



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 6, 2025

Katie Randall
MHNW 29 35th and Pacific LLLP
6930 Martin Luther King Jr. Way S
Seattle, WA 98118
Katie.Randall@mercyhousing.org

SENT BY EMAIL ONLY

**Re: CORRECTED No Further Action Likely opinion for the following contaminated
Property associated with a contaminated Site:**

Site Name: 35th St Landfill City Fill
Site Address: S 35th St & Pacific Ave, Tacoma, Pierce County, WA 98418
Unit Name: Mercy Housing Northwest
Unit Address: 3561 Pacific Ave, Tacoma, Pierce County, WA 98418
Facility/Site ID: 5774537
Cleanup Site ID: 341
VCP Project ID: XS0020

Dear Katie Randall:

This letter replaces the previously issued No Further Action Likely letter issued by the Washington State Department of Ecology (Ecology) on July 30, 2025.

Ecology received your request for an opinion on your proposed independent cleanup of the Mercy Housing Northwest site (Site). This letter provides our opinion. We are providing this opinion under the authority of the [Model Toxics Control Act \(MTCA\)](#),¹ [chapter 70A.305 Revised Code of Washington \(RCW\)](#).²

¹ <https://apps.ecology.wa.gov/publications/SummaryPages/9406.html>

² <https://app.leg.wa.gov/rcw/default.aspx?cite=70A.305>

Opinion

Upon completion of your planned cleanup (surface capping and institutional controls memorialized within an environmental covenant), Ecology has determined no further remedial action is likely necessary at the Property to clean up contamination associated with the Site. However, further remedial action is still needed elsewhere at the Site to clean up contamination.

For this opinion, it is important to distinguish between a “Site” and a “Property” under MTCA. A “Site” is defined by the area where a hazardous substance released to the environment has come to be located—the extent of contamination. A “Property” is simply the tax parcel(s) of real property that comprise a facility. Property boundaries are based on associated legal description information. As such, a site can affect multiple real property parcels, and a real property parcel can be part of multiple sites. A site can also be wholly contained within the real property parcel(s) comprising a Property.

Ecology bases this opinion on an analysis of whether the remedial action meets the substantive requirements of MTCA and its implementing regulations, which are specified in chapter 70A.305 RCW and chapter [173-340](https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340)³ WAC (collectively called “MTCA”).

Property Identification

This opinion applies to only the Property described here and consists of the following real property parcel in Pierce County:

- Parcel # 7470021283 located at 3561 Pacific Ave in Tacoma, Washington.

Summary of Opinion

A remedial investigation (RI), feasibility study (FS), and cleanup action plan (CAP) (RI/FS/CAP)⁴ was received by Ecology on June 19, 2025. The following evaluations are based on that report. The following discussion summarizes the Site Background and Ecology’s No Further Action (NFA) Likely opinion. More detailed discussions (Site Description, Basis of Opinion, and Analysis of the Proposed Cleanup) follow.

³ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>

⁴ Aspect. *Remedial Investigation, Feasibility Study, and Cleanup Action Plan, 3561 Pacific Ave, Tacoma*. June 19, 2025.

Background

The Property consists of one parcel owned by Tacoma Community Redevelopment Authority (Pierce County Parcel 7470021283). That parcel is referred herein to as the “Mercy Housing Unit” or “the Property”. The Mercy Housing Unit is a portion 35th St Landfill City Fill Site, which consists of a series of parcels extending to the north of the Property.

The 35th St Landfill City Fill Site consists of a former ravine that was largely backfilled between approximately 1957 and about 1968. Additional dumping evidently occurred as recently as December of 1990. The materials used to backfill the ravine appear to have consisted of soils with less concrete, asphalt, plant waste, and minor amounts of other materials such as metal, glass, plastic, and paper, based on review of boring logs from the Site. These anthropogenic (human caused) fill materials can include soil contamination concerns such as heavy metals; petroleum; carcinogenic polycyclic aromatic hydrocarbons (CPAHs) associated with asphalt; and methane associated with the breakdown of carbon-containing materials.

A remedial investigation/feasibility study (RI/FS) was prepared in 2008 on behalf of the City of Tacoma, and a Phase II Environmental Site Assessment was conducted in 2021 on behalf of the Tacoma Community Redevelopment Authority. Both of those investigations focused on parcels located north of the Mercy Housing Unit.

In 2023, an Affordable Housing Cleanup Grant was funded at the Site. An RI Work Plan was submitted to Ecology in May of 2024, and Ecology provided comments on that work plan in a series of communications culminating in comment letters dated November 14, 2024, and December 19, 2024. Since that time, Mercy Housing has decided to forgo the Affordable Housing Cleanup Grant funds and focus on a development solely on Parcel 7470021283 under the Voluntary Cleanup Program (VCP). An application to enter Expedited VCP was received by Ecology on June 19, 2025.

The RI/FS/CAP dated June 19, 2025, presents results of soil and groundwater sampling at the Mercy Housing Unit. A total of 61 soil samples were collected from 18 locations at depths ranging from 0-2 inches to 107.5 feet below ground surface (ft bgs). No contamination was found on the Property at concentrations exceeding MTCA cleanup levels except for CPAHs at one location at two depths (7.0 and 28 ft bgs). Methane was found in soil gas, as further discussed below.

The RI/FS/CAP report proposed Capping and Institutional Controls memorialized in an Environmental Covenant (EC) to address the contamination concerns. Ecology concurs with this approach to address the Site contamination and that this option is the most permanent alternative with costs not disproportionate to relative benefits.

Deliverables needed prior to an NFA Determination

Deliverables that need to be submitted for Ecology Toxics Cleanup Program (TCP) for our review and comment prior to NFA issue are listed in the below section titled “Next Steps”.

Site Description

This opinion applies to the Site described as follows. The Site is defined by the nature and extent of contamination associated with the following release:

- CPAHs, benzene, and arsenic into the soil.

Methane in soil gas is also of concern at the Site, as further discussed below. **Appendix A** includes a detailed description and diagrams of the Site, as currently known to Ecology.

As discussed above in the Summary of Opinion section of this letter, only CPAHs were detected in soil at concentrations exceeding MTCA cleanup levels. Other contaminants found above cleanup levels at other properties within the Site are discussed below.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcels associated with this Site are affected by other sites. The Site is in an area of Tacoma mapped for the Tacoma Smelter Plume (TSP) Site as less than 20 parts per million (ppm) arsenic (less than the Method A cleanup level for arsenic in soil). No indications of impacts to Site soils by the TSP Site have been identified to date (the arsenic in soil in the northern part of the Site, further discussed below, appears to be attributable to a more localized source).

Basis for the Opinion

This opinion is based on the information in the documents listed in **Appendix B**.

You can request these documents by filing a [records request](#).⁵ For help making a request, contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or call

⁵ <https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests>

360-407-6040. Before making a request, check whether the documents are available on [Ecology's Cleanup and Tank Search web page](#).⁶

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Proposed Cleanup

Ecology has concluded that, upon completion of your proposed cleanup, no further remedial action will likely be necessary to clean up contamination at the Property associated with the Site. That conclusion is based on the following analysis:

Characterizing the Property

Ecology has determined your characterization of the Property is sufficient for setting cleanup standards for the Site and selecting a cleanup action for the Property. The Site is described above and in **Appendix A**.

