CONTAMINATED MEDIA MANAGEMENT PLAN

1500 Airport Way South, Seattle, Washington

Prepared for: Evergreen Treatment Services

Project No. AS180043 • May 30, 2025 FINAL

Aspect
A Geosyntec Company

earth + water

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5/30/2025

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Contents

Acronyms iii

1 Introduction 1

2 Summary of Existing Information on Subsurface Conditions 3

2.1 Historical Uses of the Site and Cleanup Action Summary 3

2.1.1 Site Use Summary 3

2.1.2 Cleanup Plan Summary 4

2.2 Geology and Hydrogeology 4

3 Environmental Media Classifications 6

3.1 Source, Nature, and Extent of Contamination 6

3.2 Soil Classifications 6

3.3 Groundwater Classifications 7

4 Construction and Safety Requirements 9

5 Soil Monitoring and Management 10

5.1 Identification of Potentially Contaminated Soil 10

5.2 Segregation and Stockpiling 10

5.3 Soil Sampling and Analysis 11

5.4 Soil Profiling and Off-Site Treatment/Disposal/Reuse 12

6 Water Management 14

7 Discoveries During Excavation 15

7.1 Underground Storage Tanks 15

7.1.1 Regulated UST Decommissioning Protocol 15

7.2 Other Excavation Discoveries 16

8 Vapor Intrusion Considerations 17

9 Project Contacts and Notification Requirements 18

10 References 19

11 Limitations 20

List of Figures

1 Site Location

2 Site Plan

3 Cross Section

List of Appendices

A Supporting Documents

B Report Limitations and Guidelines for Use

Acronyms

Aspect	Aspect Consulting, a Geosyntec Company
BETX	benzene, ethylbenzene, toluene and xylenes
bgs	below ground surface
CMMP	Contaminated Media Management Plan
cDCE	cis-1,2-dichloroethene
cPAH	carcinogenic polycyclic aromatic hydrocarbon
CUL	cleanup level
cVOC	chlorinated solvents
-DRO	diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ETS	Evergreen Treatment Services
-GRO	gasoline-range organics
HASP	Health and Safety Plan
ICC	International Code Council
ISCO	injection of chemical oxidants
MNA	monitored natural attenuation
MTCA	Model Toxics Control Act
-ORO	oil-range organics
PAH	polycyclic aromatic hydrocarbon
PCE	tetrachloroethylene
PID	photoionization detector
RCW	Revised Code of Washington
RI/FS/CAP	Remedial Investigation/Feasibility Study/Cleanup Action Plan
SVE	soil vapor extraction
TCE	trichloroethylene
tCDE	trans-1,2-dichloroethene

TPH	total petroleum hydrocarbons
UST	underground storage tank
USGS	US Geological Survey
VI	vapor intrusion
VOC	volatile organic compound
WAC	Washington Administrative Code

1 Introduction

Aspect Consulting, a Geosyntec Company, (Aspect) prepared this Contaminated Media Management Plan (CMMP) on behalf of Evergreen Treatment Services (ETS) to describe the actions that should be conducted to monitor and manage environmental media[1] during redevelopment of their facility at 1700 Airport Way South in Seattle, Washington (the Site; Figure 1). The current layout of the Site is shown on Figure 2.

The property at 1700 Airport Way South (King County Parcel 766620-2855; the Property) is currently owned by ETS, an opioid addiction treatment and social services provider. The Property is developed with one building (Existing Building) featuring two wings connected via an open breezeway. Each wing features a subgrade basement extending approximately 5 feet below ground surface (bgs). ETS is currently working toward redeveloping the Property with a purpose-built treatment facility (the New Building) to expand its treatment service capacity. A copy of the Ground Disturbance Plan for the redevelopment, dated May 9, 2025, is included in Appendix A.

In May 2025, Aspect drafted a Remedial Investigation, Feasibility Study, and Cleanup Action Plan (RI/FS/CAP), which has been shared with ETS and the Washington State Department of Ecology (Ecology) for review (Aspect, 2025).[2] The RI/FS/CAP identified the source, nature, and extent of contamination present on the Site. The source of contamination on the Site, which consists of certain heavy metals, polycyclic aromatic hydrocarbons (PAHs), and chlorinated solvents (cVOCs) in soil, groundwater, and soil gas, is determined to be historical fill placed during regrading projects completed in early Seattle history, and from undocumented releases from historical industrial operations on the Site.

Current plans for cleanup and redevelopment of the Property include

- demolition of the Existing Building and subsurface structures;
- excavation of contaminated soil[3] beneath the north wing of the Existing Building;
- excavation of impacted soil[4] under the footprint of the New Building;
- utility trench excavation in the west-adjoining right of way (Airport Way South) owned by the City of Seattle;

[1] As used in this report, "environmental media" refers to soil, soil gas, groundwater, impacted concrete floor slabs, and stormwater collected on-Site during redevelopment.
[2] As of the date of this CMMP, no feedback or opinion from Ecology has been received.
[3] As defined in Section 3 of this CMMP, "contaminated soil" refers to soil containing one or more hazardous substances at concentrations exceeding Ecology's Model Toxics Control Act (MTCA) Method A cleanup levels.
[4] As defined in Section 3 of this CMMP, "impacted soil" refers to soil containing one or more hazardous substances at detectable concentrations but below MTCA Method A cleanup levels, or that otherwise exhibits evidence of contamination, such as odors or staining.

- placement of clean imported structural backfill in the footprints of the demolished Existing Building (to bring their basements up to the construction subgrade); and
- construction of the New Building on the northern portion of the Property, and construction of hardscaping across the remainder of the Property as a protective cap over contaminated soils.

This CMMP establishes procedures for identifying, segregating, handling, sampling, and disposing of impacted and contaminated soil that might be encountered during excavation as part of redevelopment of the Property.

Unconfined groundwater is present on the Site at depths as shallow as 4.5 feet bgs, and less than 1 foot below basement slab grade, and generally flows to the west. Significant dewatering is not planned for this redevelopment; however, some limited dewatering is anticipated during excavation on the Property, which could require treatment prior to disposal during construction. Water generated during dewatering should be tested upon generation to meet the applicable discharge requirements and permit conditions (the contractor is expected to obtain all appropriate permits). This CMMP also establishes procedures for handling and disposal of groundwater captured in the dewatering system.

This CMMP does not address management of building materials (with the exception of known metals-contaminated concrete found on the floor slab of the north Existing building), which may have been contaminated by historical Site use or management of hazardous building materials used in the construction of the Existing Building, both of which may be encountered during redevelopment. Note that Pacific Rim Environmental completed a hazardous building materials survey that should be referred to before the Existing Building is demolished (PacRim, 2025).

2 Summary of Existing Information on Subsurface Conditions

This section summarizes information regarding environmental investigations completed on the Site to date, historical uses of the Site, and geologic information regarding the Site. This section references information included in the appendices of the RI/FS/CAP (Aspect, 2025). The RI/FS/CAP is available upon request.

2.1 Historical Uses of the Site and Cleanup Action Summary

The historical use of the Site and details of the cleanup action are summarized in the RI/FS/CAP. (Aspect, 2025). Below is a short summary of the Site history and planned cleanup action.

2.1.1 Site Use Summary

The earliest available historical records indicate that the Site was first developed with residential property as early as 1893. At that time, present-day Airport Way South was a wood plank road at the eastern edge of the Elliott Bay tide flats, and the dwellings were possibly built on wharf-like structures supported by timber piles. Between 1907 and 1914, waste soil from the Jackson Street Regrade and Dearborn Street Regrade projects (completed north of the Site) were used to fill in the tide flats west of Beacon Hill, likely including the footprint of the Property.

After the area was filled, the Site was redeveloped and was part of a larger property occupied by an industrial manufacturer, Western Blower (1910s to 1960s), of large industrial fans. Northwest Enviroservice (later Emerald Services) (1979 to 1995) operated a hazardous waste processing facility on the parcel north of the Site and used the warehouses on the south parcel (the current ETS Property/Site) for some of its operations. The entire Northwest Enviroservice operational area was listed by the US Environmental Protection Agency (EPA) and Ecology as a contaminated facility. Corrective Action measures were undertaken by Northwest Enviroservice for the facility under the direction of the EPA in the 1990s. The ETS Property was removed from the cleanup action because the EPA and Ecology determined that only an Environmental Restrictive Covenant would be needed to manage limited arsenic-, lead-, cadmium, petroleum-, benzo(a)pyrene-contaminated soil and concrete at the Property. The Environmental Restrictive Covenant, dated December 7, 2016, involves three restrictions/requirements: (1) limiting non-conforming zoning classification uses, (2) restricting use of groundwater, and (3) restricting the alteration of existing structures without prior written approval from Ecology.

ETS moved into the south wing of the Existing Building in 1997 and acquired the Site from Emerald Services in 2021. Upon purchase ETS adopted the conditions of the Environmental Restrictive Covenant (Aspect, 2025).

2.1.2 Cleanup Plan Summary

Compliance with the Environmental Restrictive Covenant is one part of the cleanup action proposed for the ETS Subject property – restricting groundwater use and maintaining a protective cap on contaminated soil. The second component of a cleanup action at the ETS property will involve remedial action related to a solvent plume discovered during ETS' purchase of the Property in 2021. The solvent source is a sump/drain in the north warehouse building that will be demolished as part of ETS' redevelopment of the Site. Therefore, the CAP component on this document focuses on the solvent plume, and it should be considered as a supplemental element to the pre-existing (and planned-to-be-maintained) environmental covenant on this property.

