCAVATION. WHEN SOIL WAS REMOVED (E.G. FOR SILVA CELLS, PLANTER, ETC.) SOIL WAS DISPOSED AS CADMAN CLASS 2 SOIL

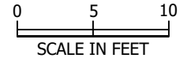
E8-SW1-4 — CONFIRMATION SOIL SAMPLE LOCATION AND I.D. (PES, 2022-2024)

CONFIRMATION SAMPLE AND LOCATION RESULTS

COLOR INDICATES ANALYTICAL RESULTS:
LEFT SIDE OF CIRCLE INDICATES PAH RESULTS AND
RIGHT SIDE OF CIRCLE INDICATES PETROLEUM HYDROCARBON RESULTS

GREEN INDICATES THAT ANALYTE WAS NOT DETECTED ABOVE THE REPORTING LIMIT (RL); **YELLOW** INDICATES THAT ANALYTE CONCENTRATION WAS AT OR BELOW THE APPLICABLE CLEANUP LEVEL (CUL); **RED** INDICATES THAT ANALYTE CONCENTRATION WAS ABOVE THE APPLICABLE CUL; AND **WHITE** INDICATES THAT THE SAMPLE WAS NOT ANALYZED FOR THAT CONSTITUENT





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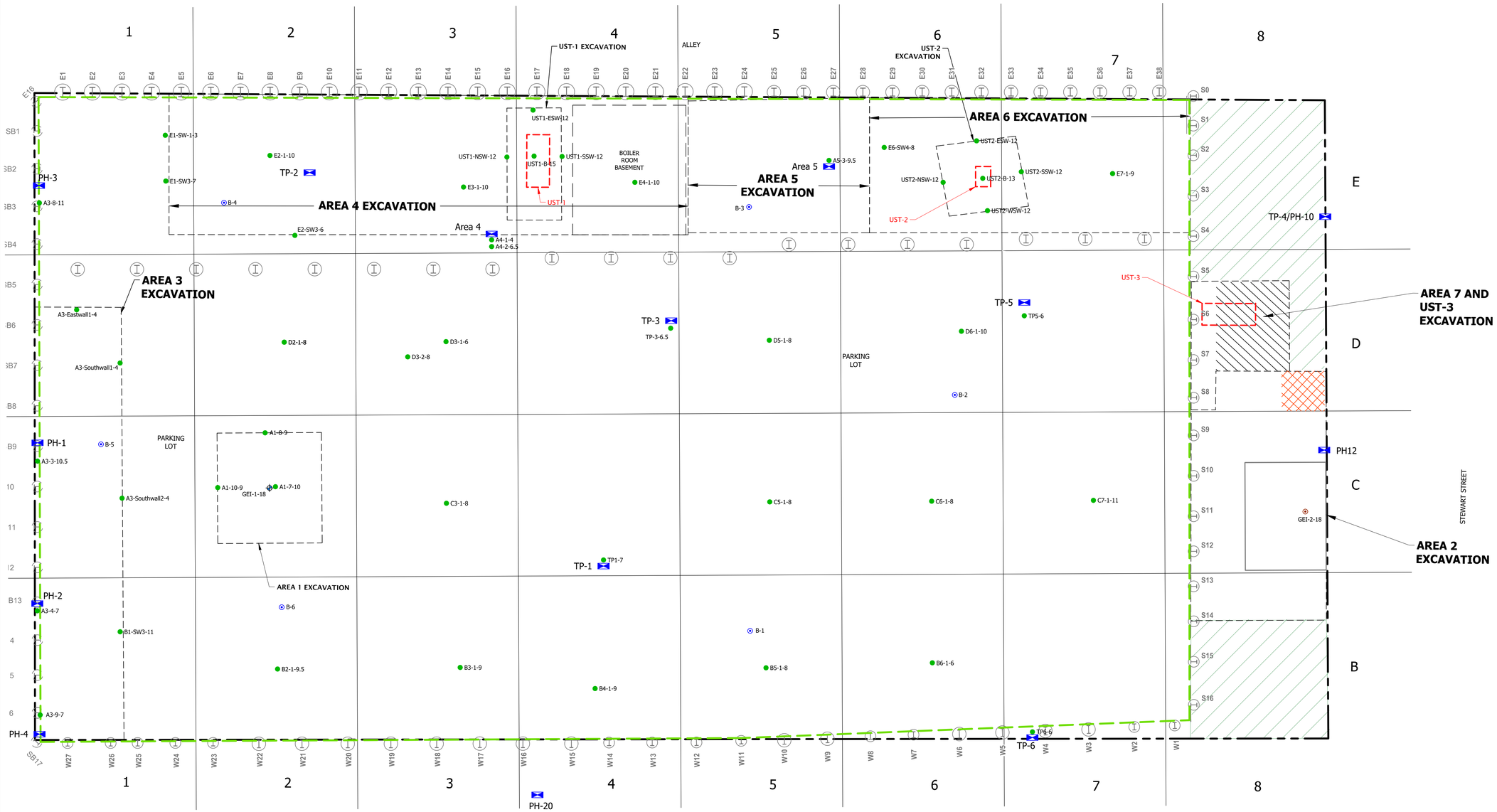
DETAIL OF AREA 6
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE 7

1350-020-008	135002001008_CCR_2_7+_DFCR.dwg	DAB	4/2025
JOB NUMBER	FILE NAME	REVIEWED BY	DATE



EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE FOOTPRINT OF NEW BUILDING BASEMENT AND SHORING WALL
- B-1 — SOIL BORING (ESNW, 2016)
- A5-3-9.5 — GRID CONFIRMATION SAMPLE FOR PAHs. A GREEN SYMBOL INDICATES THAT PAHs (INCLUDING cPAHs) WERE NOT DETECTED ABOVE THE METHOD REPORTING LIMIT (RL) IN THE SAMPLE
- TP- — TEST PIT SOIL SAMPLE
- GEI-1-18 — FORMER MONITORING WELL (GEOENGINEERS, 2018)
- GEI-2-18 — SOIL BORING (GEOENGINEERS, 2018)
- CADMAN CLASS 2 SOIL
- CADMAN CLASS 3 SOIL
- EXCEEDS CLASS 3 LIMITS AND/OR CONTAINS DEBRIS (HAULED TO REPUBLIC OR WASTE MANAGEMENT)
- AREA OF LIMITED REDEVELOPMENT EXCAVATION. WHEN SOIL WAS REMOVED (E.G. FOR SILVA CELLS, PLANTER, ETC.) SOIL WAS DISPOSED AS CADMAN CLASS 2.
- FORMER LOCATION OF UNDERGROUND STORAGE TANK (UST) REMOVED BY PES 2023-2024
- LIMITS OF CONSTRUCTION OVERSIGHT EXCAVATION AREAS 1-7
- B 1 — MASS EXCAVATION SAMPLING GRID
- S7 — SOLDIER PILE WITH I.D.
- ORIGINAL PLANNED AREA 2 EXCAVATION
- AREA EXCAVATED TO 8 FEET BGS ON MARCH 11, 2024
- AREA EXCAVATED TO 4 FEET BGS ON AUGUST 9, 2024