Soil Characterization

Soil characterization work performed at the Site at off-Property locations between 1990 and 2025. Soil sampling from these off-Property investigations is summarized in Table 1:

Table 1. Off-Property Soil Sampling and Analysis 1990 to 2025

Year of Investigation	Number of Soil Sampling Locations/Samples	Contaminants Analyzed	Number of Cleanup Level Exceedances
1990	6/14	TPH, VOCs	None
1992	5/5	TPH, Metals	2 Arsenic
2008	10/20	DRO, HRO, Metals, CPAHs	4 CPAHs
2018	9/10	GRO, DRO, HRO, Metals	None
2021	3/6	GRO, DRO, HRO, Metals, VOCs, SVOCs, CPAHs	1 CPAHs
2025	1/13	GRO, DRO, HRO, Metals, VOCs, CPAHs	1 Benzene, 1 CPAHs

TPH = total petroleum hydrocarbons

GRO = gasoline-range petroleum hydrocarbons

DRO = diesel-range petroleum hydrocarbons

HRO = heavy oil-range petroleum hydrocarbons

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

⁶ <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=17256>

The cleanup level exceedances in off-Property soil samples collected between 1990 and 2025 are summarized in Table 2:

Table 2. Off-Property Cleanup Level Exceedances in Soil, 1990 to 2025

Year of Investigation	Sample location and depth (ft bgs)	Contaminant	Concentration (mg/kg)	Method A Cleanup Level (mg/kg)
1992	TP-9*	Arsenic	228	20
1992	TP-3*	Arsenic	21.7	20
2008	TP-LAI-03 4-6'	CPAHs	0.141	0.10
2008	TP-LAI-06 8-10'	CPAHs	0.249	0.10
2008	TP-LAI-09 4-6'	CPAHs	0.614	0.10
2008	TP-LAI-10 6-8'	CPAHs	0.395	0.10
2021	B2-05'	CPAHs	0.672	0.10
2025	AB-08-06'	CPAHs	0.104	0.10
2025	AB-08-17'	Benzene	0.047	0.03

mg/kg = milligrams per kilogram.

† No sample depth report in the 1992 report.

Bold = concentration above MTCA cleanup

The elevated arsenic in soil at location TP-9 was collected beneath the 34th Street bridge, approximately 900 feet north of the Property. The 1992 report concluded that the arsenic in soil at this location was likely attributable to street sweepings; however, due to the variable nature of the fill materials found at the Site, this exceedance could have been due to anthropogenic materials within the fill.

Location AB-08 from 2025, where benzene and CPAHs were detected, was collected within the Harrison Street right-of-way, approximately 50 feet north of the Property. The benzene from that location appears to be a localized contamination concern and was not found in shallower or deeper soil samples from that location. A trace of asphalt was found at AB-08 at 6 ft bgs, where the CPAH exceedance occurred. Concrete debris was noted at 14 ft bgs, but no indications of contamination such as sheen or photoionization detector (PID) readings were found at 17 ft bgs, based on the boring log.

On-Property soil investigations were conducted in 2018 and 2025. A total of 61 soil samples were collected from 18 locations at depths ranging from 0-2 inches to 107.5 ft bgs. Samples were analyzed for GRO, DRO, HRO, Metals, CPAHs, and benzene, toluene, ethylbenzene, and xylenes (BTEX). All results were less than Method A cleanup levels except for CPAHs in the following two samples:

Table 3. On-Property Cleanup Level Exceedances in Soil, 2018 to 2025

Year of Investigation	Sample location and depth (ft bgs)	Contaminant	Concentration (mg/kg)	Cleanup Level (mg/kg)
2008	AB-06 7'	CPAHs	1.17	0.10*
2008	AB-06 28'	CPAHs	0.21	0.10*

* Method A cleanup level.

Bold = concentration above MTCA cleanup

Soil samples were collected at location AB-06 at depths shallower and deeper than the cleanup level exceedances, and no cleanup level exceedances were found. No indications of anthropogenic activities were noted in the boring log in the sample from 7.0 ft bgs. The 28 ft bgs sample was noted as silty sand with gravel “becomes black,” and concrete debris was observed between 31 and 35 ft bgs. The exact source of the CPAHs in soils is unknown; however, asphalt was noted in boring logs for AB-07 and AB-08. CPAH exceedances in soils containing asphalt debris are common in the region.

Soil appears to have been adequately characterized for identifying appropriate cleanup actions for the Property. No further soil characterization appears to be warranted at this time.

Surface Water Characterization

Surface water sampling was conducted at two locations beneath the 34th Street Bridge in 1992 from a culvert and a “runoff stream.” These samples were analyzed for TPH and metals. TPH concentrations were 25.6 milligrams per liter (mg/L) and 32.0 mg/L. The surface water from these locations (approximately 800-900 feet north of the Property) appears to be unrelated to the Property, and no surface water is present in the immediate vicinity of the Property. Hence, Ecology has concluded that no further surface water characterization is warranted for the Property. However, further examination of existing surface water data and potential additional sampling of surface water may be warranted for the Site.

Groundwater Characterization

Groundwater is relatively deep at the Property. One monitoring well (AMW-04) was installed on the Property in January 2025. This monitoring well had a screened interval of 75 to 95 ft bgs. Groundwater was measured at a depth of approximately 88.5 ft bgs, though wet soils were encountered during drilling at a depth of approximately 60 ft bgs. A groundwater sample from this monitoring well was analyzed for GRO, DRO, HRO, VOCs, and CPAHs and no contaminants were detected in this groundwater sample. Ecology has concluded that no further groundwater characterization is warranted for the Property. However, further groundwater characterization may be warranted for the Site.

Methane in Soil Gas Characterization

Methane is an explosive gas. It is considered an Applicable or Relevant and Appropriate Requirement (ARAR) under MTCA.⁷ Although not a toxic gas, MTCA requires “Standard Method B air cleanup levels shall not exceed ten percent (10%) of the lower explosive limit for any hazardous substance or mixture of hazardous substances.”⁸

Ecology defers to the appropriate local entity(s) as the lead entity(s) regulating this substance at the Site, though we anticipated providing our feedback to the appropriate local entity(s) regarding the need for mitigation measures at the Site.

Methane in soil gas sampling was conducted at the Property, as presented within the RI/FS/CAP. Three locations were sampled at depths of 4.0 to 4.5 ft bgs. Methane concentrations ranged from 0.0 to 8.0 percent by volume. Higher methane concentrations have been found in other parts of the Site. The lower explosive limit for methane is 5.0 percent by volume; hence, methane mitigation was included within the RI/FS/CAP for any structures to be constructed on the Property.

Setting Cleanup Standards

Cleanup Standards

Ecology has determined the cleanup levels and points of compliance presented below meet the substantive requirements of MTCA. The following cleanup levels have been selected for the Site:

Table 4. Selected Cleanup Levels and Screening Levels

Contaminant	Method A Soil Cleanup Level (mg/kg)	Method A Groundwater Cleanup Level (µg/L)	Unrestricted Sub-slab Screening Level (µg/m ³)
Arsenic	20	5.0	NA
Total CPAHs	0.1	0.1	NA
Petroleum*	2,000	500	1,500
Benzene	0.03	5.0	11

µg/L = micrograms per liter

µg/m³ = micrograms per cubic meter

NA = Not applicable (no risk of vapor intrusion from non-volatile contaminants).

* Diesel- or heavy oil-range petroleum for soil or groundwater, generic cleanup level for soil gas.

⁷ WAC 173-340-700(6)(a).