The selected cleanup action for the solvent plume at the Site includes a sump removal and limited remedial excavation around it, in situ treatment of contaminants via injection of chemical oxidants (ISCO), monitored natural attenuation (MNA) of remaining contamination in groundwater, and implementation of engineering (chemical vapor barrier, as needed) and institutional controls (updating the environmental covenant, if needed) for the Property. Remedial excavation would be completed during demolition of the Existing Building. ISCO treatment would occur following regrading of the Property but prior to construction of the New Building. Engineering controls would be implemented during construction of the New Building. MNA would follow construction of the New Building and continue for up to 5 years. Institutional controls, currently in place on the Property, would be revised as appropriate following construction and/or completion of the cleanup action.

ETS plans to implement the selected cleanup action in conjunction with the planned redevelopment of the Property.

After implementation of the cleanup action it is expected that the Property and/or Site will qualify for a written no further action determination from Ecology.

2.2 Geology and Hydrogeology

The Site is located in the Puget Lowland region, characterized by heterogeneous, glacially deposited sediments within a large topographic basin. According to the Geologic Map of Seattle, produced by the U.S. Geological Survey (USGS) and the Pacific Northwest Center for Geological Mapping Studies, the Site and properties westward are underlain by artificial fill over tide flat deposits (Troost et al., 2005). The eastern boundary of the Site abuts a steep slope beneath current Interstate 5, separating the Site from the northern portion of the Beacon Hill neighborhood. The slope is underlain mainly by Quaternary continental glacial drift deposits from the Pleistocene, including pre-Fraser-age deposits from about 70,000 to 20,000 years ago. The Site features a slight westward slope, with the western boundary and properties west of the Site situated at approximate Elevation 24 feet NAVD88[5]. The eastern boundary of the Site, abutting the steep slope under Interstate 5, is at approximate Elevation 27 feet.

The geotechnical engineer completed a geotechnical investigation on the Site in 2023, based on multiple sources of soil data including Aspect soil boring logs from 2018

[5] All elevations are determined using North American Vertical Datum of 1988 (NAVD88)

(GeoEngineers, 2023). Based on the geotechnical investigation report and appended soil boring logs, the Site is underlain by approximately 11 to 16 feet of undocumented imported fill featuring anthropogenic debris including fragments of wood, brick, glass, ceramics, and coal. The fill overlies soft estuarine deposits ranging in thickness from 5 to 19 feet thick, thickening to the west with distance from the steep slopes east of the Site. The estuarine deposits consist of soft interbedded silt and clay, which are underlain by glacially consolidated soils consisting of very stiff to hard silt and clay. The top of these soils appears to slope to the west, increasing in depth from approximately 16 feet below ground surface (approximate Elevation 15 feet) on the eastern Property boundary to approximately 30 feet bgs (approximate Elevation -5 feet) on the western Property boundary. The glacially consolidated soils reportedly continue deeper than the maximum depth explored on the Site (approximately 35 feet bgs; approximate Elevation -10 feet). The floor of the basement under each wing of the Existing Building is at approximate Elevation 19.4 feet based on survey reports for the Site.

Soils observed during environmental investigations described in the RI/FS/CAP consisted primarily of artificial fill soil overlying native estuarine sediments. The fill material was observed to generally be composed of reworked silty sand with gravel, with artificial debris including shards of glass, bricks, and wood. The observed estuarine sediments were composed of interbedded silty sand, sand with silt, sandy clay, and sand with gravel. Estuarine sediments included some seashell fragments and trace rootlets. An interpretation of the subsurface geology is presented in cross-section on Figure 3.

Environmental investigations completed on the Site have included construction and development of five monitoring wells (AMW-1 through AMW-5; Figure 2) across the Site. During both groundwater sampling events, groundwater elevations ranged from approximate Elevations 18 to 19.5 ft, and the groundwater gradient was generally westward with a shallow hydraulic gradient of about 0.014 to 0.017 feet per foot.

3 Environmental Media Classifications

This section presents the nature and extent of contamination identified on the site and identifies environmental classifications for soil and groundwater which may be encountered during redevelopment of the Site.

3.1 Source, Nature, and Extent of Contamination

Three historical primary sources of contamination have been identified for the Site:

1. **Historical contaminated fill** placed at the Site which contains artificial debris and contaminants associated with uncontrolled dumping of material derived from regrading projects completed by the City of Seattle in the early 1900s (the following chemicals of concern have been identified in the fill: metals, cPAHs, petroleum, benzene).
2. **The sump in the basement of the north wing of the Existing Building** located in the vicinity of historical Site operations which likely included the use of solvents without a dedicated solvent recovery system and were discharged into the sump (the following chemicals of concern have been identified in soil, groundwater and soil gas around the sump: trichloroethylene (TCE) and its degradation products[6] (cis-1,2-dichloroethene [cDCE], trans-1,2-dichloroethene [tCDE] and vinyl chloride).
3. **Contaminated concrete is present in the floor slab of the Existing Building**. It is our understanding that the contaminated concrete will be removed and disposed of appropriately as part of building demolition. Therefore the rest of this document focuses on soil and water management.

The extent of contamination was identified in the RI/FS/CAP (Aspect, 2025). The results of the RI/FS/CAP corroborate the understanding stated in the Site's current environmental covenant that shallow soils across the Site are contaminated with metals and cPAHs including the COCs identified above. The historical fill extends between approximate Elevations 9 to 16 feet on the Site.[7] Groundwater has been identified at approximate Elevations 18 to 19.5 feet on the Site.

Chlorinated solvents including TCE, cDCE, and vinyl chloride, have been identified in soil, soil gas, and/or groundwater under the basement of the north wing of the Existing Building. These appear to be derived from undocumented releases of solvents into the sump in the basement of the north wing of the Existing Building.

3.2 Soil Classifications

Excavating and backfilling parts of the Site is planned as part of redevelopment. This is shown graphically in the Ground Disturbance diagram prepared by Coughlin Porter Lundeen, the Site civil engineer, dated May 9, 2025. A copy of the Ground Disturbance

[6] TCE degradation products include cis-1,2 dichloroethylene (cDCE), trans-1,2 dichlorethylene (tDCE), and vinyl chloride.
[7] Ground surface elevation varies from approximate Elevations 24 to 27 feet across the Site.

diagram is included in Appendix A. Redevelopment of the Site is expected to include excavation to approximately 3.5 feet bgs (approximate Elevation 23.5 feet) north and east of the New Building and utility trenching in the west-adjoining right of way (Airport Way South) to a depth of approximately 4 feet bgs (approximate Elevation 20 feet). Additionally, the planned cleanup action described in the RI/FS/CAP assumes excavation of contaminated soil in the vicinity of the sump in the basement of the north wing of the Existing Building to a depth of approximately 2 feet below the top of basement slab (approximate Elevation 17.5 feet).

Based on the results of the RI/FS/CAP (Aspect, 2025) and redevelopment plans provided to Aspect for review, three classifications of soil may be encountered during redevelopment of the Site:

- **Contaminated Soil.** Soil with concentrations of hazardous substances exceeding applicable cleanup levels established by Ecology under MTCA, Chapter 70A.305 Revised Code of Washington (RCW), and its implementing regulations, Chapter 173-340 Washington Administrative Code (WAC). Contaminated soil is expected to be encountered in the excavation areas described in the Ground Disturbance Plan (Appendix A) and the Cleanup Action Plan of the RI-FS-CAP (Aspect, 2025)
- **Impacted Soil**. Soil with hazardous substances at detectable concentrations but below applicable MTCA cleanup levels or that otherwise exhibits evidence of contamination, such as odors or staining. Impacted soil may be encountered during demolition of the basement of the south wing of the Existing Building.
- **Clean Soil.** Soil that does not contain detectable concentrations of hazardous substances and that exhibits no evidence of contamination.

As described above, contaminated and impacted soil is known to be present throughout the volume of the historical fill soil underlying the Site. Impacted and contaminated soil may also be present in the upper layers of the native estuarine deposits underlying the historical fill, but excavation planned for redevelopment is not expected to reach depths where these deposits are known to be present.

Section 5 of this CMMP establishes guidelines and procedures for excavating, handling, transporting, and disposing of impacted soil and contaminated soil encountered during redevelopment of the Site.

3.3 Groundwater Classifications

As summarized in Section 2.2, groundwater has been identified at elevations ranging from 18 to 19.5 feet across the Site. A limited area of excavation at the site is expected to reach a minimum elevation of approximately 17.5 feet but otherwise is generally expected not to reach groundwater (Aspect, 2025). However, perched water may present discontinuously at shallower depths across the Site and this water may be encountered during redevelopment of the Site. Groundwater quality in shallow soil and/or upgradient of the sump in the basement of the north wing of the Existing Building is assumed to be impacted by contaminants identified in soil. Additionally, stormwater may be contaminated by contact with exposed soils during redevelopment of the Site and/or

mixed with contaminated groundwater collected by the construction water management system utilized during redevelopment of the Site.

Based on the results of the RI/FS/CAP (Aspect, 2025), three classifications of groundwater may be encountered during redevelopment of the Site:

- **Contaminated Water.** Water with concentrations of hazardous substances exceeding applicable MTCA cleanup levels.
- **Impacted Water**. Water with hazardous substances at detectable concentrations but below applicable MTCA cleanup levels or that otherwise exhibits evidence of contamination, such as odors or sheen.
- **Clean Groundwater.** Water that does not contain detectable concentrations of hazardous substances and that exhibits no evidence of contamination.

Section 6 of this CMMP establishes guidelines and procedures for managing water encountered during redevelopment of the Site.

4 Construction and Safety Requirements

The following is a summary of construction and safety requirements that Aspect staff will follow during excavation activities at the Site. We recommend that the contractor comply with their own health and safety program requirement and use this document for informational purposes only.