TRUE NORTH
PROJECT NORTH

0 5 10
SCALE IN FEET

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MASS EXCAVATION PAH CONFIRMATION SAMPLES
CONSTRUCTION COMPLETION REPORT
1916 BOREN PROPERTY
1900 AND 1916 BOREN AVENUE, SEATTLE, WA

FIGURE 8

1350-020-008	135002001008_CCR-All-Samples-22x34_A-1_DFCR	DAB	4/2025
JOB NUMBER	FILE NAME	REVIEWED BY	DATE

TABLES

Soil Analytical Results - Total Petroleum Hydrocarbons
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	GRO	DRO	Heavy Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MTCA Method A Cleanup Level			**100**	**2,000**	**2,000**	**0.03**	**7**	**6**	
Confirmation Samples									
A3-2-6	11/11/22	6	–	53.9 U	108 U	–	–	–	–
A3-3-10.5	11/11/22	10.5	**8.03**[b]	**80.1**	110 U	0.0162 U	0.0277 U	0.0231 U	0.0692 U
A3-4-7	11/11/22	7	**347**[b]	**1,360**	109 U	0.0159 U	0.0272 U	0.0227 U	0.068 U
A3-5-11	11/11/22	11	**234**[b]	**378**	129 U	0.0216 U	0.0371 U	0.0309 U	0.0927 U
A3-6-12.5	11/11/22	12.5	5.41 U	56.4 U	113 U	–	–	–	–
A3-7-6.5	11/11/22	6.5	5.40 U	57.7 U	115 U	0.0189 U	0.0324 U	0.0270 U	0.0810 U
A3-8-11	11/11/22	11	5.78 U	57.1 U	114 U	0.0202 U	0.0347 U	0.0289 U	0.0867 U
A3-9-7	11/11/22	7	**124**[b]	62.8 U	**131**	0.0186 U	0.0319 U	0.0266 U	0.0797 U
A3-10-11	11/11/22	11	6.15 U	53.8 U	108 U	0.0215 U	0.0369 U	0.0308 U	0.0923 U
A3-11-5	11/11/22	5	5.47 U	61.1 U	122 U	0.0191 U	0.0328 U	0.0273 U	0.082 U
A4-1-4	11/11/22	4	5.71 U	59.5 U	119 U	0.0200 U	0.0343 U	0.0285 U	0.0856 U
A3-Southwall1-4	01/17/23	4	6.46 U	63.5 U	127 U	0.0180 U	0.0388 U	0.0323 U	0.0969 U
A3-Eastwall1-4	01/17/23	4	5.55 U	59.5 U	119 U	0.0194 U	0.0333 U	0.0278 U	0.0833 U
A3-Southwall2-4	01/17/23	4	5.93 U	60.5 U	121 U	0.0208 U	0.0356 U	0.0297 U	0.089 U
A3-Southwall3-3.5	01/17/23	3.5	6.09 U	61.3 U	123 U	0.0213 U	0.0366 U	0.0305 U	0.0914 U
A3-Westwall1-4	01/17/23	4	5.14 U	60.0 U	120 U	0.0226 U	0.0308 U	0.0257 U	0.0771 U
B1-SW1-7.5	01/26/23	7.5	**69.1**[b]	**4,190**	**2,350**	–	–	–	–
E2-SW1-3	01/27/23	3	6.08 U	56.3 U	113 U	–	–	–	–
E3-SW1-4	01/27/23	4	5.00 U	58.4 U	117 U	–	–	–	–
E4-SW1-4	01/27/23	4	–	56.4 U	113 U	–	–	–	–
E1-SW1-3	01/30/23	3	–	61.1 U	122 U	–	–	–	–
E1-SW2-3	01/30/23	3	–	58.7 U	117 U	–	–	–	–
E6-SW1-3.5	01/30/23	3.5	–	62.8 U	**229**	–	–	–	–
E6-SW2-4.5	01/30/23	4.5	–	55.8 U	112 U	–	–	–	–
E7-SW1-3.5	01/30/23	3.5	–	55.5 U	111 U	–	–	–	–
B1-SW3-11	02/01/23	11	14 U	30 U	59 U	–	–	–	–
E2-SW3-6	02/01/23	6	–	32 U	64 U	–	–	–	–
E1-SW3-7	02/03/23	7	–	34 U	67 U	–	–	–	–
E2-1-10	02/03/23	10	–	30 U	59 U	–	–	–	–
E2-SW4-7	02/03/23	7	–	33 U	65 U	–	–	–	–
E3-1-10	02/03/23	10	–	33 U	66 U	–	–	–	–
E3-SW2-7	02/03/23	7	–	32 U	63 U	–	–	–	–
E4-1-10	02/03/23	10	–	36 U	72 U	–	–	–	–
E6-SW3-4.5	02/03/23	4.5	–	32 U	64 U	–	–	–	–
E6-SW4-8	02/03/23	8	–	33 U	66 U	–	–	–	–
UST1-B-15	02/06/23	15	–	29 U	57 U	–	–	–	–
UST1-ESW-12	02/06/23	12	–	32 U	65 U	–	–	–	–
UST1-NSW-12	02/06/23	12	–	32 U	65 U	–	–	–	–
UST1-SSW-12	02/06/23	12	–	33 U	66 U	–	–	–	–
UST1-WSW-13	02/06/23	13	–	32 U	63 U	–	–	–	–
UST2-B-13	02/06/23	13	–	33 U	66 U	–	–	–	–
UST2-ESW-12	02/06/23	12	–	36 U	72 U	–	–	–	–
UST2-NSW-12	02/06/23	12	–	39 U	79 U	–	–	–	–
UST2-SSW-12	02/06/23	12	–	36 U	72 U	–	–	–	–
UST2-WSW-12	02/06/23	12	–	36 U	72 U	–	–	–	–