⁸ WAC 173-340-750(3)(b)(iii).

As discussed above, only CPAHs have been found in soil at concentrations above cleanup levels at the Property. No volatile contaminants presenting a vapor intrusion risk have been found beneath the Property and no groundwater contamination concerns have been found.

Points of Compliance

The points of compliance are throughout the Site. Cleanup levels based on the direct contact pathway apply to soils to a depth of 15 ft bgs, whereas cleanup levels for the soil-to-groundwater pathway apply throughout the Site without regard to depth. Cleanup levels for groundwater apply throughout the Site.

Terrestrial Ecological Evaluation (TEE)

The Site is located within a generally urbanized area of Tacoma. However, there is a significant amount of open space within 500 feet of the Site (predominantly within the Site itself). Within 500 feet of the Property there is approximately 5.3 acres of open space, found within Site parcels to the north of the Property. The open space consists of a mix of grassy and forested areas.

Based on completion of MTCA Table 749-1, the simplified TEE process cannot be ended. MTCA Table 749-2 lists indicator concentrations for performing a simplified TEE.

Benzo(a)pyrene (BAP) has an unrestricted land use-based TEE concentration of 30 mg/kg. The highest total CPAHs detection of 1.17 mg/kg in soil from the Property (and the Site) is well below this concentration. No exceedances of other contaminant concentrations in MTCA Table 749-2 have been identified and no contamination was found at a depth of six ft bgs or less (within the biologically active zone limit).⁹ Therefore, the simplified TEE process can be ended. Ecology has concluded that risk to Ecological receptors on the Property is low. However, a simplified TEE should be performed for other parts of the Site prior to making any NFA determinations for other properties or for the Site as a whole.

Selecting the Cleanup Action

Ecology has determined the cleanup action you selected for the Property will likely meet the cleanup standards discussed in the “Setting cleanup standards” subsection. Your planned cleanup meets minimum cleanup requirements and likely won’t exacerbate conditions or preclude reasonable cleanup alternatives elsewhere at the Site.

⁹ WAC-340-7490(4)(a).

The RI/FS/CAP submitted to Ecology dated June 19, 2025, included evaluation of the following three alternatives to address the identified contamination:

Table 5. FS Alternatives

Alternative Number	Alternative Description	Estimated Cost	Benefit Score
1	Institutional Controls Only	NA*	NA*
2	Removal of Contaminated Fill Soil to 15ft	\$7.5 M	8.2
3	Capping and Institutional Controls	\$50 K	8.6

* No costs or benefit scores developed – Alternative 1 eliminated in screening stage.

Although no contamination was found at a depth less than 7.0 ft bgs, the possibility of shallower contamination being present within these fill soils cannot be precluded. Hence, institutional controls alone (Alternative 1) are not sufficiently protective for the proposed residential development of this property. Alternative 2 includes the excavation and offsite disposal of potentially contaminated soils to a depth of 15 feet, the direct contact-based depth limit.¹⁰ Alternative 3, the selected alternative, includes the placement of one to four feet of clean fill throughout the Property.

As stated in the RI/FS/CAP:

After placement of imported clean fill soil, the redevelopment would continue with the construction of hardscape (building foundation, concrete walkways) and softscape (lawn, planting beds, and woodchips over geotextile barrier) components of the redevelopment.

The selected alternative (Alternative 3) was presented within the FS to be the most permanent alternative with costs not disproportionate to relative benefits. Ecology concurs with the results of the Disproportionate Cost Analysis (DCA) and the selection of the preferred alternative for the Property presented within the RI/FS/CAP dated June 19, 2025.

Implementing the Cleanup Action

Ecology notes that the proposed development could include a playground area. For any playground areas, Ecology requests that a minimum of three feet of clean fill be placed above a long-lasting geotextile fabric used to demarcate the top of potentially contaminated fill soils.

¹⁰ WAC 173-340-740(6)(d).

Alternatively, one foot of clean fill can be placed above a long-lasting geotextile fabric used to demarcate the top of potentially contaminated fill soils if a resilient rubber playground mat is placed throughout the playground area.

For areas with landscaping where workers may install and replace flowers, bushes, and shrubs, Ecology requests that a long-lasting geotextile fabric be installed to demarcate the top of potentially contaminated fill soils. Any vegetable gardening should be done only in raised beds filled with clean soils. These precautionary elements are intended to be protective for the long-term in case additional unidentified contamination is present on the Property that was not identified during Site investigations.

Methane in soil gas could present an explosive risk at the Site. Ecology defers to the appropriate local entity(s) with respect to the selection of appropriate methane mitigation measures needed for the proposed development. In addition, the appropriate local entity(s) concurrence on the design of a methane mitigation system should be provided, if such a system is needed. Ecology requests written opinions from the appropriate local entity(s) on these subjects be submitted to us for our record prior to NFA issue. Ecology anticipates providing our input to the appropriate local entity(s) regarding the need for mitigation measures at the Site.

Institutional Controls (ICs)

The RI/FS/CAP stated:

ICs, Institutional controls will include an environmental covenant deed restriction to prevent future unrestricted development or any other activities that could create exposure pathways for direct contact with the contaminated fill soil. The environmental covenant will specifically apply to the Contaminated Fill Area, shown Figure 10. Institutional controls are required in perpetuity.

Figure 10 showed a “Contaminated Fill Area” within the northern part of the Property. Ecology does not concur with applying restrictions to a portion of the Property due to a risk the risk of finding cleanup level exceedances throughout the Property. Although the investigations that took place were reasonably robust, due to the nature of the release (heterogenous fill soil containing various anthropogenic materials), the possibility of additional locations/depths with cleanup level exceedances cannot be precluded. Hence, Ecology anticipates that the Environmental Covenant (EC) to be recorded will have restrictions covering the entire Property, rather than a portion of the Property.

Key elements of the EC are anticipated to, at a minimum, include:

1. Notification to Ecology prior to performing any intrusive work that could adversely affect the cap or result in exposures to contaminated soil.
2. A prohibition on drinking water use of groundwater (although groundwater was not found to be contaminated at the Site, Ecology advises inclusion of this restriction at any Site with soil contamination).
3. A prohibition on growing crops within fill soils currently found at the Site (raised beds filled with soils from a clean source are recommended for growing vegetables on the Property).
4. Protection of any methane mitigation system.

Covering the entire property with the EC restrictions should not be excessively burdensome and results in a greater degree of protectiveness. Ecology will be performing periodic reviews on a 5-year basis following issue of an NFA determination.

Prior to the performance of a 5-year periodic review, cap inspection forms should be submitted to Ecology. These forms should document that the cap that separates the potentially contaminated soil from the surface remains covered by the structure(s), paving, and landscaping. Should a concern be noted regarding the cap at any time, Ecology should be notified within 48 hours, and corrective measures taken as appropriate.

Next Steps

Prior to an NFA issue, Ecology anticipates the following next steps at the Site:

1. **Provide written opinions from the appropriate local entity(s)** as to whether a methane mitigation system is needed and providing their concurrence on the appropriate design of any methane mitigation systems and any operations and maintenance requirements.
2. **Submit a Cap Inspection Plan to Ecology.** This plan should provide for annual examination of surfaces at the Property, completion of a Cap Inspection Form, and the submitting of the forms to Ecology for our five-year Periodic Review. This plan should also outline corrective measures and notification to Ecology within 48 hours should any cap concerns be identified.
3. **Record an Ecology-signed EC at Pierce County.** A draft EC was submitted to Ecology on June 30, 2025. Ecology will work with Mercy Housing to finalize this EC. Once the EC has been finalized, the executed document will be recorded at Pierce County then returned to Ecology.
4. **Submit to Ecology As-Built documentation for the cap** (consisting of the added clean soil, the structure(s), paved areas (hardscape), turf, and landscaped areas). This submittal should include a map showing the thickness of added clean fill and a detailed map for any playground areas.