- All persons performing activities where they may contact hazardous materials, including contaminated soil or groundwater, must have completed Hazardous Waste Operations and Emergency Response (HAZWOPER) training in accordance with the Occupational Safety and Health Administration (OSHA) Part 1910.120 of Title 29 of the Code of Federal Regulations, and be in possession of current HAZWOPER certification documents.
- All work must be performed in accordance with the contractor's site-specific health and safety plan (HASP). The HASP should include guidelines to reduce the potential for injury, as well as incident preparedness and response procedures, emergency response and evacuation procedures, local and project emergency contact information, appropriate precautions for potential airborne contaminants and site hazards, and expected characteristics of generated waste. The general contractor will operate under its own HASP, as will any subcontractor performing activities where hazardous materials may be contacted.

A safety meeting will be conducted prior to the start of each workday to inform workers of changing work conditions, and to reinforce key safety requirements.

All work must be conducted in a manner consistent with federal, state, and local construction and health and safety standards applicable to the Site and to the work being performed. All companies are responsible for the health and safety of their own workers.

5 Soil Monitoring and Management

This section describes recommended procedures for the monitoring and management of soil encountered during redevelopment of the Site.

5.1 Identification of Potentially Contaminated Soil

An Aspect representative should be at the Subject Property to monitor excavation activities for the full duration of the mass excavation. If potentially contaminated soil is encountered, then the excavation contractor should stop work in the affected area and immediately notify Aspect for further instructions. Discovery of any of the following should be reported to Aspect:

- Petroleum hydrocarbon or solvent staining, sheen, or chemical color hues in soil or standing water
- The presence of separate-phase petroleum hydrocarbon product, solvents, or other chemicals
- The presence of utility pipelines with sludge or trapped liquid indicating petroleum hydrocarbon or chemical discharge sludge
- The presence of buried pipes, conduits, or tanks
- Vapors causing eye irritation or nose tingling or burning
- The presence of solvent-, gasoline- or oil-like odors

An Aspect representative will investigate the discovery and determine whether soil in the affected area should be managed as Contaminated Soil or Impacted Soil, or whether other actions should be taken in response to observed conditions. The Aspect representative may investigate the discovery by using field-screening techniques such as visual and olfactory observations and a photoionization detector (PID), and/or by collecting and analyzing soil samples from the affected area. The Aspect representative will conduct all monitoring, sampling, and analyses in accordance with industry standard practices and applicable laws, regulations, and guidance.

5.2 Segregation and Stockpiling

Contaminated Soil and Impacted Soil excavated from the Subject Property will be managed in accordance with applicable laws and regulations. Soil containing petroleum hydrocarbons will be managed in accordance with Ecology's *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology, 2016b). Soil containing other hazardous substances will be managed in accordance with other applicable laws and regulations.

As needed, Aspect will assist the contractor in real-time segregation of excavated soil into categories (contaminated, impacted, or clean) based on field observations, analytical results, and disposal criteria. An Aspect representative will assist the contractor in a preliminary delineation of Contaminated Soil and Impacted Soil based on existing analytical data. In areas where data does not exist, the presence and extent of

Contaminated or Impacted Soil may be determined at the time of excavation through the collection and laboratory analysis of soil samples.

Excavated soils that are judged to be contaminated and/or impacted may be direct-loaded and hauled to a treatment/disposal facility to limit impacts to the construction schedule. Alternatively, soils may be temporarily stockpiled for subsequent handling based on the results of laboratory analyses (discussed in Section 5.3). Stockpile requirements include the following:

- All stockpiles will be placed on a hardscaped surface or on 4 inches of clean imported soil; or, if placed on existing soil, 4 inches of soil beneath the stockpile will need to be removed as contaminated (or impacted).
- The perimeter of stockpiles will be surrounded by a berm to prevent run-on and/or runoff of precipitation.
- All stockpiles will be covered with plastic sheeting of 6-millimeter minimum thickness when not in use, and the cover will be anchored daily to prevent it from being disturbed by wind.

5.3 Soil Sampling and Analysis

The results of the RI-FS-CAP (Aspect, 2025) indicate that the hazardous substances detected in soil at the Site at concentrations above the laboratory detection limits include

- **metals** including arsenic, cadmium, chromium, copper, lead, nickel, and zinc at concentrations exceeding natural background levels;
- **polycyclic aromatic hydrocarbons (PAHs)** including carcinogenic PAHs (cPAHs) such as benzo(a)pyrene;
- **total petroleum hydrocarbon**s (TPH) including gasoline-range organics (TPH-GRO), diesel-range organics (TPH-DRO), and oil-range organics (TPH-ORO);
- **petroleum VOCs** including benzene, toluene, ethylbenzene, and xylenes; and
- **chlorinated VOCs** including tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-dichloroethene (cDCE), trans-1,2-dichloroethene (tDCE), and vinyl chloride.

In areas of the Site where Contaminated Soil is encountered and removed, soil sampling will be conducted to: (a) confirm that soil containing concentrations of hazardous substances above applicable cleanup levels has been removed; or (b) if contamination remains, to document the location and magnitude of hazardous substances in soil at the excavation limits. The soil sampling required to demonstrate achievement of cleanup levels and to meet the requirements of MTCA is not addressed in this CMMP.

Depending on conditions encountered during mass excavation, Aspect may collect and analyze soil samples for any of the following reasons:

- To investigate the discovery of potentially Contaminated Soil

- To determine the presence, nature, and extent of Impacted Soil
- To determine the concentration of hazardous substances in soils that are excavated
- To determine whether stockpiled soils may be reused
- To provide waste-profiling data required by treatment/disposal facilities
- To confirm that soils left in place do not contain hazardous substances at concentrations exceeding applicable cleanup levels

Soil samples collected in the course of the excavation may be submitted for analysis of one or more of the following analytical methods:

- Gasoline-range TPH by Northwest Method NWTPH-Gx
- Diesel- and oil-range TPH by Northwest Method NWTPH-Dx
- VOCs by U.S. Environmental Protection Agency (EPA) Method 8260E
- PAHs by EPA Method 8270D
- Resource Conservation and Recovery Act (RCRA)-8 Metals[8] and copper, nickel, and zinc by EPA Method 6020, EPA Method 1631E, and/or the Toxicity Characteristic Leaching Procedure (TCLP)
- Other analyses requested by receiving facilities as necessary for waste disposal characterization

Soil samples collected for analysis of volatile contaminants (TPH-GRO and VOCs that will include BETX) will be collected using EPA Method 5035 sampling kits. Discrete grab samples will be submitted for analysis so that contaminant variability can be evaluated. Field-screening techniques will generally be used to help ensure that a "worst-case" sample is collected for analysis. If a backhoe is used to collect the sample (e.g., when it is unsafe for the sampler to enter the excavation), care will be taken to ensure the backhoe bucket is clean of other soil before sampling. "Fresh" soils will be exposed just prior to sampling (to limit contaminant loss to volatilization), and the soil sample will be collected from the middle of the bucket, from soils that have not contacted the sides of the bucket. If sampling personnel can safely access the sampling location, a hand auger or shovel will be used to expose "fresh" soils just prior to sampling.

The overall scope of soil sampling and analysis activities will depend on field-screening results, stockpile soil volumes, treatment/disposal facility profiling requirements, and other factors.

5.4 Soil Profiling and Off-Site Treatment/Disposal/Reuse

All excavated soils with evidence of potential contamination must be characterized, by laboratory analysis of representative samples, to determine treatment/disposal/reuse options. Soils that are not eligible for reuse will require disposal in a permitted landfill. It

[8] The RCRA-8 metals include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

is possible, but unlikely, that soils impacted solely by petroleum hydrocarbons could be eligible for disposal in a special treatment and disposal landfill permitted to accept "Subtitle D" (nonhazardous) wastes. For example, treatment/disposal facilities, such as the Heidelberg Materials Soil Remediation facility in Everett, Washington[9], accept petroleum-contaminated soils that meet certain criteria[10], and may be an alternative to landfill disposal. Each landfill and treatment/disposal facility has its own waste acceptance criteria, and soil quality must be reviewed by the disposal facility to determine whether those criteria are met. All soil exported from this Site will need to be verified by Aspect. The Contractor should provide Aspect details on proposed disposal and end use locations for soil.

It is important to note that the concentration limits for reuse of soils impacted by petroleum hydrocarbons are more stringent than the MTCA Method A cleanup levels. That is, excavated soils may meet Method A cleanup levels, but still be unsuitable for reuse. Guidelines and contaminant concentration limits for reuse of petroleum-impacted soils are summarized in Tables 12.1 and 12.2 of *Guidance for Remediation of Petroleum Contaminated Sites* (Ecology, 2016b). Those tables are provided as Appendix A to this CMMP. Any reuse of excavated soil will be in accordance with the guidelines and concentration limits provided in the Appendix A tables.

Aspect will support with the following:

- Submitting representative soil samples for laboratory analysis and evaluating results to determine cost-effective treatment/disposal/reuse options.
- Identifying candidate landfills and treatment/disposal facilities, and interfacing with facility representatives to complete the soil profiling/acceptance process.
- Providing soil loadout assistance to ensure that all paperwork (waste manifests, bills of lading, soil tickets) is in place, monitor soil loadout, and track final soil disposition.

[9] The Heidelberg Materials Everett Soil Remediation Facility is located at 17 East Marine View Drive in Everett, Washington.
[10] A copy of the Soil Remediation Facility's general material receiving requirements are included in Appendix A.

6 Water Management

Shallow groundwater is present across the Site at elevations ranging from 18 to 19.5 feet, which is approximately 4.5 to 6 feet bgs, and less than 1 ft below the sub-grade basement slab surface. Arsenic, cDCE, and vinyl chloride are present in groundwater at concentrations above the MTCA Method A cleanup levels (Aspect, 2025).