Soil Analytical Results - Total Petroleum Hydrocarbons
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	GRO	DRO	Heavy Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MTCA Method A Cleanup Level			**100**	**2,000**	**2,000**	**0.03**	**7**	**6**	
C1-1-11	02/08/23	11	7.1 U	29 U	57 U	–	–	–	–
C1-2-11	02/08/23	11	6.6 U	28 U	57 U	–	–	–	–
D1-1-11	02/08/23	11	6.4 U	29 U	58 U	–	–	–	–
E1-1-11	02/08/23	11	6.1 U	29 U	57 U	–	–	–	–
S-1-022724	02/27/24	7	–	52.5 U	**147**	–	–	–	–
S-2-022724	02/27/24	7	–	57.3 U	**1,150**	–	–	–	–
UST-1-03052024	03/05/24	11	–	61.2 U	122 U	–	–	–	–
UST-2-03052024	03/05/24	9.5	–	**1,480**	120 U	–	–	–	–
S-1-03112024	03/11/24	4	–	**877**	127 U	–	–	–	–
S-2-03112024	03/11/24	8	–	**237**	115 U	–	–	–	–
S-3-03112024	03/11/24	8	–	**577**	103 U	–	–	–	–
S-4-4-080924	08/09/24	4	–	56.3 U	**281**	–	–	–	–
S-5-3-080924	08/09/24	3	–	58.3 U	117 U	–	–	–	–
Performance Samples									
TP2-3	11/16/22	3	**40.9**[b]	**62.2**	**17,700**	–	–	–	–
A6-Nwall-6	12/08/22	6	41.6 U	**2,710**[b]	**3,390**[b]				
A2-Ewall-3.5	12/13/22	3.5	–	53.9 U	**975**	–	–	–	–
A2-Ewall-6.5-7	12/13/22	6.5-7	–	58.2 U	**307**	–	–	–	–
A2-EWALL2-3.5	12/19/22	3.5	–	**82.2**	**1,050**[b]	–	–	–	–
A2-Nwall-3-3	12/21/22	3	–	52.7 U	**2,510**	–	–	–	–
E2-SW2-3	01/30/23	3	–	60.6 U	**168**	–	–	–	–

Notes:

Analytical results in milligrams per kilogram (mg/kg).

Sample depths given in feet below ground surface (ft bgs).

Petroleum hydrocarbons analyzed by NWTPH-Gx NWTPH-Dx/Dx-Ext, and/or NWTPH-HCID.

Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260D.

Method A Cleanup Level for unrestricted land use from MTCA Method A Table 740-1 (WAC 173-340-900).

a = Cleanup level is for total xylenes.

b = The analytical laboratory reported that the GRO detection is due to overlap with diesel-range material. Consequently, the footnoted results have not been compared to the GRO CUL.

c = The analytical laboratory reported that the chromatographic pattern indicates a continuous distribution of material in the diesel and oil ranges. Material is not identified as a specific petroleum product and is divided into diesel and heavy oil by carbon range.

U = Not detected at or above the laboratory reporting limit (RL).

– = Not analyzed.

Detected results are shown in **bold.**

Results exceeding the applicable cleanup level are shown in **bold and shaded**.