Limitations of the Opinion

Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion does not:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70A.305.040(4).

Opinion does not constitute a determination of substantial equivalence.

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. See RCW 70A.305.080 and WAC 173-340-545.

Opinion is limited to proposed cleanup.

This letter does not provide an opinion on whether further remedial action will actually be necessary at the Site upon completion of your proposed cleanup. To obtain such an opinion, you must submit a report to Ecology upon completion of your cleanup and request an opinion under the Voluntary Cleanup Program (VCP).

State is immune from liability.

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70A.305.170(6).

Contact Information

Thank you for choosing to clean up the Site under the VCP. As you conduct your cleanup, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our [webpage](#).¹¹

If you have any questions about this opinion, please contact me at 509-424-0543 or frank.winslow@ecy.wa.gov.

Sincerely,



Frank P. Winslow, LHG
Toxics Cleanup Program
Headquarters Section

FPW/tam

Appendices: A – Site Description and Diagrams
B – Basis for the Opinion: Documents List

cc by email: Ali Cochrane, Geosyntec, ali.cochrane@geosyntec.com

Dave Cook, Geosyntec, dave.cook@geosyntec.com

Keith Johnstone, TPCHD, Environmental Health, kjohnston@tpchd.org

Felicia Medlen, Tacoma Community Redevelopment Authority, fmedlen@cityoftacoma.org

Shirley Schultz, Tacoma Development Services, sschultz@tacoma.gov

Treasure Mitchell, Ecology, treasure.mitchell@ecy.wa.gov

Ecology Site File

¹¹ <https://www.ecy.wa.gov/vcp>

Appendix A

Site Description and Diagrams

Site Description

Site

The Site is defined by the extent of soil and groundwater contamination associated with the fill materials that were historically placed in the former gully in this area. Investigations conducted throughout the Site have found arsenic, carcinogenic polycyclic aromatic hydrocarbons (CPAHs), and benzene in soil at concentrations exceeding the MTCA cleanup levels.

Area and Property Description

Pierce County parcel # 7470021283 (the Property) is being developed by Mercy Housing with a multi-family affordable housing project. This 2.897-acre parcel is rectangular in shape. The Property is bound by Pacific Avenue to the west, other parcels of the 35th Street Landfill Fill site to the north (including right-of-way for an extension of East Harrison Street), single family residences to the east (including two small vacant lots), and a Tacoma Public Utilities substation on a 1.324-acre property to the south.

The Property is located at 3561 Pacific Avenue and is owned by Tacoma Community Redevelopment Authority. It is currently occupied by paved parking and tent structures referred to as a temporary supportive housing facility. To the west, across Pacific Avenue, is South Sound 911, an emergency dispatch center. Tacoma-Pierce County Health Department has an office building on the west side of Pacific further to the south.

Site History

The following Site history discussion is from the RI/FS/CAP report:

The Subject Property has never been developed; however, significant quantities of fill have been placed on the Subject Property and adjoining parcels. The original ground surface topography prior to fill placement consisted of a north-south trending ravine with the bottom of the ravine situated between 80 and 120 feet below today's ground surface according to the 1961 U.S. Department of Interior Topographic Survey. A photograph of the Property from 1946 shows the Subject Property ravine as forested, and shows no use or development activity (TRU, 1992). Historical aerial photographs show the Property generally consisting of the ravine until at least 1957, with extensive filling of the entire ravine by 1968 (coinciding with construction of the interstates to the north and east of the Subject Property vicinity)...

Research into documentation describing the fill source(s) has been conducted as part of several previous investigations that occurred at the Subject Property and at parcels to the north (TRU, 1992; Landau, 2008; Landau, 2021a) and additional research was conducted in support of this RI. Of all records identified, most notable are the 1991 interview records with representatives of the City and Dickson Construction, the primary parties placing fill at the Subject Property and north-adjointing parcels, as well as with residents of neighboring properties who observed fill placement (TRU, 1992). Records indicate that filling at the Subject Property occurred from the early 1960s until December 1990 and was derived primarily from the following sources:

- By 1965, the majority of the former ravine was filled with construction debris and soil generated by construction of Interstate-5 (I-5), Interstate-705 (I-705), and Highway 7 extensions situated north of the Subject Property (see Figure 3). In their 1991 interview, Dickson Construction estimated that approximately half of the fill material placed south of Division Lane (see Figure 2) was derived specifically from construction of I-705 between I-5 and downtown Tacoma, and consisted of excavated soil and reinforced concrete from demolished building and bridge footings (TRU, 1992). Fill placement from these sources likely ceased when the portions of these roadway extensions in the immediate vicinity of the Subject Property were majorly completed in 1968. Aerial photographs and maps showing development of the I-5, I-705, and Highway 16 areas prior to construction were reviewed; within approximately a half mile of the Subject Property, these areas were primarily residentially developed with single-family homes and apartment buildings, as well as schools. Evidence of significant commercial or industrial uses along the roadway corridors at the time of construction was not observed in these resources.*
- Construction debris was backfilled into the ravine at the Subject Property. This material was sourced from City of Tacoma Public Utilities construction projects, various large private construction projects, and was placed by City contractors, including Northwest Construction, who is no longer in business (TRU, 1992). Other contractors approved by the City to dump material at the Subject Property also brought construction debris and excavated soil. In their 1991 interview, Dickson Construction indicated that the material from construction projects consisted of “mostly clean dirt and concrete”, but did not include any wood or other organic material (TRU, 1992). Records provided no information on the specific construction projects nor descriptions of their locations.*

Filling during this time period did not require a solid waste permit per Tacoma-Pierce County Health Department (TPCHD) because the wastes disposed of were considered inert and the majority of filling occurred prior to regulation of inert wastes by TPCHD (TPCHD, 2010). Records do not indicate that municipal wastes, hazardous wastes, or other wastes typical of a formal “landfill” were placed in the former ravine, and evidence of wastes of this nature have not been observed in explorations (see Section 3).

Filling at the Subject Property ceased in December 1990 (TRU, 1992) and the City graded, sloped, and hydroseeded the ground surface in 1992 for stability and erosion control (TPCHD, 2010). The Subject Property has remained generally unchanged since that time and remains owned and maintained by the Tacoma Community Redevelopment Authority.

Sources of Contamination

The CPAH contamination beneath the Property is likely attributable to an asphalt component of the fill soils that were placed in the former gulley. Other anthropogenic contaminants found in soils at the Site (but not at the Property) were arsenic and benzene. The arsenic in soil beneath the 34th Street bridge was attributed to street sweeping in the 1992 report; however, finding occasional hazardous substances within the fill materials placed at the Site would not be surprising. The benzene found in soil in one off-Property is an example of this.

Although the Property was well characterized and only CPAHs were found in soil samples at concentrations above MTCA cleanup levels at the Property (and CPAH cleanup level exceedances were in only two of 51 soil samples), the possibility of other occasional contamination within this fill soil cannot be precluded.