Contaminated groundwater may be encountered during remedial excavation described in the RI/FS/CAP (Aspect, 2025). Due to the presence of contamination in soil at concentrations exceeding cleanup levels protective of groundwater quality and the potential for discontinuous volumes of perched groundwater in the historic fill underlying the Site, mass excavation into Contaminated or Impacted soil during redevelopment may encounter Contaminated or Impacted groundwater not identified by the RI/FS/CAP.

As shown on the Ground Disturbance diagram for the redevelopment (Appendix A), a moveable in-excavation sump and pump system will be used to manage groundwater and accumulated stormwater during mass excavation. Water collected during redevelopment must be sampled for characterization prior to discharge or disposal and to comply with discharge permits (assuming that the contractor will be discharging water to the combined sanitary/stormwater system).

Water sample samples collected in the course of the excavation will need to be submitted for analysis of one or more of the following analytical methods:

- TPH-GRO by Northwest Method NWTPH-Gx
- TPH-DRO and TPH-ORO by Northwest Method NWTPH-Dx
- VOCs (including cVOCs and BETX) by EPA Method 8260D
- PAHs by EPA Method 8270E
- Total and dissolved RCRA-8 Metals and copper, nickel, and zinc by EPA Method 200.8 and EPA Method 1631E

Based on the results of water analysis, Aspect will advise on the appropriate methods of disposal or discharge. If collected water is to be discharged from the Site, treatment may be required. Discharge of collected water will require authorization from King County and/or the City of Seattle.

It is the responsibility of the contractor to obtain discharge permits and ensure treatment is conducted so contaminant concentrations in groundwater meet the discharge criteria prior to discharge. Should a discharge permit be required, a copy should be provided to Aspect and, upon receipt, will be included in this document as an appendix. Aspect can assist the contractor by obtaining samples from the treatment system to compare to discharge criteria and reporting, if necessary.

7 Discoveries During Excavation

There is a potential for undocumented environmental concerns to be uncovered during redevelopment of the Site. It is the responsibility of the contractor to identify discoveries of possible environmental concern and immediately notify ETS and Aspect for further instructions. The following sections describe commonly encountered mass excavation discoveries and the required protocols for each.

7.1 Underground Storage Tanks

Historical documents indicate there has been at least one underground storage tank (UST) used at the Subject Property (Aspect, 2025; Figure 2), but there are no records of its current status and it may have been removed during historical modifications to the Existing Building. However, it may still be present and there is a potential for the historical UST and additional undocumented and/or unknown USTs to be encountered during excavation activities. Select USTs are regulated by Ecology under Chapter 173-360A WAC and require regulatory notification and specific removal requirements.[11] Any removal or handling of discovered USTs should be coordinated with Aspect.

7.1.1 Regulated UST Decommissioning Protocol

Generalized protocols for removal of regulated USTs is briefly outlined as follows:

1. Immediately upon discovery, stop excavation in the UST area and notify Aspect to discuss next steps.
2. Prior to removal, an International Code Council (ICC)-Certified UST Site Assessor must notify Ecology of the upcoming UST closure and removal.[12] Ecology will provide written or verbal authorization to proceed with the UST removal. Aspect will provide the UST Site Assessor for the project.
3. Authorized closure and removal of a UST consists of several tasks, which will be coordinated by the contractor:
    a. An ICC-Certified UST Decommissioner must empty and clean the UST of all liquids and accumulated sludges.
    b. A marine chemist must inert the UST of flammable vapors, as directed by the International Fire Code.
    c. A representative of the Seattle Fire Marshal will make a site visit to confirm that these tasks have been completed according to the International Fire Code and provide a written authorization for removal.
    d. The cleaned UST may then be removed from the excavation, crushed, and transported from the Subject Property.
4. The UST Decommissioner must ensure that the UST atmosphere and excavation area is regularly monitored for flammable vapor concentrations until the UST is

[11] https://ecology.wa.gov/spills-cleanup/contamination-cleanup/underground-storage-tanks
[12] A copy of the 30-Day Notice form for UST removal is included in Appendix A.

removed from both the excavation and the Subject Property. The UST Site Assessor (Aspect) will obtain confirmation soil samples from the excavated UST pit and assist with segregation and management of any Impacted Soil and/or Contaminated Soil identified during the UST removal. The UST Site Assessor will also photo document and visually inspect the UST prior to transport from the Subject Property.

5. Following completion of the UST removal, the UST Site Assessor will complete the Site Check/Site Assessment Checklist and an appropriate report completed in accordance with Ecology's *Site Assessment Guidance for Underground Storage Tank Systems* (Ecology, 2022).

As stated above, Aspect will provide the ICC-Certified Site Assessor, lead communications with Ecology, and is available to coordinate and schedule the UST closure/removal with the other involved parties.

7.2 Other Excavation Discoveries

Examples of other possible excavation discoveries of environmental concern include

- an undocumented monitoring well;
- an unknown underground facility, such as utility vaults or sumps;
- utility line exhibiting evidence of contamination;
- debris or buried waste material exhibiting evidence of contamination, such as drums, paint/oil cans, etc.; and
- odors, staining, or other evidence of contamination.

Potential environmental concerns should be reported to ETS and Aspect for review and discussion.

8 Vapor Intrusion Considerations

Soil containing VOCs at concentrations exceeding applicable screening levels may be left in place at the limits of excavation, and the potential for vapor intrusion (VI) into the New Building needs to be considered as part of building design. Ecology provides guidance for evaluating VI (Ecology, 2016a). The potential for VI will depend on the New Building design.

For the purposes of this CMMP (which will be modified if new information is obtained), it is assumed that vapor mitigation will be needed for the new building because of existing soil gas and indoor air data that have been obtained to date. Other VI mitigation technologies can be considered. Mitigation technologies include passive systems such as vapor barriers, as well as active systems such as sub-slab depressurization. Aspect can help design a protective system depending on the building design components that are currently being completed at the time that this document was prepared.

9 Project Contacts and Notification Requirements

This section lists key project contacts involved in implementation or changes to this CMMP. In the event of discovery of USTs, suspect Impacted or Contaminated Soil, or other possible conditions of environmental concern, the Aspect and Owner contacts listed below should be notified as soon as practical. Phone numbers and emails for primary and backup points of contact are provided in the table below.

Table 1. Project Team Contact Information

Name		Title	Phone	Email
Aspect Consulting, a Geosyntec Company				
Primary Contact	Nathan Dickey	Environmental Project Manager	206-413-5399	nathan.dickey@geosyntec.com
Backup Contact	Dave Cook	Environmental Person in Charge	206-838-5837	dave.cook@geosyntec.com
Field Lead	To Be Determined			
Evergreen Treatment Services				
Primary Contact	Jack Lussier	Project Management Supervisor	206-690-0535	jhebron@evergreentreatment.org
Backup Contact	John Chandler	Real Estate Services Manager	206-690-0829	jchandler@evergreentreatment.org
Contractor				
Primary Contact	To Be Determined			

This table should be revised as project contacts change.

10 References

Aspect Consulting, a Geosyntec Company (Aspect), 2025, Remedial Investigation, Feasibility Study, and Cleanup Action Plan, 1700 Airport Way South, Seattle, Washington, May 23, 2025.

GeoEngineers, Inc. (GeoEngineers), 2023, Geotechnical MUP Report, Seattle Clinic Renovation, Seattle, Washington, August 16, 2023.

Pacific Rim Environmental, Inc. (PacRim), 2025, Regulated Building Materials Survey, Seattle Facility Demolition, 1700 Airport Way South, Seattle, WA 98134, dated May 23, 2025.

Troost, K.G., Booth., D.B., Wisher, A.P., and Shimel., S.A. (Troost et al.), 2005, The Geologic Map of Seattle—A Progress Report., United States Geological Survey Open-File Report 2005-1252, version 1.0, August 1, 2005.

Washington State Department of Ecology (Ecology), 2016a, Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action, Toxics Cleanup Program Publication No. 09-09-047, Review Draft October 2009, Revised February 2016.

Washington State Department of Ecology (Ecology), 2016b, Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program Publication No. 10-09-057, Revised June 2016.

Washington State Department of Ecology (Ecology), 2022, Site Assessment Guidance for Underground Storage Tank Systems, Toxics Cleanup Program Publication No. 21-09-050, Published January 2021, Revised October 2022.