Table 2

PAHs in Soil
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total TEQ
MTCA Method B Cleanup Level			–	–	**4,800**[b]	–	**24,000**[b]	–	**0.19**	–		–	–	–	**3,200**[b]	**3,200**[b]	–	**5**[a]	–	**2,400**[b]	**0.19**
Toxic Equivalency Factor			–	–	–	–	–	**0.1**	**1**	**0.1**	–	**0.1**	**0.01**	**0.1**	–	–	**0.1**	–	–	–	–
Confirmation Samples																					
A3-1-3	11/11/22	3	–	–	–	–	–	**1.60**	**1.84**	**1.97**	–	**0.606**	**1.79**	**0.235**	–	–	**0.911**	–	–	–	**2.39**
A3-3-10.5	11/11/22	10.5	–	–	–	–	–	0.0230 U	0.0345 U	0.0288 U	–	0.0288 U	0.0230 U	0.0576 U	–	–	0.0461 U	–	–	–	0.0266 U
A3-4-7	11/11/22	7	–	–	–	–	–	0.0205 U	0.0308 U	0.0257 U	–	0.0257 U	0.0205 U	0.0513 U	–	–	0.0411 U	–	–	–	0.0237 U
A3-8-11	11/11/22	11	–	–	–	–	–	0.0240 U	0.0359 U	0.0300 U	–	0.0300 U	0.0240 U	0.0599 U	–	–	0.0479 U	–	–	–	0.0277 U
A3-9-7	11/11/22	7	–	–	–	–	–	0.0248 U	0.0372 U	0.0310 U	–	0.0310 U	0.0248 U	0.0620 U	–	–	0.0496 U	–	–	–	0.0286 U
A4-1-4	11/11/22	4	–	–	–	–	–	0.0257	0.0353 U	0.0294 U	–	0.0294 U	0.0249	0.0588 U	–	–	0.047 U	–	–	–	0.028699 U
TP1-7	11/16/22	7	–	–	–	–	–	0.0199 U	0.0299 U	0.0249 U	–	0.0249 U	0.0199 U	0.0499 U	–	–	0.0399 U	–	–	–	0.0230 U
A1-5-3.5	11/16/22	3.5	–	–	–	–	–	0.0209 U	0.0314 U	0.0262 U	–	0.0262 U	0.0209 U	0.0523 U	–	–	0.0418 U	–	–	–	0.0242 U
A1-6-6	11/16/22	6	–	–	–	–	–	0.0232 U	0.0348 U	0.0290 U	–	0.0290 U	0.0232 U	0.0580 U	–	–	0.0464 U	–	–	–	0.0268 U
A1-7-10	11/16/22	10	–	–	–	–	–	0.0228 U	0.0342 U	0.0285 U	–	0.0285 U	0.0228 U	0.0569 U	–	–	0.0455 U	–	–	–	0.026324 U
A4-2-6.5	11/17/22	6.5	–	–	–	–	–	0.0242 U	0.0363 U	0.0303 U	–	0.0303 U	0.0242 U	0.0605 U	–	–	0.0484 U	–	–	–	0.0280 U
SPU-PH20-3	11/17/22	3	–	–	–	–	–	0.0243 U	0.0264 U	0.0303 U	–	0.0303 U	0.0243 U	0.0606 U	–	–	0.0485 U	–	–	–	0.0230 U
TP3-3.5	11/17/22	3.5	–	–	–	–	–	0.0257 U	0.0386 U	0.0322 U	–	0.0322 U	0.0257 U	0.0643 U	–	–	0.0515 U	–	–	–	0.0297 U
TP3-6.5	11/17/22	6.5	–	–	–	–	–	0.0298 U	0.0447 U	0.0373 U	–	0.0373 U	0.0298 U	0.0745 U	–	–	0.0596 U	–	–	–	0.0344 U
TP4-3 (PH10)	11/17/22	3	–	–	–	–	–	**0.0633**	**0.0906**	**0.101**	–	**0.0355**	**0.0741**	0.0605 U	–	–	**0.0584**	–	–	–	**0.120**
TP4-5.5 (PH10)	11/17/22	5.5	–	–	–	–	–	**0.0280**	0.0381 U	**0.0331**	–	0.0318 U	0.0254 U	0.0636 U	–	–	0.0509 U	–	–	–	**0.0326**
TP5-6	11/17/22	6	–	–	–	–	–	0.0279 U	0.0418 U	0.0349 U	–	0.0349 U	0.0279 U	0.0697 U	–	–	0.0558 U	–	–	–	0.0322 U
TP6-3	11/17/22	3	–	–	–	–	–	**0.0562**	**0.0735**	**0.0945**	–	0.0308 U	0.0680 U	0.0616 U	–	–	0.0493 U	–	–	–	**0.0960**
TP6-6	11/17/22	6	–	–	–	–	–	0.0237 U	0.0356 U	0.0297 U	–	0.0297 U	0.0237 U	0.0594 U	–	–	0.0475 U	–	–	–	0.0274 U
A1-8-9	11/18/22	9	–	–	–	–	–	0.0239 U	0.0359 U	0.0299 U	–	0.0299 U	0.0239 U	0.0598 U	–	–	0.0479 U	–	–	–	0.0276395 U
A1-9-9	11/18/22	9	–	–	–	–	–	0.0246 U	0.0369 U	0.0308 U	–	0.0308 U	0.0246 U	0.0615 U	–	–	0.0492 U	–	–	–	0.028418 U
A1-10-9	11/18/22	8	–	–	–	–	–	0.0243 U	0.0364 U	0.0304 U	–	0.0304 U	0.0243 U	0.0607 U	–	–	0.0486 U	–	–	–	0.0280 U
A5-2-6	11/18/22	6	–	–	–	–	–	0.0222 U	0.0334 U	0.0278 U	–	0.0278 U	0.0222 U	0.0556 U	–	–	0.0445 U	–	–	–	0.025706 U
A5-3-9.5	11/18/22	9.5	–	–	–	–	–	0.0245 U	0.0367 U	0.0306 U	–	0.0306 U	0.0245 U	0.0612 U	–	–	0.0489 U	–	–	–	0.0282625 U
SPU-PH12-3.5	12/01/22	3.5	–	–	–	–	–	0.0214 U	0.0320 U	0.0267 U	–	0.0267 U	0.0214 U	0.0534 U	–	–	0.0427 U	–	–	–	0.0247 U
A2-FE-8	12/13/22	8	–	–	0.0254 U	0.0254 U	0.0254 U	0.0254 U	0.0381 U	0.0317 U	0.0635 U	0.0317 U	0.0254 U	0.0635 U	0.0254 U	0.0254 U	0.0508 U	0.0254 U	0.0254 U	0.0508 U	0.0293 U
A2-FW-8	12/13/22	8	–	–	0.0206 U	0.0206 U	0.0206 U	0.0206 U	0.0309 U	0.0257 U	0.0515 U	0.0257 U	0.0206 U	0.0515 U	0.0206 U	0.0206 U	0.0412 U	0.0206 U	0.0206 U	0.0412 U	0.0238 U