Physiographic and Topographic Setting

The Site is located in Tacoma, Washington, approximately 5,000 feet south of the Thea Foss Waterway inlet of Commencement Bay. The Site is located within the gently undulating glacial terrain of the Puget Lowland Physiographic Province. More locally, the Site is located within a former gulley, that drained to the north to the Thea Foss Waterway. Remnants of the gulley are still present north of the South 34th Street bridge.

Surface/Storm Water

Other than intermittent drainage within the gulley beneath and north of the South 34th Street bridge, the nearest surface water body is the Thea Foss Waterway inlet of Commencement Bay, located approximately 5,000 feet to the north.

Ground surface elevations at the Property range from 304 feet above mean sea level (ft amsl) at the northeast property corner to 312 ft amsl at the southeast property corner. Stormwater will generally flow to the north in the vicinity of the Property.

Ecological Setting

The Site is located within a generally urbanized area of Tacoma. However, there is a significant amount of open space within 500 feet of the Site, primarily within the Site itself. The open space consists of a mix of grassy areas and forest. Although this area is an open space island surrounded by commercial and residential properties, there is some potential for wildlife in this area. As discussed above, risk to potential ecological receptors is considered low on the Property, since no contaminants have been found on the Property at concentrations above terrestrial ecological evaluation (TEE) based concentrations. In addition, the current use of the Property (paved parking and area of tent structures) and the planned development (proposed structure, paving, and landscaped areas) indicated low potential for wildlife being present on the Property.

Geology and Hydrogeology

The following Site Geology and Hydrogeology discussion is from the RI/FS/CAP report:

The fill soil at the Subject Property consists of brown to gray sandy silts and silty sands with varying gravel content, gravel with varying sand and silt content, as well as cobbles, concrete debris, asphalt, brick, and organic material such as roots and wood debris. The various debris types were observed throughout the Subject Property at various depths typically in trace amounts, with the exception of AB-06, where a 2-foot-thick section of concrete debris was observed with additional trace debris observed for an additional 2 feet (Appendix B). Fill soil thicknesses on the Subject Property ranged from 78 to 103 feet thick in the RI explorations. The Vashon till underlies the fill soil and consists of dense brown to gray silty sand with gravel and sand with silt and gravel.

Regional groundwater was encountered at 85 feet bgs (elevation 219) at the Subject Property well AMW-04. Moist to wet soil was observed in soil samples obtained at depths ranging from 4.5 feet bgs (in AB-01) to 55 feet bgs (in AB-08), typically in more porous fill soil intervals. It is likely that this water represents precipitation that seeped into the looser fill material and percolated into airspace between gravel and sand grains.

Water Supply

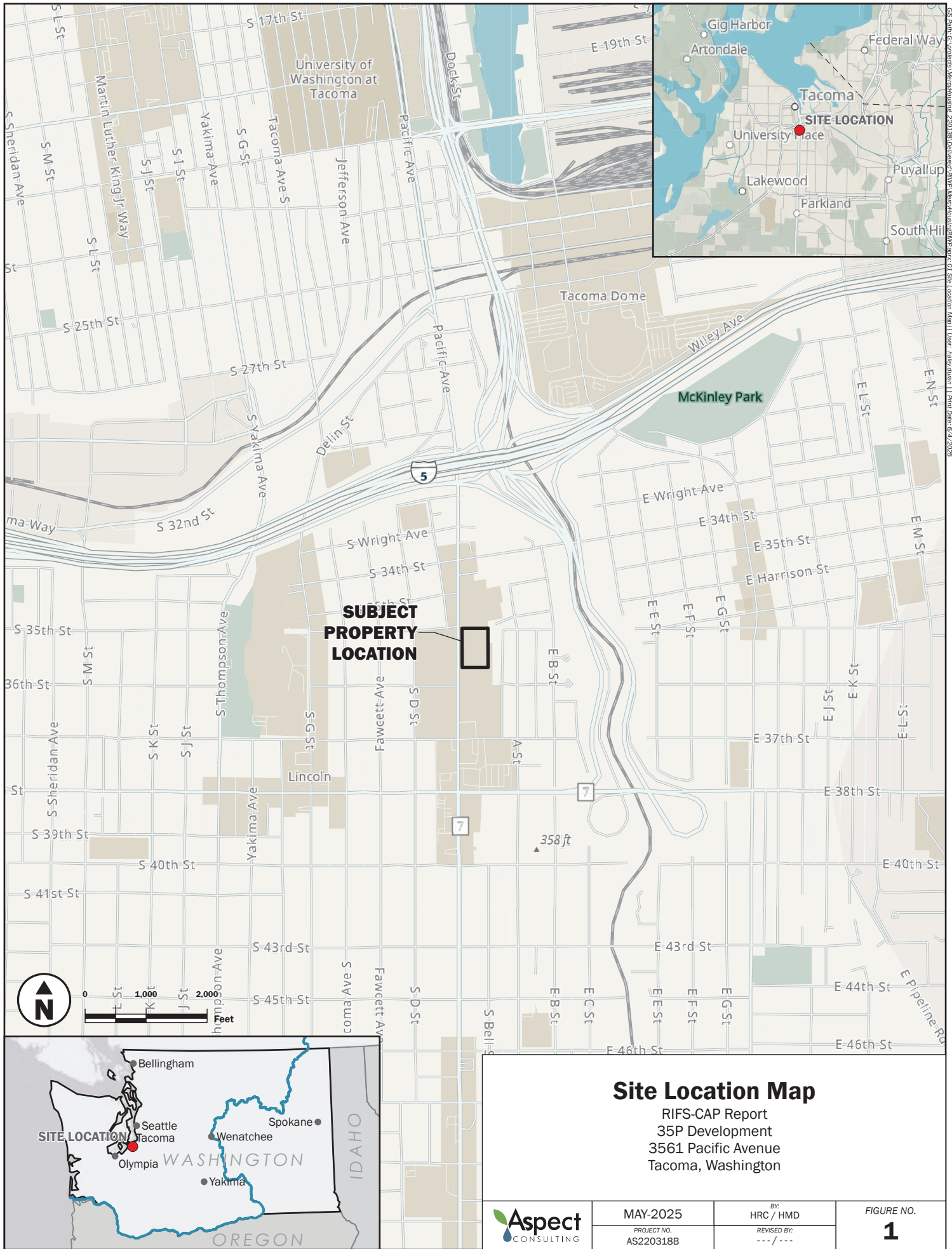
Potable water is provided to the Property by the Tacoma Public Utilities, which obtains water from the Green River watershed as well as local water supply wells. The nearest Group A/B water well is a Group B well located approximately 3,500 feet to the southeast. The Site is within the 5-year wellhead protection zone for a City of Tacoma water supply well located approximately 1.8 miles to the southwest of the Site. Risk to existing water supply wells from the Site appears to be low.