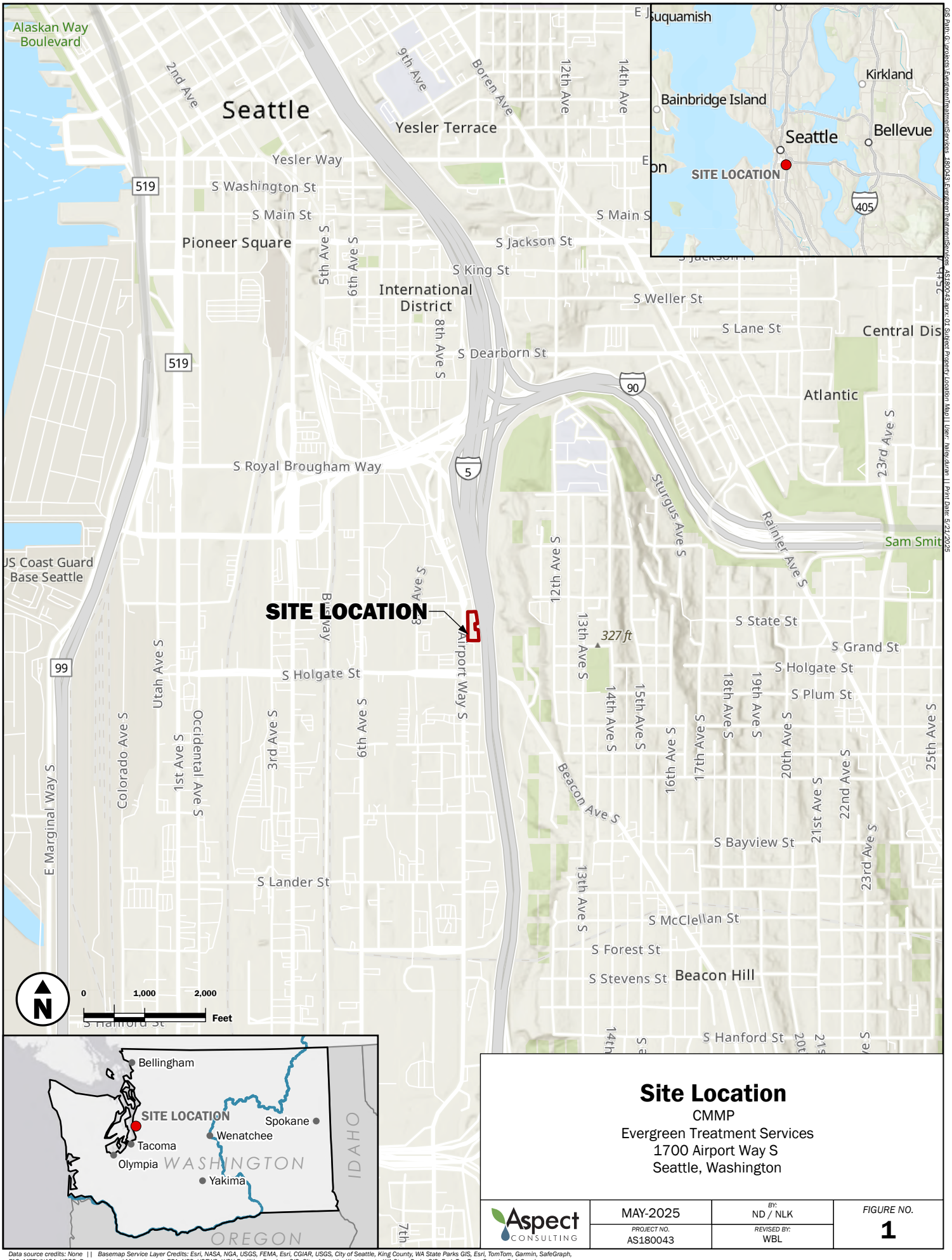
11 Limitations

Work for this project was performed for the Evergreen Treatment Services (Client), and this report was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This report does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect, for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect. Aspect's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix B titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.

FIGURES

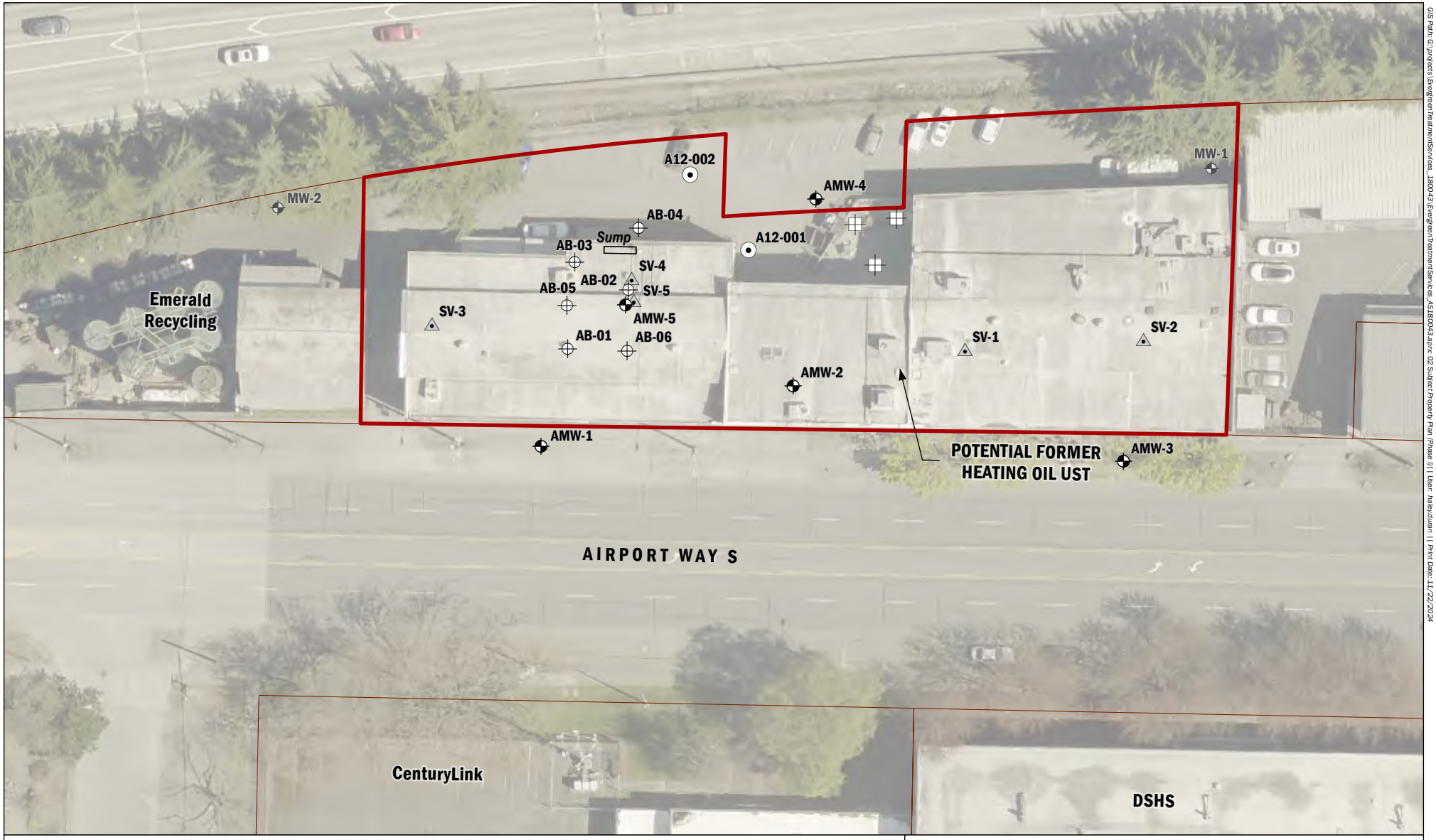


Site Location

CMMP
Evergreen Treatment Services
1700 Airport Way S
Seattle, Washington

Aspect Consulting	MAY-2025	BY: ND / NLK	FIGURE NO. 1
	PROJECT NO. AS180043	REVISED BY: WBL	

Data source credits: None || Basemap Service Layer Credits: Esri, NASA, NGA, USGS, FEMA, Esri, CGIAR, USGS, City of Seattle, King County, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USFWS, WSU Facilities Services GIS, City of Seattle, King County, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Esri, HERE, Garmin, USGS, EPA, NPS



- Soil Gas Sample Location (Aspect, 2018-2020)
- Concrete Sample Location (NWES, 1995)
- Shallow Soil Sample Location (NWES, 1995)
- Groundwater Monitoring Well Location (Aspect, 2018)
- Boring (Aspect, 2024)
- Decommissioned Well
- Sump
- Subject Property
- King County Tax Parcel

N

0 25 50 Feet

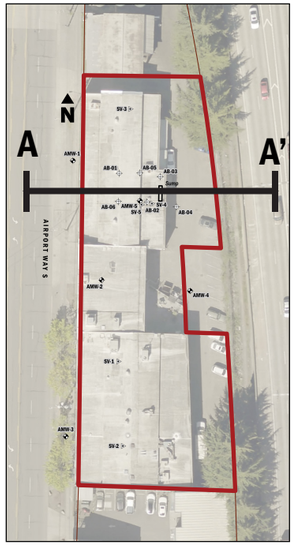
Site Plan

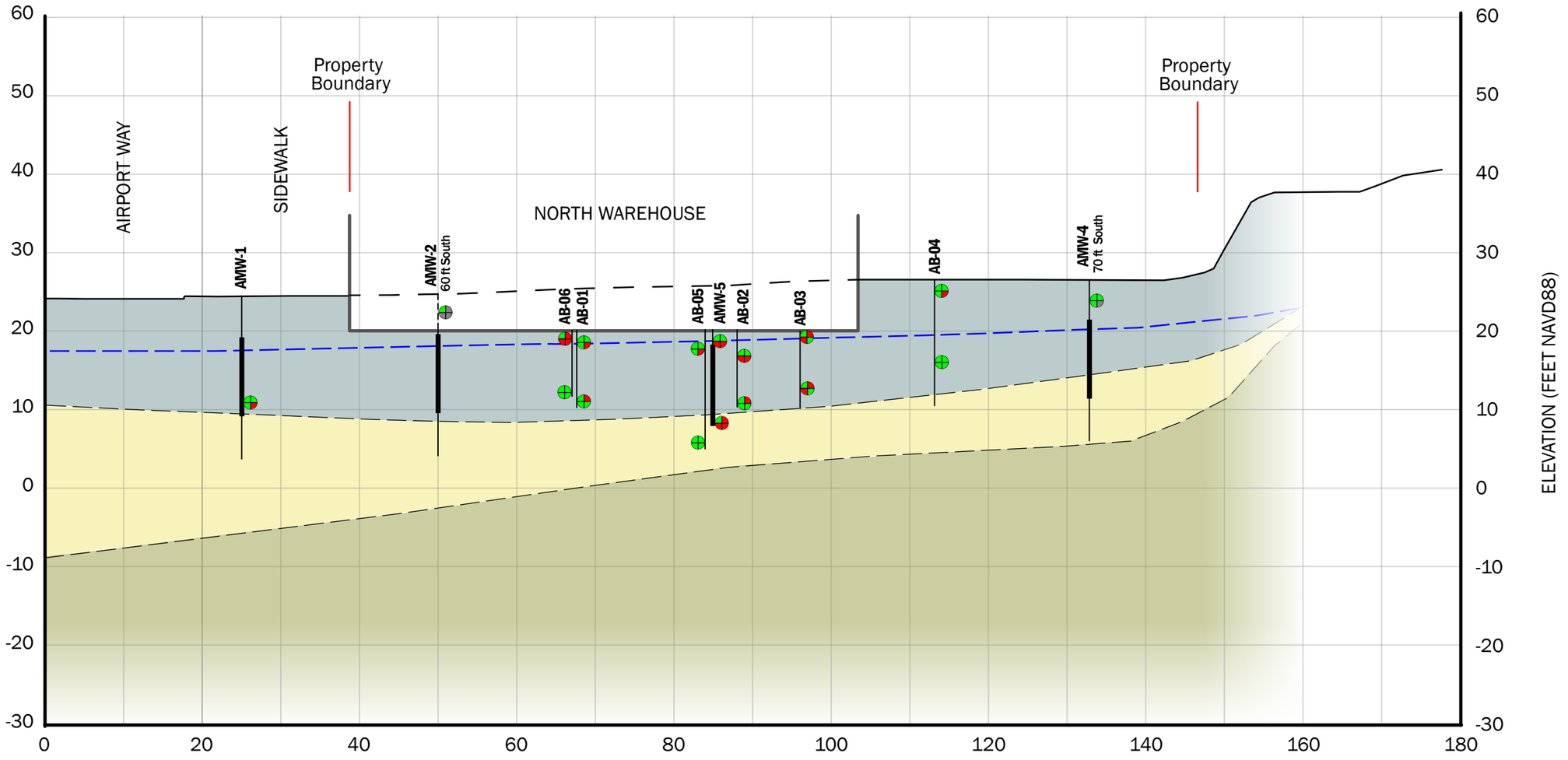
CMMP
Evergreen Treatment Services
1700 Airport Way S
Seattle, Washington