A2-Nwall-7	12/13/22	7	–	–	0.0256 U	0.0256 U	0.0256 U	0.0256 U	0.0384 U	0.0320 U	0.0640 U	0.0320 U	0.0256 U	0.0640 U	0.0256 U	0.0256 U	0.0512 U	0.0256 U	0.0256 U	0.0512 U	0.0296 U
A2-Swall-3	12/13/22	3	–	–	0.0207 U	0.0207 U	0.0207 U	0.0207 U	0.0311 U	0.0259 U	0.0518 U	0.0259 U	0.0207 U	0.0518 U	0.0207 U	0.0207 U	0.0414 U	0.0207 U	0.0207 U	0.0414 U	0.0239 U
A2-Swall-7	12/13/22	7	–	–	0.0247 U	0.0247 U	0.0247 U	0.0247 U	0.0370 U	0.0309 U	0.0617 U	0.0309 U	0.0247 U	0.0617 U	0.0247 U	0.0247 U	0.0494 U	0.0247 U	0.0247 U	0.0494 U	0.0285 U
A2-EWALL2-7	12/19/22	7	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.0240 U	0.036 U	0.0300 U	0.0600 U	0.0300 U	0.0240 U	0.0600 U	0.0240 U	0.0240 U	0.0480 U	0.0240 U	0.0240 U	0.0480 U	0.0277 U
A2-EWALL2-7N	12/19/22	7	0.0232 U	0.0232 U	0.0232 U	**0.0350**	0.0232 U	**0.114**	**0.105**	**0.0955**	0.0579 U	**0.0402**	**0.114**	0.0579 U	**0.210**	0.0232 U	**0.0471**	0.0232 U	**0.0645**	**0.264**	**0.139**
A2-WWALL2-4	12/19/22	4	0.0229 U	0.0229 U	0.0229 U	0.0229 U	0.0229 U	**0.0398**	**0.0357**	**0.051**	0.0572 U	0.0286 U	**0.0544**	0.0572 U	**0.0996**	0.0229 U	0.0457 U	0.0229 U	**0.0713**	**0.112**	**0.0519**
A2-WWALL2-7	12/19/22	7	0.0223 U	0.0223 U	0.0223 U	0.0223 U	0.0223 U	**0.0247**	0.0335 U	0.0279 U	0.0559 U	0.0279 U	0.0223 U	0.0559 U	**0.0388**	0.0223 U	0.0447 U	0.0223 U	0.0223 U	**0.0466**	**0.0272**
A2-FE2-7	12/20/22	7	0.0266 U	0.0266 U	0.0266 U	0.0266 U	0.0266 U	0.0266 U	0.0399 U	0.0332 U	0.0665 U	0.0332 U	0.0266 U	0.0665 U	0.0266 U	0.0266 U	0.0532 U	0.0266 U	0.0266 U	0.0532 U	0.0307 U
A2-NWALL2-6E	12/20/22	6	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0375 U	0.0312 U	0.0625 U	0.0312 U	0.0250 U	0.0625 U	0.0250 U	0.0250 U	0.0500 U	0.0250 U	0.0250 U	0.0500 U	0.0289 U
A3-Southwall1-4	01/17/23	4	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0250 U	0.0375 U	0.0313 U	0.0625 U	0.0313 U	0.0250 U	0.0625 U	0.0250 U	0.0250 U	0.0500 U	0.0250 U	0.0250 U	0.0500 U	0.02888 U
A3-Eastwall1-4	01/17/23	4	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0233 U	0.0350 U	0.0292 U	0.0583 U	0.0292 U	0.0233 U	0.0583 U	0.0233 U	0.0233 U	0.0467 U	0.0233 U	0.0233 U	0.0467 U	0.0270 U
A3-Southwall2-4	01/17/23	4	0.0243 U	0.0243 U	0.0243 U	0.0243 U	0.0243 U	0.0243 U	0.0365 U	0.0304 U	0.0608 U	0.0304 U	0.0243 U	0.0608 U	0.0243 U	0.0243 U	0.0487 U	0.0243 U	0.0243 U	0.0487 U	0.0281015 U
A3-Southwall3-3.5	01/17/23	3.5	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0242 U	0.0363 U	0.0302 U	0.0605 U	0.0302 U	0.0242 U	0.0605 U	0.0242 U	0.0242 U	0.0484 U	0.0242 U	0.0242 U	0.0484 U	0.027946 U
A3-Westwall1-4	01/17/23	4	0.0236 U	0.0236 U	0.0236 U	0.0236 U	0.0236 U	0.0236 U	0.0355 U	0.0296 U	0.0591 U	0.0296 U	0.0236 U	0.0591 U	0.0236 U	0.0236 U	0.0473 U	0.0236 U	0.0236 U	0.0473 U	0.027328 U
B2-1-9.5	01/26/23	9.5	0.0232 U	0.0232 U	0.0232 U	0.0232 U	0.0232 U	0.0232 U	0.0347 U	0.0290 U	0.0579 U	0.0290 U	0.0232 U	0.0579 U	0.0232 U	0.0232 U	0.0463 U	0.0232 U	0.0232 U	0.0463 U	0.026736 U
B2-SW1-7	01/26/23	7	0.0229 U	0.0229 U	0.0229 U	0.0229 U	0.0229 U	0.0229 U	0.0343 U	0.0286 U	0.0571 U	0.0286 U	0.0229 U	0.0571 U	0.0229 U	0.0229 U	0.0457 U	0.0229 U	0.0229 U	0.0457 U	0.0264095 U
E2-SW1-3	01/27/23	3	0.0220 U	0.0220 U	0.0220 U	0.0220 U	**0.0259**	**0.0708**	**0.0651**	**0.0606**	0.0550 U	0.0275 U	**0.0702**	0.0550 U	**0.127**	0.0220 U	0.0440 U	0.0220 U	**0.157**	**0.178**	**0.0853**
E3-SW1-4	01/27/23	4	0.0213 U	0.0213 U	0.0213 U	0.0213 U	0.0213 U	**0.0221**	0.0320 U	0.0267 U	0.0534 U	0.0267 U	0.0213 U	0.0534 U	**0.0262**	0.0213 U	0.0427 U	0.0213 U	0.0213 U	0.0427 U	**0.0258**
E4-SW1-4	01/27/23	4	**0.0285**	**0.0366**	0.0235 U	0.0235 U	0.0235 U	**0.0246**	0.0353 U	0.0294 U	0.0588 U	0.0294 U	0.0235 U	0.0588 U	**0.0358**	0.0235 U	0.0471 U	**0.0254**	0.0235 U	0.0471 U	**0.0285**