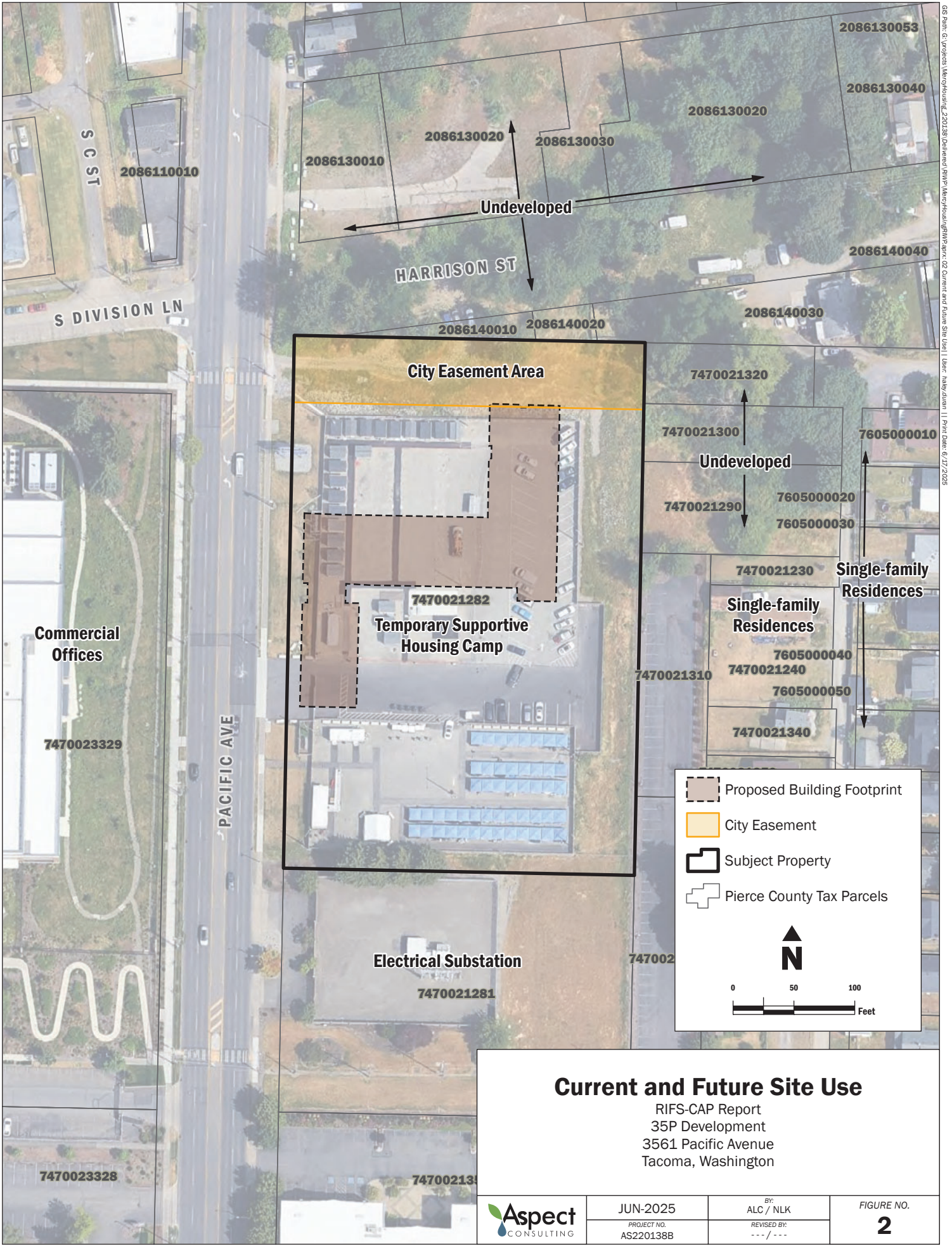
Site Diagrams

Figures from Geosyntec’s *Remedial Investigation, Feasibility Study, and Cleanup Action Plan*, dated June 19, 2025.

Figure 1	Site Location Map
Figure 2	Current and Future Site Use
Figure 3	Historical Features
Figure 4	Investigation Locations
Figure 5	Cross Section A-A’
Figure 6	Cross Section B-B’
Figure 7	Soil Results
Figure 8	Groundwater Results, March 2025
Figure 9	Methane Measurements
Figure 10	Contaminated Fill Area and Development Plan

Following Figure 10 is a map showing recent parcel adjustments made by the Pierce County Assessor on July 25, 2025.





Current and Future Site Use

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington



JUN-2025
PROJECT NO.
AS220138B

BY:
ALC / NLK
REVISED BY:
--- / ---

FIGURE NO.
2

1957 Aerial Photograph



1968 Aerial Photograph



1990 Aerial Photograph



2017 Aerial Photograph



 Subject Property



Notes:
Historical aerial photographs provided by
Environmental Data Resources, Inc.

Historical Features

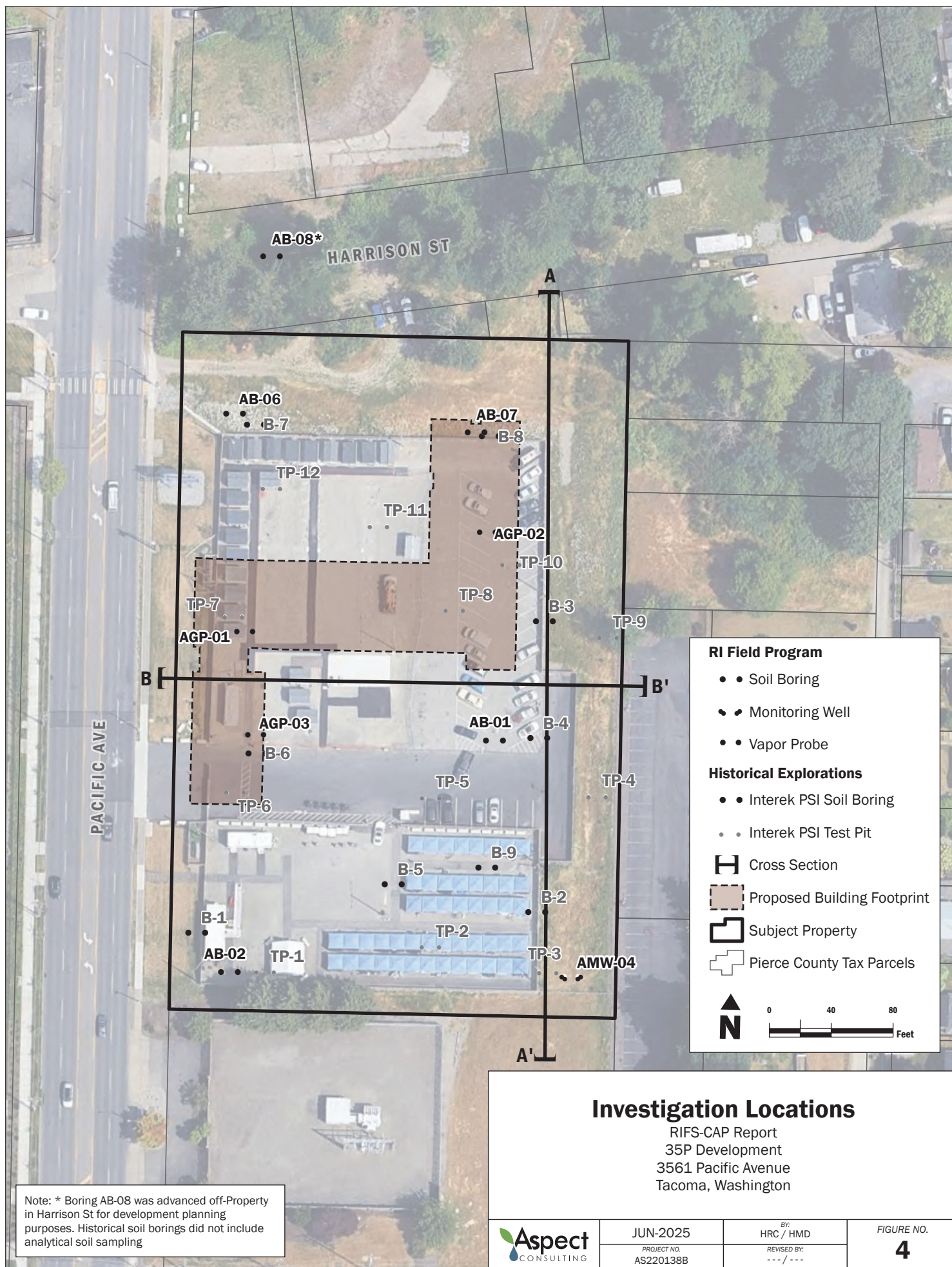
RIFS-CAP
35P Development
3561 Pacific Avenue
Tacoma, Washington