Aspect CONSULTING	MAY-2025	BY: ND / HMD	FIGURE NO. 2
	PROJECT NO. AS180043	REVISED BY: ---/---	

Data source credits: None || Basemap Service Layer Credits: EagleView Technologies, Inc.

GIS Path: G:\projects\EvergreenTreatmentServices_180043\EvergreenTreatmentServices_AS180043.aprx: 02 Subject Property Plan (Phase I) || User: haleyduran || Print Date: 11/22/2024





Horizontal Scale 1" = 15'
Vertical Scale 1" = 15'
Vertical Exaggeration 1x

Legend

Lithology Graphics

- Artificial Fill
- Lacustrine Deposits
- Glacial Till

Contacts and Groundwater

- Contact - Known
- Contact - Inferred
- Groundwater - Inferred

Soil Boring and Monitoring Well Key

AMW-1 *Location Name*

Screened Interval (Monitoring Wells)

Select Chemical Analytical Results

Petroleum Hydrocarbons
Chlorinated VOCs
Metals
Polycyclic Aromatic Hydrocarbons

- *Analyte(s) detected in soil at a concentration greater than the MTCA Method A cleanup level*
- *Analyte(s) not detected or detected less than the MTCA Method A cleanup level*
- *Analyte result(s) not reported by laboratory*

Note: Some sample locations omitted for clarity. See Report for detailed results and explanations.

DISCLAIMER: The subsurface conditions presented in this geologic cross section are conceptual. Variations may exist between the soil and groundwater conditions depicted on this figure and those actually underlying the site. Refer to the contents of this report for further context.

Notes:
- Cross section profile based on GeoEngineers (2023), and geologic observations during investigations. See Report for details.
- Site features are approximate.

Cross Section

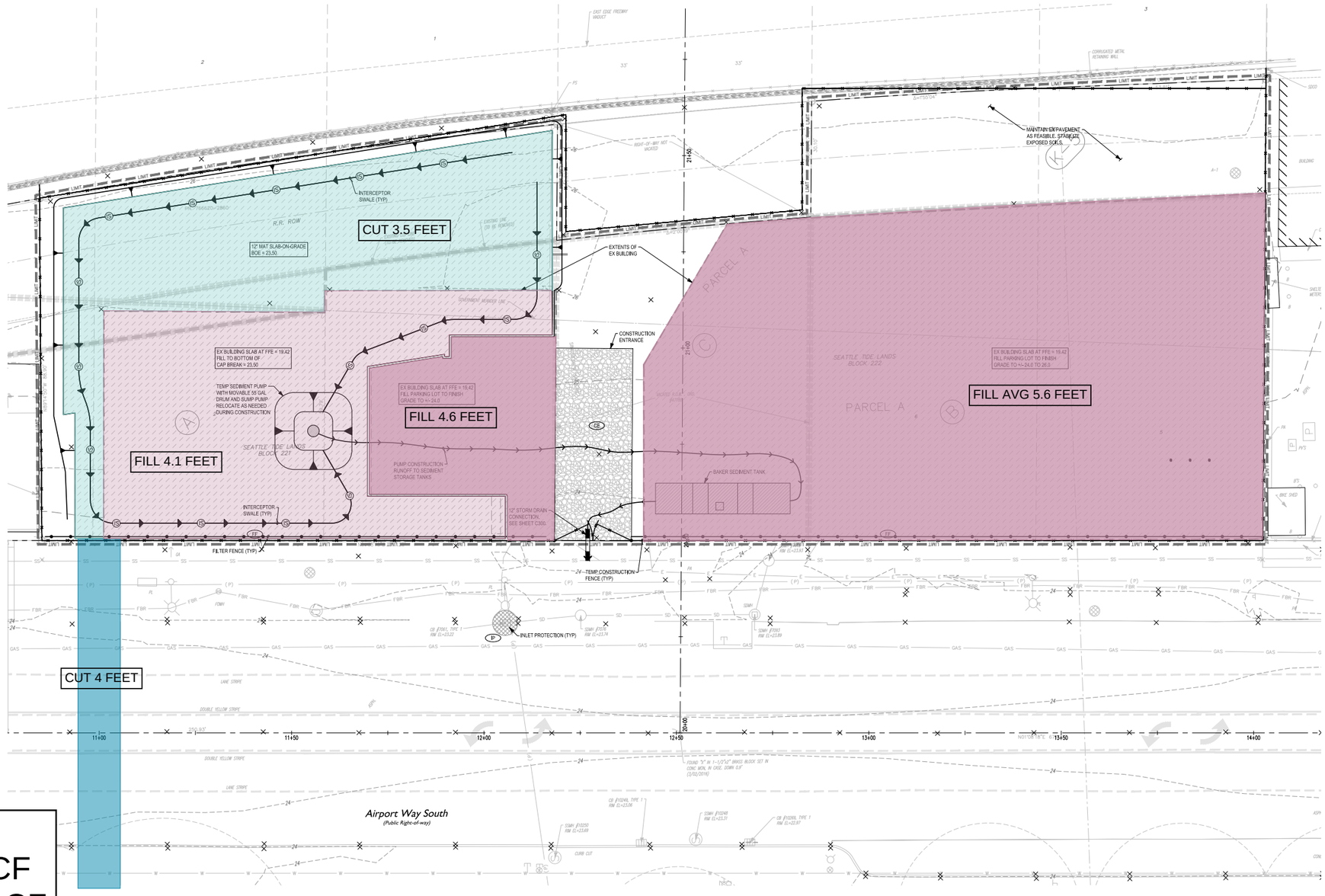
CMMP
Evergreen Treatment Services
1700 Airport Way S
Seattle, Washington

Aspect Consulting	MAY-2025	BY: NWD	FIGURE NO. 3
	PROJECT NO. AS180043	REVISED BY: —	

APPENDIX A

Supporting Documents

1"=30'



TOTAL
CUT = 21,146 CF
FILL = 105,838 CF

Project: Evergreen Treatment Services
Designed By: BAC
Project No: C23171
Date: 2025-05-09
Checked By:

1191 SECOND AVE. · SUITE 1100 · SEATTLE, WA 98101 · P: 206/343-0460

Ground Disturbance
Evergreen Treatment Services

Table 12.1 Guidelines for Reuse of Petroleum-Contaminated Soil

Parameter	Analytical Method	Soil Category (8)(9)(10)			
		1 No detectable Petroleum Components (mg/kg)	2 Commercial Fill Above Water Table (mg/kg)	3 Paving Base Material & Road Construction (mg/kg)	4 Landfill Daily Cover or Asphalt Manufacturing (mg/kg)
Total Petroleum Hydrocarbons (1)(2) See Table 7.1 for petroleum products that fall within these categories.					
Gasoline Range Organics	NWTPH-Gx	<5	5 - 30	>30 - 100	>100
Diesel Range Organics	NWTPH-Dx	<25	25 - 200	>200 - 500	>500
Heavy Fuels and Oils*	NWTPH-Dx	<100	100 - 200	>200 – 500	>500
Mineral Oil	NWTPH-Dx	<100	100 - 200	>200 – 500	>500
Volatile Petroleum Components					
Benzene	SW8260B	<0.005	0.005 - 0.03	0.03 or less	See Table 12.2
Ethylbenzene	SW8260B	<0.005	0.005 - 6	6 or less	>6
Toluene	SW8260B	<0.005	0.005 - 7	7 or less	>7
Xylenes (3)	SW8260B	<0.015	0.015 - 9	9 or less	>9
Fuel Additives & Blending Components					
(MTBE) Methyl Tert-Butyl Ether	SW8260B	<0.005	0.005 - 0.1	0.1 or less	>0.1
Lead	SW6010A	<17	17 - 50	>50 - 220	See Table 12.2
Other Petroleum Components					
Polychlorinated (4) Biphenyls (PCBs)	SW8082	<0.04	<0.04	<0.04	See Table 12.2
Naphthalenes (5)	SW8260B	<0.05	0.05 - 5	5 or less	>5
cPAHs (6)	SW8270C	<0.05	0.05 - 0.1	>0.1 - 2	>2
Other Petroleum Characteristics (Applies to soils contaminated with any petroleum product.)					
Odors	Smell	No detectable odor			
Staining	Visual	No unusual color or staining			
Sheen Test	See Footnote # 7	No visible sheen			

IMPORTANT: See Table 12.2 and the footnotes to this Table on the following pages!