Table 2

PAHs in Soil
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total TEQ
MTCA Method B Cleanup Level			–	–	4,800[b]	–	24,000[b]	–	0.19	–		–	–	–	3,200[b]	3,200[b]	–	5[a]	–	2,400[b]	0.19
Toxic Equivalency Factor			–	–	–	–	–	0.1	1	0.1	–	0.1	0.01	0.1	–	–	0.1	–	–	–	–
E1-SW2-3	01/30/23	3	–	–	–	–	–	0.0243 U	0.0365 U	0.0304 U	–	0.0304 U	0.0243 U	0.0608 U	–	–	0.0486 U	–	–	–	0.0280965 U
E6-SW1-3.5	01/30/23	3.5	–	–	–	–	–	**0.581**	**0.471**	**0.474**	–	**0.135**	**0.512**	0.0656	–	–	**0.177**	–	–	–	**0.61938**
E6-SW2-4.5	01/30/23	4.5	–	–	–	–	–	**0.0365**	**0.0353**	**0.0341**	–	0.0258 U	**0.0294**	0.0517 U	–	–	0.0413 U	–	–	–	**0.0486**
E7-SW1-3.5	01/30/23	3.5	–	–	–	–	–	**0.0530**	**0.0659**	**0.0636**	–	0.0254 U	**0.0490**	0.0508 U	–	–	0.0406 U	–	–	–	**0.0839**
E8-SW1-4	01/30/23	4	–	–	–	–	–	**0.0239**	0.0323	**0.0294**	–	0.0269 U	0.0215 U	0.0538 U	–	–	0.0431 U	–	–	–	**0.0439**
D3-1-6	01/31/23	6	–	–	–	–	–	0.0229 U	0.0343 U	0.0229 U	–	0.0286 U	0.0229 U	0.0571 U	–	–	0.0457 U	–	–	–	0.0261245 U
C3-1-8	01/31/23	8	–	–	–	–	–	0.0236 U	0.0354 U	0.0295 U	–	0.0295 U	0.0236 U	0.0591 U	–	–	0.0473 U	–	–	–	0.0273 U
B4-SW1-3.5	01/31/23	3.5	–	–	–	–		0.0241 U	0.0362 U	0.0302 U	–	0.0302 U	0.0241 U	0.0603 U	–	–	0.0483 U	–	–	–	0.0278755 U
B3-1-9	02/01/23	9	–	–	–	–	–	0.0079 U	0.0079 U	0.0079 U	–	0.0079 U	0.0079 U	0.0079 U	–	–	0.0079 U	–	–	–	0.0060 U
B4-1-9	02/01/23	9	–	–	–	–	–	0.0078 U	0.0078 U	0.0078 U	–	0.0078 U	0.0078 U	0.0078 U	–	–	0.0078 U	–	–	–	0.0059 U
B5-1-8	02/01/23	8	–	–	–	–	–	0.0082 U	0.0082 U	0.0082 U	–	0.0082 U	0.0082 U	0.0082 U	–	–	0.0082 U	–	–	–	0.0062 U
B5-SW1-4	02/01/23	4	–	–	–	–	–	**0.087**	**0.089**	**0.10**	–	**0.032**	**0.10**	**0.018**	–	–	**0.068**	–	–	–	**0.12**
B6-1-6	02/01/23	6	–	–	–	–	–	0.0086 U	0.0086 U	0.0086 U	–	0.0086 U	0.0086 U	0.0086 U	–	–	0.0086 U	–	–	–	0.0065 U
B6-SW1-4	02/01/23	4	–	–	–	–	–	0.0084 U	0.0084 U	0.0084 U	–	0.0084 U	0.0084 U	0.0084 U	–	–	0.0084 U	–	–	–	0.0063 U
C5-1-8	02/01/23	8	–	–	–	–	–	0.0087 U	0.0087 U	0.0087 U	–	0.0087 U	0.0087 U	0.0087 U	–	–	0.0087 U	–	–	–	0.0066 U
C6-1-8	02/01/23	8	–	–	–	–	–	0.0086 U	0.0086 U	0.0086 U	–	0.0086 U	0.0086 U	0.0086 U	–	–	0.0086 U	–	–	–	0.0065 U
C7-1-11	02/01/23	11	–	–	–	–	–	0.0078 U	0.0078 U	0.0078 U	–	0.0078 U	0.0078 U	0.0078 U	–	–	0.0078 U	–	–	–	0.0059 U
D2-1-8	02/01/23	8	–	–	–	–	–	0.0084 U	0.0084 U	0.0084 U	–	0.0084 U	0.0084 U	0.0084 U	–	–	0.0084 U	–	–	–	0.0063 U
D3-2-8	02/01/23	8	–	–	–	–	–	0.0090 U	0.0090 U	0.0090 U	–	0.0090 U	0.0090 U	0.0090 U	–	–	0.0090 U	–	–	–	0.0068 U
D5-1-8	02/01/23	8	–	–	–	–	–	0.0088 U	0.0088 U	0.0088 U	–	0.0088 U	0.0088 U	0.0088 U	–	–	0.0088 U	–	–	–	0.0066 U
D7-SW2-11	02/01/23	11	–	–	–	–	–	**0.016**	**0.018**	**0.016**	–	0.0091 U	**0.017**	0.0091 U	–	–	**0.012**	–	–	–	**0.023**
E2-SW3-6	02/01/23	6	–	–	–	–	–	0.0086 U	0.0086 U	0.0086 U	–	0.0086 U	0.0086 U	0.0086 U	–	–	0.0086 U	–	–	–	0.0065 U
E7-1-9	02/02/23	9	–	–	–	–	–	0.0085 U	0.0085 U	0.0085 U	–	0.0085 U	0.0085 U	0.0085 U	–	–	0.0085 U	–	–	–	0.0064 U
D6-1-10	02/02/23	10	–	–	–	–	–	0.0091 U	0.0091 U	0.0091 U	–	0.0091 U	0.0091 U	0.0091 U	–	–	0.0091 U	–	–	–	0.0068705 U
E7-1-9	02/02/23	9	–	–	–	–	–	0.0085 U	0.0085 U	0.0085 U	–	0.0085 U	0.0085 U	0.0085 U	–	–	0.0085 U	–	–	–	0.0064175 U
E1-SW3-7	02/03/23	7	–	–	–	–	–	0.0090 U	0.0090 U	0.0090 U	–	0.0090 U	0.0090 U	0.0090 U	–	–	0.0090 U	–	–	–	0.0068 U
E2-1-10	02/03/23	10	–	–	–	–	–	0.0079 U	0.0079 U	0.0079 U	–	0.0079 U	0.0079 U	0.0079 U	–	–	0.0079 U	–	–	–	0.0060 U
E2-SW4-7	02/03/23	7	–	–	–	–	–	0.0087 U	0.0087 U	0.0087 U	–	0.0087 U	0.0087 U	0.0087 U	–	–	0.0087 U	–	–	–	0.0066 U
E3-1-10	02/03/23	10	–	–	–	–	–	0.0088 U	0.0088 U	0.0088 U	–	0.0088 U	0.0088 U	0.0088 U	–	–	0.0088 U	–	–	–	0.0066 U
E3-SW2-7	02/03/23	7	–	–	–	–	–	0.0085 U	0.0085 U	0.0085 U	–	0.0085 U	0.0085 U	0.0085 U	–	–	0.0085 U	–	–	–	0.0064 U
E4-1-10	02/03/23	10	–	–	–	–	–	0.0096 U	0.0096 U	0.0096 U	–	0.0096 U	0.0096 U	0.0096 U	–	–	0.0096 U	–	–	–	0.0072 U
E6-SW3-4.5	02/03/23	4.5	–	–	–	–	–	0.0085 U	0.0085 U	0.0085 U	–	0.0085 U	0.0085 U	0.0085 U	–	–	0.0085 U	–	–	–	0.0064 U
E6-SW4-8	02/03/23	8	–	–	–	–	–	0.0088 U	0.0088 U	0.0088 U	–	0.0088 U	0.0088 U	0.0088 U	–	–	0.0088 U	–	–	–	0.0066 U
UST1-B-15	02/06/23	15	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U	0.005738 U
UST1-ESW-12	02/06/23	12	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.006493 U
UST1-NSW-12	02/06/23	12	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.0086 U	0.006493 U
UST1-SSW-12	02/06/23	12	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.006644 U
UST1-WSW-13	02/06/23	13	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.0084 U	0.006342 U
UST2-B-13	02/06/23	13	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0065685 U
UST2-ESW-12	02/06/23	12	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.007248 U
UST2-NSW-12	02/06/23	12	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.008305 U
UST2-SSW-12	02/06/23	12	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.007248 U
UST2-WSW-12	02/06/23	12	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.0096 U	0.007248 U
S-1-022724	02/27/24	7	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0204 U	0.0306 U	0.0255 U	0.051 U	0.0255 U	**0.0225**	0.051 U	**0.0339**	0.0204 U	0.0408 U	0.0204 U	0.0204 U	**0.0423**	**0.023685**
S-2-022724	02/27/24	7	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.022 U	0.033 U	0.0275 U	0.055 U	0.0275 U	**0.0224**	0.055 U	**0.031**	0.022 U	0.044 U	0.022 U	0.022 U	0.044 U	**0.025524**