 Aspect
CONSULTING

APR - 2024
PROJECT NO.
220138

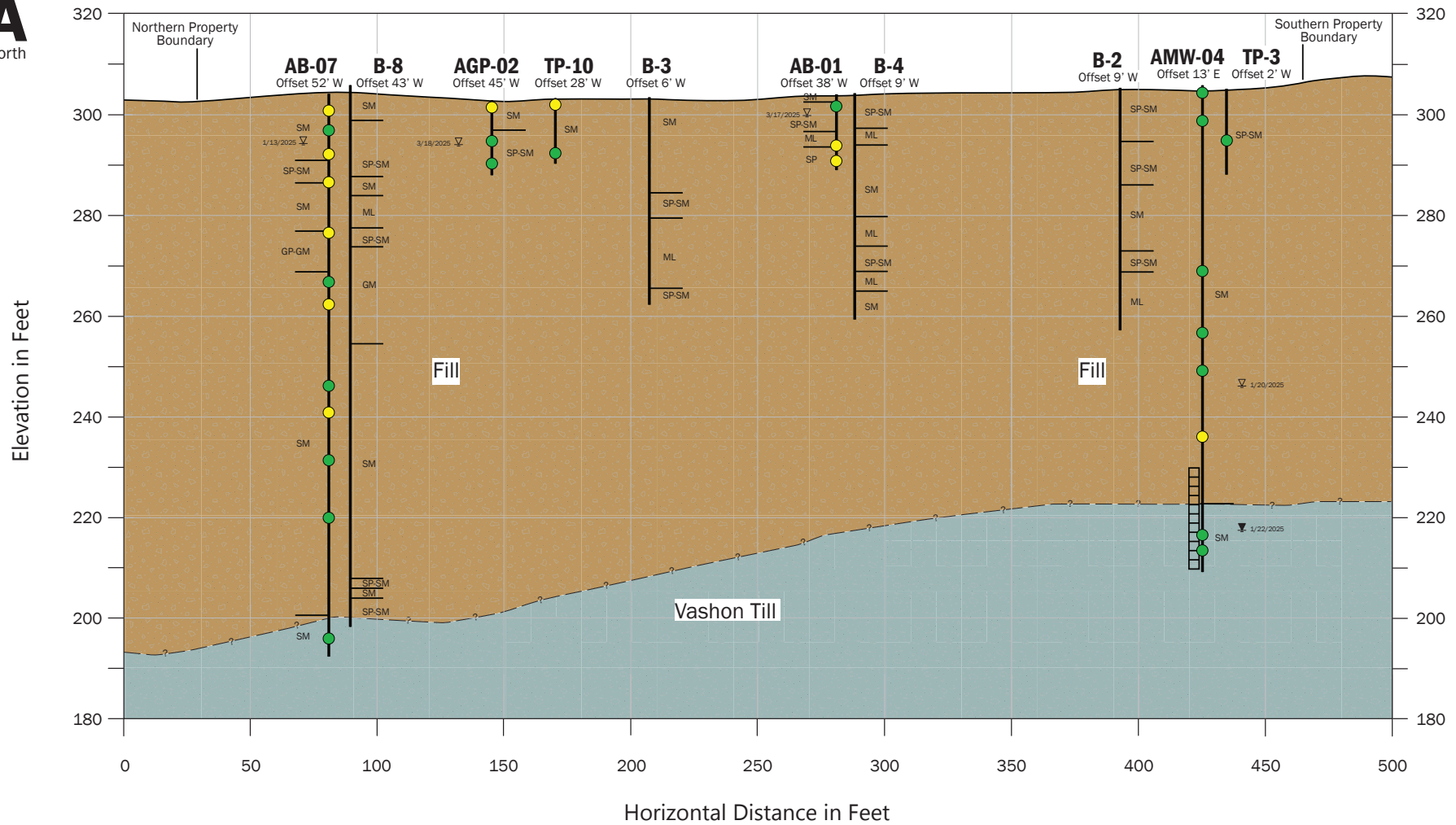
BY:
ALC
REVISED BY:

FIGURE NO.
3



A
North

A'
South



Profile Legend

Lithology Graphics

- Fill
- Vashon Till

Soil Analytical Results for TPH, PAHs, and VOCs

- Analytes not detected
- Analytes detected at concentrations less than the MTCA Method A cleanup Level
- Analytes detected at concentrations greater than the MTCA Method A Cleanup Level

Explorations

Exploration Name and Offset

Soil Sample

USCS Soil Description*

Water Level at Time of Drilling

Static Water Level

Geologic Contact, Dashed Where Inferred

Well Screen Interval

Horizontal Scale 1" = 40'

Vertical Scale 1" = 20'

Vertical Exaggeration 2x

NOTES:

- *Unified Soil Classification System (USCS) soil descriptions. Refer to the boring logs in Appendix B for definitions and further information.
- TPH = petroleum hydrocarbons
- PAHs = polycyclic aromatic hydrocarbons
- VOCs = volatile organic compounds
- MTCA = Model Toxics Control Act

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 and boring logs for further context. Site features are approximate.

Cross Section A-A'