Test soil for the parameters specified in Table 7.2.

****Does NOT include waste oil contaminated soils, which should be disposed of in a landfill.***

"<" means less than; ">" means greater than

Table 12.1 Guidelines for reuse of petroleum-contaminated soil.

Table 12.2 Description and Recommended Best Management Practices for Soil Categories in Table 12.1 (continued next page)

Category	Acceptable Uses	Limitations
Category 1 Soils: Soils with no detectable/ quantifiable levels of petroleum hydrocarbons or constituents using the analytical methods listed in Table 7.3 and are not suspected of being contaminated with any other hazardous substances.	• Can be used anywhere the use is allowed under other regulations. • Any use allowed for Category 2, 3 & 4 soils.	• These soils should be odor-free.
Category 2 Soils: Soils with residual levels of petroleum hydrocarbons that could have adverse impacts on the environment in some circumstances.	• Any use allowed for Category 3 & 4 soils. • Backfill at cleanup sites above the water table. • Fill in commercial or industrial areas above the water table. • Road and bridge embankment construction in areas above the water table.	• These soils may have a slight petroleum odor, depending on the sensitivity of the individual. This should be considered when reusing these soils. • Should be placed above the highest anticipated high water table. If seasonal groundwater elevation information is not available, place at least 10 feet above the current water table. • Should not be placed within 100 feet of any private drinking water well or within the 10 year wellhead protection area of a public water supply well. • Should not be placed in or directly adjacent to wetlands or surface water where contact with water is possible. • Should not be placed under a surface water infiltration facility or septic drain field. • Any other limitations in state or local regulations.
Category 3 Soils: Soils with moderate levels of residual petroleum contamination that could have adverse impacts on the environment unless re-used in carefully controlled situations.	• Any use allowed for Category 4 soils. • Use as pavement base material under public and private paved streets and roads. • Use as pavement base material under commercial and industrial parking lots.	• Should be placed above the highest anticipated high water table. If seasonal ground water elevation information is not available, place at least 10 feet above the water table. • Should be a maximum of 2 feet thick to minimize potential for leaching or vapor impacts. • Should not be placed within 100 feet of any private drinking water well or within the 10 year wellhead protection area of a public water supply well. • Should not be placed in or directly adjacent to wetlands or surface water. • Should not be placed under a surface water infiltration facility or septic drain field. • When exposed, runoff from area in use should be contained or treated to prevent entrance to storm drains, surface water or wetlands. • Any other limitations in state or local regulations.

Table 12.2 Description and recommended best management practices for soil categories in Table 12.1 (continued next page).

Table 12.2 (continued) Description and Recommended Best Management Practices for Soil Categories in Table 12.1

Category	Acceptable Uses	Limitations
Category 4 Soils: Soils with high levels of petroleum contamination that should not be re-used except in very limited circumstances.	• Use in the manufacture of asphalt. • Use as daily cover in a lined municipal solid waste or limited purpose landfill provided this is allowed under the landfill operating permit.	**Landfill Limitations:** The soil should be tested for and pass the following tests: ➢ Free liquids test. Soils that contain free liquids cannot be landfilled without treatment. ➢ TCLP for lead and benzene. Unless exempt under WAC 173-303-071(3)(t), soils that fail a TCLP for lead or benzene must be disposed of as hazardous waste. ➢ Flammability test. Soils that fail this test must be disposed of as hazardous waste. ➢ Bioassay test under WAC 173-303-100(5). Soils that fail this test must be disposed of as hazardous waste. ➢ PCBs. Soils with a total PCB content of 2 ppm or more must be disposed of as hazardous waste. Soil used for daily cover should be stockpiled within the landfill lined fill area. Soil containing more than 10,000 mg/kg TPH should be buried immediately with other wastes or daily covered to limit potential worker exposure. Any additional limitations specified in the landfill permit or in other state or local regulations. **Asphalt Manufacturing Limitations:** Soil storage areas should be contained in a bermed area to minimize contact with surface water runoff from adjacent areas. Runoff from storage areas should be considered contaminated until tested to prove otherwise. Soil storage areas should also be lined and covered with a roof or secured tarp to minimize contact with precipitation and potential groundwater contamination. Leachate from storage areas should be considered contaminated until tested to prove otherwise. The soil should be tested for and pass the following tests: ➢ TCLP for lead and benzene. Unless exempt under WAC 173-303-071(3)(t), soils that fail a TCLP for lead or benzene must be disposed of as hazardous waste. ➢ Flammability test. Soils that fail this test must be disposed of as hazardous waste. ➢ Bioassay test under WAC 173-303-100(5). Soils that fail this test must be disposed of as hazardous waste. ➢ No detectable levels of PCBs in soil (<0.04 mg/kg). Precautions should be taken to minimize worker exposure to soil storage piles and any dust or vapors from these piles prior to feeding into the asphalt batch plant.

IMPORTANT: See the following page for additional information!

Notes to Table 12.1:

Contaminated soils can be treated to achieve these concentrations but dilution with clean soil to achieve these concentrations is a violation of Washington State solid and hazardous waste laws.

(1) See Table 7.1 for a description of what products fall within these general categories. If the product released is unknown, use the limitations for gasoline range organics. If the soil is contaminated from releases from more than one product, use the limitations for both products. For example, if the release is a mixture of gasoline and diesel, the soil should be tested for components of both gas and diesel and the limitations for both fuels and their components used.

(2) The concentrations for diesel, heavy oil and mineral oil are not additive. Use the TPH product category most closely representing the TPH mixture and apply the limitations for that product to the mixture. ***The reuse of waste oil contaminated soil is not allowed due to the wide variety of contaminants likely to be present.***

(3) Value is total of m, o, & p xylenes.

(4) Value is the total of all PCBs. Only heavy oil and mineral oil contaminated soils need to be tested for PCBs. Soil contaminated with a spill from a regulated PCB containing device must be disposed of in a TSCA permitted landfill, regardless of the PCB concentration. Other PCB contaminated soils may be disposed of in a municipal solid waste landfill permitted to receive such materials, provided the concentration does not exceed 2 ppm PCBs (WAC 173-303-9904).

(5) Value is total of naphthalene, 1-methyl naphthalene and 2-methyl naphthalene. Only diesel and heavy oil contaminated soils need to be tested for naphthalenes.

(6) The value is the benzo(a)pyrene equivalent concentration of the following seven cPAHs. See Appendix C for how to calculate a toxic equivalent concentration. The seven cPAHs are as follows: benz(a)anthracene; benzo(b)fluoranthene; benzo(k)fluoranthene; benzo(a)pyrene; chrysene; dibenz(a,h)anthracene; and, indeno(1,2,3-cd)pyrene. Only diesel and heavy oil contaminated soils need to be tested for cPAHs. Soils contaminated with more than 1% polycyclic aromatic hydrocarbons, as that term is defined in WAC 173-303-040 (which is more expansive than the above list), must be disposed of as hazardous waste.

(7) No visible sheen observed on water when approximately one tablespoon of soil placed in approximately ½ liter of water held in a shallow pan (like a gold pan or similar container).

(8) A soil in a lower category can be used for uses specified in any higher category. This means that:

- A category 1 soil can be used for any use specified in categories 1, 2, 3 and 4.
- A category 2 soil can be used for any use specified in categories 2, 3 and 4.
- A categories 3 soil can be used for any use specified in categories 3 and 4.

(9) ***If an environmental site assessment or soil or groundwater analyses indicate contaminants other than common petroleum constituents and naturally occurring levels of metals are likely to be present in the soil of interest at the site (for example, solvents or pesticides), do not reuse the soil.*** The soil should instead be treated using appropriate technology to address all contaminants or landfilled at a solid waste or hazardous waste facility permitted to receive these materials.

(10) Soils in categories 2, 3 and 4 should be stockpiled consistent with the soil storage recommendations in Subsection 11.3 of this guidance.

DEPARTMENT OF ECOLOGY
State of Washington

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

UST ID #: _____

County: _____

This form provides Ecology 30-days' advanced notice for projects, as required by Chapter 173-360A WAC. Instructions are on the back page.

Please ✓ the appropriate box: ☐ Intent to Install ☐ Intent to Close ☐ Change-in-Service

I. SITE INFORMATION	II. OWNER/OPERATOR INFORMATION
Tag or UBI # (if applicable):	Owner/Operator Name:
UST ID # (if applicable):	Business Name:
Site Name:	Mailing Address:
Site Address:	City: State: Zip:
City:	Phone:
Phone:	Email:

III. CERTIFIED SERVICE PROVIDER(S)

Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.

Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) ☐ Installer ☐ Decommissioner ☐ Site Assessor

Company Name:	Certification Type:
Service Provider Name:	Cert. No.: Exp. Date:
Provider Phone:	Provider Email:

2) ☐ Installer ☐ Decommissioner ☐ Site Assessor

Company Name:	Certification Type:
Service Provider Name:	Cert. No.: Exp. Date:
Provider Phone:	Provider Email:

IV. TANK AND/OR PIPING INFORMATION

TANK ID	TANK CAPACITY	SUBSTANCE STORED	PIPING INSTALLATION OR REPLACEMENT ONLY (Y/N)	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS

30-DAY NOTICE

FOR UNDERGROUND STORAGE TANK SYSTEMS

GENERAL INSTRUCTIONS

Under WAC 173-360A-0300, 173-360A-0810 and 173-360A-0820, owners and/or operators are required to notify the Department of Ecology (Ecology) **at least 30 days prior** to beginning underground storage tank (UST) and/or piping installation, decommissioning, or change-in-service projects by mailing this notice to the address below. A separate form must be used for each project type (e.g. install, removal). Once this form is received by Ecology, it is date-stamped and returned to the owner/operator listed on the form. Installation and decommissioning projects cannot begin within the first 30 days after the date stamped on this form unless the wait-period has been waived by a regional Ecology UST inspector. If a project cannot meet the deadlines described below, an additional 30-Day Notice may be required.