Table 2

PAHs in Soil
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Date	Sample Depth (ft bgs)	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total TEQ
MTCA Method B Cleanup Level			–	–	**4,800**[b]	–	**24,000**[b]	–	**0.19**	–		–	–	–	**3,200**[b]	**3,200**[b]	–	**5**[a]	–	**2,400**[b]	**0.19**
Toxic Equivalency Factor			–	–	–	–	–	**0.1**	**1**	**0.1**	**0.1**	**0.1**	**0.01**	**0.1**	–	–	**0.1**	–	–	–	–
S-1-03112024	03/11/24	4	0.0253 U	0.0253 U	0.0253 U	0.0253 U	0.0253 U	0.0253 U	0.038 U	0.0316 U	0.0633 U	0.0316 U	0.0253 U	0.0633 U	0.0253 U	0.0253 U	0.0506 U	0.0253 U	0.0253	0.0506 U	0.0292465 U
S-2-03112024	03/11/24	8	0.0224 U	0.0224 U	0.0224 U	0.0224 U	0.0224 U	0.0224 U	0.0336 U	0.028 U	0.056 U	0.028 U	0.0224 U	0.056 U	0.0224 U	0.0224 U	0.0448 U	0.0224 U	0.0224	0.0448 U	0.025872 U
S-3-03112024	03/11/24	8	0.0237 U	0.0237 U	**0.0237**	0.0237 U	0.0237 U	0.0237 U	0.0355 U	0.0296 U	0.0592 U	0.0296 U	0.0237 U	0.0592 U	0.0237 U	0.0237 U	0.0474 U	0.0237 U	0.0237	0.0474 U	0.0273435 U
S-4-4-080924	08/09/24	4	**0.0499**	**0.053**	0.0223 U	0.0223 U	0.0223 U	**0.0444**	**0.0546**	**0.062**	0.0446 U	0.0223 U	**0.052**	0.0223 U	**0.0648**	0.0223 U	**0.0255**	0.0223 U	**0.0411**	**0.0799**	**0.07054**
S-5-3-080924	08/09/24	3	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0454 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227 U	0.0227	0.0171385 U
Performance Samples																					
TP1-3.5	11/16/22	3.5	–	–	–	–	–	**0.335**	**0.270**	**0.249**	–	**0.0983**	**0.363**	0.0536 U	–	–	**0.112**	–	–	–	**0.36**
TP2-3	11/16/22	3	–	–	–	–	–	**40.8**	**45.3**	**43.1**	–	**14.8**	**36.8**	**6.51**	–	–	**19.7**	–	–	–	**58.2**
A1-1-2.5	11/16/22	2.5	–	–	–	–	–	0.0198 U	**0.0504**	**0.0254**	–	0.0247 U	0.0198 U	0.0495 U	–	–	0.0396 U	–	–	–	**0.06**
A1-2-4.5	11/16/22	4.5	–	–	–	–	–	**0.319**	**0.414**	**0.367**	–	**0.125**	**0.321**	**0.0558**	–	–	**0.186**	–	–	–	**0.52**
A1-3-2.5	11/16/22	2.5	–	–	–	–	–	**0.0445**	**0.0711**	**0.0760**	–	**0.0275**	**0.0586**	0.0481 U	–	–	**0.0430**	–	–	–	**0.09**
A1-4-4.5	11/16/22	4.5	–	–	–	–	–	**0.0350**	**0.0657**	**0.0610**	–	0.0258 U	**0.0512**	0.0516 U	–	–	**0.0418**	–	–	–	**0.08**
TP2-6	11/16/22	6	–	–	–	–	–	**0.0282**	**0.103**	**0.0465**	–	0.0281 U	0.0225 U	0.0562 U	–	–	**0.0652**	–	–	–	**0.12**
TP5-3	11/17/22	3	–	–	–	–	–	**0.0444**	**0.0453**	**0.0461**	–	0.0342 U	**0.0448**	0.0683 U	–	–	0.0546 U	–	–	–	**0.06**
A5-1-3.5	11/18/22	3.5	–	–	–	–	–	**0.156**	**0.147**	**0.138**	–	**0.0442**	**0.149**	0.0555 U	–	–	**0.0578**	–	–	–	**0.19**
A2-Ewall-3.5	12/13/22	3.5	–	–	0.0206 U	0.0206 U	**0.0256**	**0.164**	**0.208**	**0.233**	**0.119**	**0.0599**	**0.168**	0.0514 U	**0.324**	0.0206 U	**0.0887**	**0.0284**	**0.182**	**0.339**	**0.27**
A2-Ewall-6.5-7	12/13/22	6.5-7	–	–	0.0245 U	**0.0548**	**0.0553**	**0.430**	**0.467**	**0.418**	**0.219**	**0.142**	**0.371**	0.0613 U	**0.761**	0.245 U	**0.187**	**0.0371**	**0.209**	**0.946**	**0.59**
A2-Nwall-3.5	12/13/22	3.5	–	–	0.0199 U	0.0199 U	0.0199 U	**0.212**	**0.209**	**0.253**	**0.0999**	**0.0901**	**0.246**	0.0496 U	**0.331**	0.0199 U	**0.0782**	0.0199 U	**0.0831**	**0.446**	**0.28**
A2-Wwall-3.5	12/13/22	3.5	–	–	0.0239 U	0.0239 U	0.0239 U	**0.182**	**0.248**	**0.272**	**0.124**	**0.0875**	**0.191**	0.0596 U	**0.321**	0.0239 U	**0.106**	0.0239 U	**0.126**	**0.323**	**0.32**
A2-Wwall-7	12/13/22	7	–	–	0.0246 U	0.0246 U	0.0246 U	**0.127**	**0.142**	**0.123**	**0.0625**	**0.0416**	**0.115**	0.0614 U	**0.234**	0.0246 U	**0.0564**	0.0246 U	**0.0666**	**0.288**	**0.18**
A2-EWALL2-3.5	12/19/22	3.5	0.0216 U	0.0216 U	0.0216 U	**0.0230**	**0.0440**	**0.159**	**0.142**	**0.189**	**0.123**	**0.0578**	**0.213**	0.054 U	**0.365**	0.0216 U	**0.0970**	0.0216 U	**0.206**	**0.379**	**0.20**
A2-NWALL2-3E	12/20/22	3	**0.0232**	**0.0288**	**0.0280**	0.0231 U	**0.0467**	**0.285**	**0.286**	**0.413**	**0.147**	**0.112**	**0.406**	0.0578 U	**0.697**	0.0231 U	**0.116**	**0.0343**	**0.245**	**0.746**	**0.39**
A2-Nwall-3-3	12/21/22	3	0.0225 U	0.0225 U	0.0225 U	0.0225 U	**0.0313**	**0.256**	**0.237**	**0.336**	**0.0902**	**0.0998**	**0.331**	0.0563 U	**0.529**	0.0225 U	**0.0817**	**0.0271**	**0.112**	**0.557**	**0.32**
E1-SW1-3	01/30/23	3	–	–	–	–	–	**0.0397**	0.0349 U	**0.0302**	–	0.0291 U	**0.0302**	0.0582 U	–	–	0.0466 U	–	–	–	**0.03**
E2-SW2-3	01/30/23	3	–	–	–	–	–	**0.116**	**0.107**	**0.0951**	–	**0.0329**	**0.115**	0.0622 U	–	–	0.0498 U	–	–	–	**0.14**
D8-SW1-3	01/31/23	3	–	–	–	–	–	**0.147**	**0.157**	**0.205**	–	**0.0586**	**0.219**	0.0557 U	–	–	**0.0498**	–	–	–	**0.21**
SoundEarth Samples (2018)																					
GEI-1-5	05/30/18	5	–	–	–	–	–	**0.014**	**0.013**	**0.016**	–	0.01 U	**0.014**	0.01 U	–	–	0.01 U	–	–	–	**0.02**
GEI-2-7.5	05/29/18	7.5	–	–	–	–	–	**0.28**	**0.33**	**0.33**	–	**0.14**	**0.29**	**0.024**	–	–	**0.10**	–	–	–	**0.42**

Notes:

Analytical results in milligrams per kilogram (mg/kg).

Sample depth given in feet below ground surface (ft bgs).

Polyaromatic Hydrocarbons (PAHs) analyzed by EPA Method 8270E (SIM).

Carcinogenic PAHs (cPAHs) include Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.

TEQ = Toxic Equivalent Concentration. Total TEQ is the sum of the individual cPAHs multiplied by their respective TEF (calculations not shown in this table). The TEQ for non-detect values is calculated using one-half the reporting limit, per Ecology guidelines.

Toxicity Equivalency Factor (TEF) (unitless) from WAC 173-340-708(8)(e) in the Model Toxics Control Act (MTCA) rule.