Department of Ecology
Underground Storage Tank Section
PO Box 47655
Olympia, WA 98504-7655

SITE AND OWNER/OPERATOR INFORMATION

Fill in the site/owner information completely. The contact person listed on this form must confirm the exact date an installation or decommissioning project will begin by contacting the regional UST inspector **at least 3 business days** before proceeding.

INSTALLATION/REPLACEMENT OF TANK AND/OR PIPING

Installation projects must begin within 90 days of the date stamped on this notice. Complete the Tank Information section by assigning Tank ID numbers that have not previously been used at the facility. Once processed, this form allows a one-time drop of product for UST system testing purposes only. The fuel drop is not required to occur within the 90-day period. Once your tank(s) store more than one inch of product, leak detection equipment and monitoring must be in place.

To receive additional deliveries and operate the new tanks/piping, you must submit the Business License application, UST Addendum, and the tank/piping Manufacturer's Installation Checklists to the Department of Revenue (DOR) **within 30 days** of completing the installation. This activates the mailing of your Business License with tank endorsement(s) from DOR and the facility compliance tag from Ecology.

If only piping is being installed or replaced piping, the ICC-certified installer must certify the installation by completing the Retrofit/Repair Checklist with the Manufacturer's Installation Checklist and submitting it to the owner/operator. The form packet must be submitted by the owner/operator to Ecology **within 30 days** of completing the piping installation.

PERMANENT CLOSURE OF TANK AND/OR PIPING

Decommissioning projects must be completed within 90 days after the date stamped on this returned notice. Complete the Tank Information section using Tank ID numbers listed on the Business License. Use the Comments box to include additional information, such as the date when product was removed from both the piping and the tank to less than one inch.

Contact your local fire marshal and planning department prior to tank closure to procure any permits required by county or other local jurisdictions. Compliance with the State Environmental Policy Act (SEPA) Rules, Chapter 197-11 WAC may also apply.

A site assessment is required at the time of closure. If contamination is not discovered, a site assessment report must be submitted to the above address **within 30 days**. If contamination is discovered or confirmed, it must be reported to the appropriate Ecology regional office **within 24 hours** and a site characterization report must be submitted to the above address **within 90 days**.

The following are some examples of tanks that are exempt from the UST regulations.

- Farm or residential tanks, 1,100 gallons or less, used to store motor fuel for personal or farm use only. The fuel must be used for farm purposes and cannot be for resale.
- Tanks used for storing heating oil that is used solely for the purpose of heating the premises.
- Tanks with a capacity of 110 gallons or less.
- Emergency overflow tanks, catch basins, or sumps.

GENERAL MATERIAL RECEIVING REQUIREMENTS

The CADMAN criteria for acceptance is based on Chapter 173-340 WAC *"The Model Toxics Control Act,"* andthe Washington State Department of Ecology's publication entitled *"Guidance for Remediation of Releases From Underground Storage Tanks."*

Number of samples to be provided to CADMAN prior to acceptance of contaminated soil.

Cubic Yards of Soil	Minimum Number of Samples
0 - 100	3
101 - 500	5
501 - 1,000	7
1,001 - 2,000	10
> 2,000	10 + 1 for each additional 500 cubic yards

Analytical Data Requirements

Contaminate	Analytical Method
Heavy fuel hydrocarbons	NWTPH-D-EXTENDED
Diesel/Heating Oil	NWTPH-D-EXTENDED
cPAH's	EPA-8270
Gasoline	NWTPH-G
Gasoline	BTEX 8020

*** Total RCRA Metals analysis is required from all sites other than residential properties***

Note: Soils contaminated with used oil, hydraulic oil, mineral oil, or other waste oil shall be tested for Volatile Organic Aromatics (8020), and Volatile Organic Halogenated (8010), Volatile Organics (8240/8260), Total Metals (6010 or 7000 series) may be required if any of the total metals are above regulatory thresholds.

LIMITS OF ACCEPTANCE FOR PETROLEUM CONTAMINATED SOIL

CADMAN Class 3 Acceptance Limits For Petroleum Contaminated Soil To Be Thermally Treated

TPH	
Heavy fuels	20,000 ppm
Diesel	20,000 ppm
cPAH's	5 ppm
Gasoline	15,000 ppm
RCRA METALS:	
Lead	250 ppm
Arsenic	20 ppm
Cadmium	2 ppm
Chromium VI	19 ppm
Chromium III	2000 ppm
Mercury	2 ppm

CADMAN Class 2 Acceptance Limits For Petroleum Contaminated Soil to Be Land-Filled*

TPH	
Heavy Oils	460 ppm
Fuel Oils	460 ppm
cPAH's	0.1 ppm
Gasoline	100 ppm
BTEX:	
Benzene	.03 ppm
Ethyl benzene	6 ppm
Toluene	7 ppm
Xylenes	9 ppm

*Material that meets the class 2 criteria can be disposed of at CADMAN'S permitted class 2 landfill. Incoming material will by stockpiled and tested for conformation at CADMAN'S Thermal Treatment Facility.

If the conformation analytical results do not meet the limits of class 2 as defined above it will be the customer's responsibility to either dispose of the material using CADMAN's Thermal Treatment Facility or provide loading and transport of the material to an alternate disposal facility.

In addition, CADMAN has several requirements relating to the receipt of material at our facility.

- No material will be received without a completed contaminated soil application form, an approval of credit application on file, and pre-approval from CADMAN.
- Trucks will be permitted to weigh in Monday through Friday 6:30 AM to 4:30 PM unless prior arrangements have been made.
- Material will be sampled at delivery. Comparisons will be made between the submitted profile and on site analysis. CADMAN reserves the right to refuse any material whose profile does not compare to delivered material.
- Organic content (i.e. grass, sod, leaves, root debris, etc.) may not exceed 15%
- Soil must not contain any free liquids, or foreign material (i.e. rebar, fittings, cans, lumber, etc.)
- Loads found with excessive foreign material will be reloaded and returned to customer OR screened, sorted and disposed of by CADMAN @ $6.00 per ton original load weight plus charges for off-site transportation and disposal.

It is our sincere desire to provide you with complete service and technical support for your soil remediation needs.

APPENDIX B

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND USE GUIDELINES

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on this report or the product of our services without the express written consent of Aspect Consulting, a Geosyntec Company (Aspect). This limitation is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual conditions or limitations and guidelines governing their use of the report. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and recognized standards of professionals in the same locality and involving similar conditions.

Services for Specific Purposes, Persons and Projects

Aspect has performed the services in general accordance with the scope and limitations of our Agreement. This report has been prepared for the exclusive use of the Client and their authorized third parties, approved in writing by Aspect. This report is not intended for use by others, and the information contained herein is not applicable to other properties.

This report is not, and should not, be construed as a warranty or guarantee regarding the presence or absence of hazardous substances or petroleum products that may affect the subject property. The report is not intended to make any representation concerning title or ownership to the subject property. If real property records were reviewed, they were reviewed for the sole purpose of determining the subject property's historical uses. All findings, conclusions, and recommendations stated in this report are based on the data and information provided to Aspect, current use of the subject property, and observations and conditions that existed on the date and time of the report.

Aspect structures its services to meet the specific needs of our clients. Because each environmental study is unique, each environmental report is unique, prepared solely for the specific client and subject property. This report should not be applied for any purpose or project except the purpose described in the Agreement.

This Report Is Project-Specific

Aspect considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Aspect.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

Environmental Regulations Are Not Static

Some hazardous substances or petroleum products may be present near the subject property in quantities or under conditions that may have led, or may lead, to contamination of the subject property, but are not included in current local, state or federal regulatory definitions of hazardous substances or petroleum products or do not otherwise present potential liability. Changes may occur in the standards for appropriate inquiry or regulatory definitions of hazardous substance and petroleum products; therefore, this report has a limited useful life.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time (for example, Phase I ESA reports are applicable for 180 days), by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope failure or groundwater fluctuations. If more than six months have passed since issuance of our report, or if any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Phase I ESAs – Uncertainty Remains After Completion

Aspect has performed the services in general accordance with the scope and limitations of our Agreement and the current version of the "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", ASTM E1527, and U.S. Environmental Protection Agency (EPA)'s Federal Standard 40 CFR Part 312 "Innocent Landowners, Standards for Conducting All Appropriate Inquiries".

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with subject property. Performance of an ESA study is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental conditions affecting the subject property. There is always a potential that areas with contamination that were not identified during this ESA exist at the subject property or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

Historical Information Provided by Others

Aspect has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data does not provide definitive information with regard to all past uses, operations or incidents affecting the subject property or adjacent properties. Aspect makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others.

Exclusion of Mold, Fungus, Radon, Lead, and HBM

Aspect's services do not include the investigation, detection, prevention or assessment of the presence of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detection, assessment, prevention or abatement of molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts. Aspect's services also do not include the investigation or assessment of hazardous building materials (HBM) such as asbestos, polychlorinated biphenyls (PCBs) in light ballasts, lead based paint, asbestos-containing building materials, urea-formaldehyde insulation in on-site structures or debris or any other HBMs. Aspect's services do not include an evaluation of radon or lead in drinking water, unless specifically requested.