MTCA Cleanup Level = Method B Cleanup Level for Direct Contact, Cancer from Ecology Cleanup Levels and Risk Calculation (CLARC) tables, July, 2022.

U = Not detected at or above the laboratory method reporting limit (MRL).

– = Not analyzed.

Detected results are shown in **bold.**

Results detected above the applicable cleanup level are shown in **bold and shaded**.

Waste Characterization Sample Results
Construction Completion Report
1916 Boren Property, Seattle, Washington

Sample ID	Sample Type	Sample Date	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Nickel	Selenium	Silver	Zinc	Mercury
OW-S-111622[a]	Oil-Water Separator Solids	11/16/22	**3.87**	**99.9**	**0.476**	**26.3**	**189 J-**	**51.0 J-**	**16.5**	1.45 U	0.145 U	**264**	0.478 U

Sample ID	Sample Type	Sample Date	GRO	Mineral Spirits	Kerosene	DRO	Heavy Oil	Mineral Oil	–	–	–	–	–
WCHAR-111622[b]	Water (UST-1)	11/16/22	2,500 U	2,500 U	2,500 U	**DETECT**[c]	4,990 U	4,990 U	–	–	–	–	–
UST-S-CHAR[d]	Soil (UST-2)	02/03/23	37.2 U	62.0 U	62.0 U	**DETECT**	124 U	124 U	–	–	–	–	–
A6-Nwall-6[d]	Soil (Area 6)	12/08/22	41.6 U	69.4 U	69.4 U	**DETECT**[e]	**DETECT**[e]	139 U	–	–	–	–	–

Notes:

a = Total Metals analyzed using EPA Method 6020B and EPA Method 7471B (for mercury). Results reported in milligrams per kilogram (mg/kg).

b = Hydrocarbon Identification (HCID) analyzed using Ecology Method NWTPH-HCID. Results reported in micrograms per liter (ug/l).

c = Chromatographic pattern indicates the presence of two overlapping products (laboratory note).

d = Hydrocarbon Identification (HCID) analyzed using Ecology Method NWTPH-HCID. Results reported in mg/kg.

e = Chromatographic pattern indicates a continuous distribution of material in the diesel and oil ranges. Material is not identified as a specific petroleum product and is divided into diesel and oil by carbon range (laboratory note). Concentrations for detected carbon ranges were quantified by follow-up analysis and are reported on Table 1.

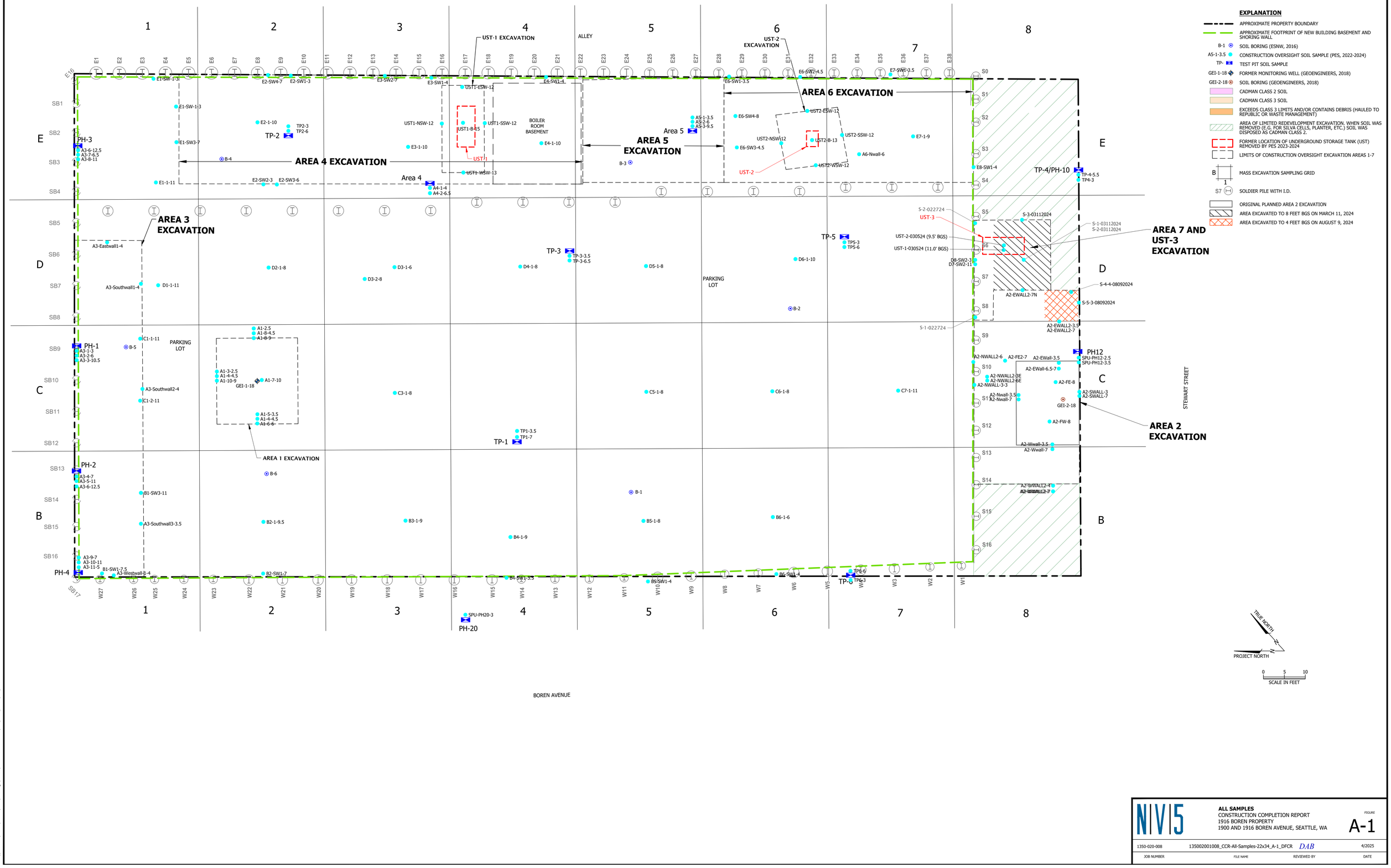
U = Not detected at or above the laboratory reporting limit (RL).

– = Not available or not analyzed.

Detected results are shown in **bold.**

APPENDIX A

FIGURE A-1
ALL SOIL SAMPLES



NV5	ALL SAMPLES CONSTRUCTION COMPLETION REPORT 1916 BOREN PROPERTY 1900 AND 1916 BOREN AVENUE, SEATTLE, WA		FIGURE A-1
1350-020-008	135002001008_CCR-All-Samples-22x34_A-1_DFCR	DAB	4/2025
JOB NUMBER	FILE NAME	REVIEWED BY	DATE