RIFS-CAP

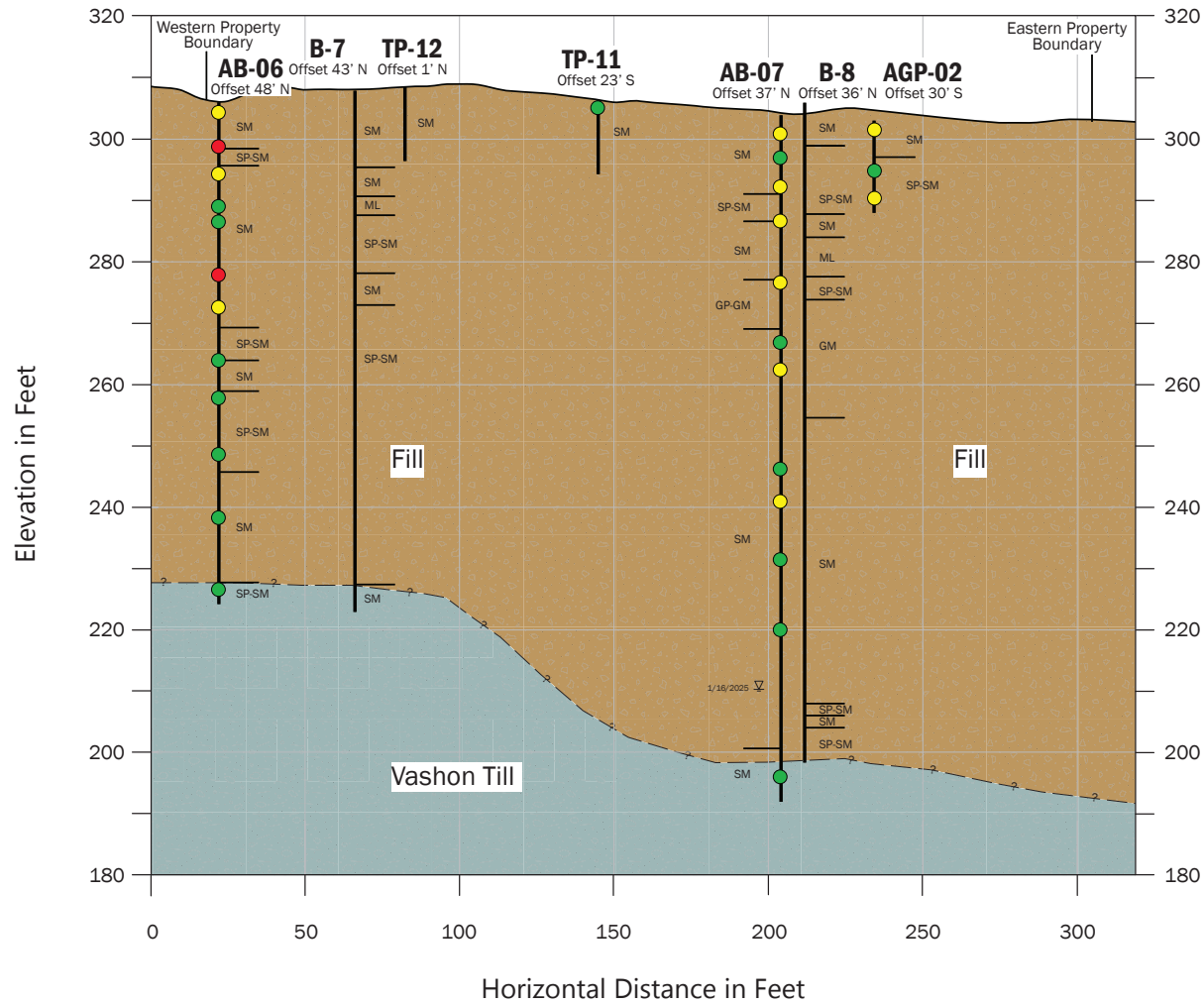
35P Development

3561 Pacific Avenue

Tacoma, Washington

Aspect CONSULTING	MAY-2025 PROJECT NO. AS2201388-45-01	BY: JBM/CMT REVISED BY: ALC	FIGURE NO. 5
--	--	---	---------------------

B
West



B'
East

Profile Legend

Lithology Graphics

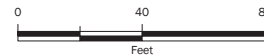


Soil Analytical Results for TPH, PAHs, and VOCs

- Analytes not detected
- Analytes detected at concentrations less than the MTCA Method A cleanup Level
- Analytes detected at concentrations greater than the MTCA Method A Cleanup Level

Explorations

- Exploration Name and Offset
- Soil Sample
- USCS Soil Description*
- Geologic Contact, Dashed Where Inferred
- Water Level at Time of Drilling
- Static Water Level
- Well Screen Interval



Horizontal Scale 1" = 40'
Vertical Scale 1" = 20'
Vertical Exaggeration 2x

NOTES:

- *Unified Soil Classification System (USCS) soil descriptions. Refer to the boring logs in Appendix B for definitions and further information.
- TPH = petroleum hydrocarbons
- PAHs = polycyclic aromatic hydrocarbons
- VOCs = volatile organic compounds
- MTCA = Model Toxics Control Act

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 and boring logs for further context. Site features are approximate.

Cross Section B-B'

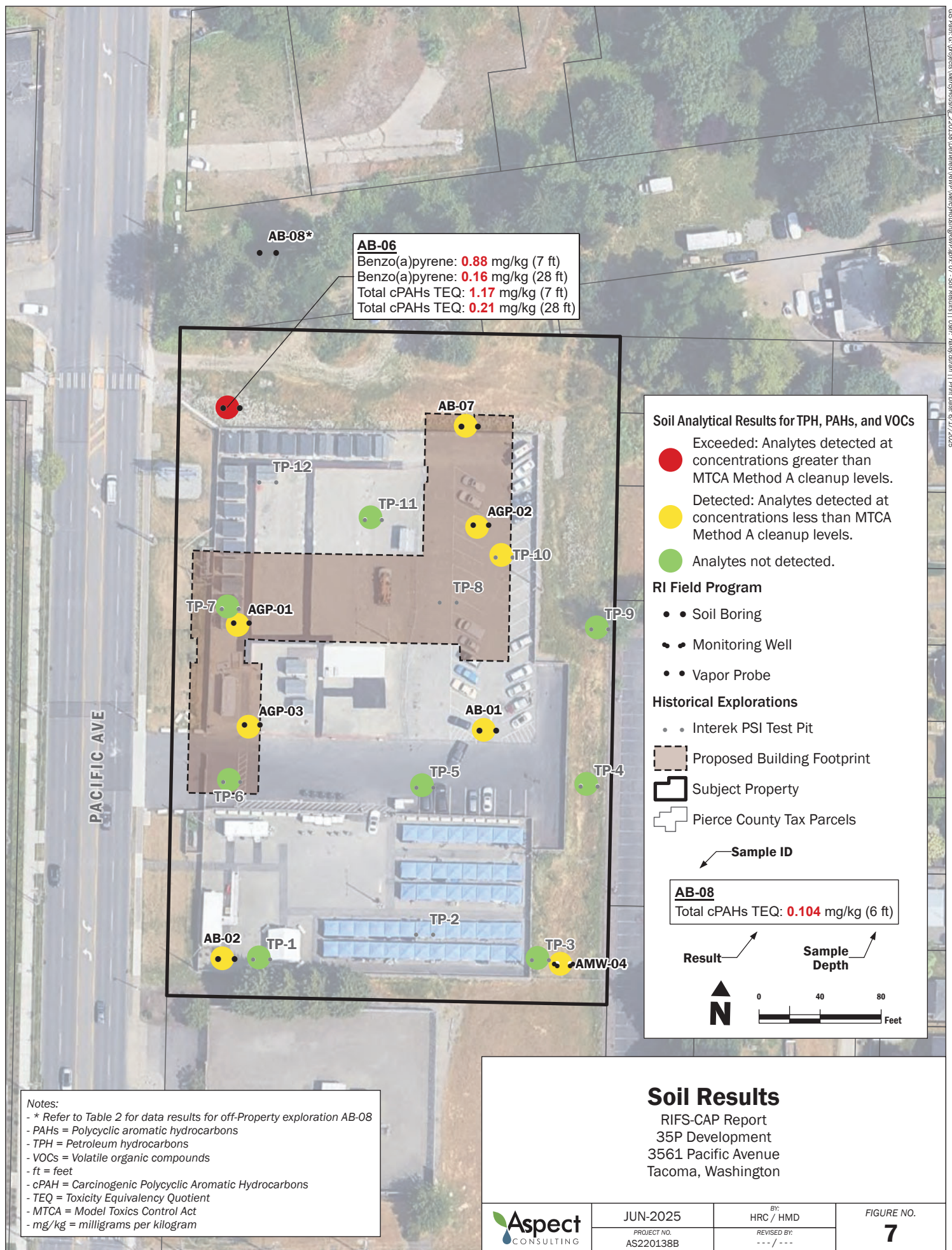
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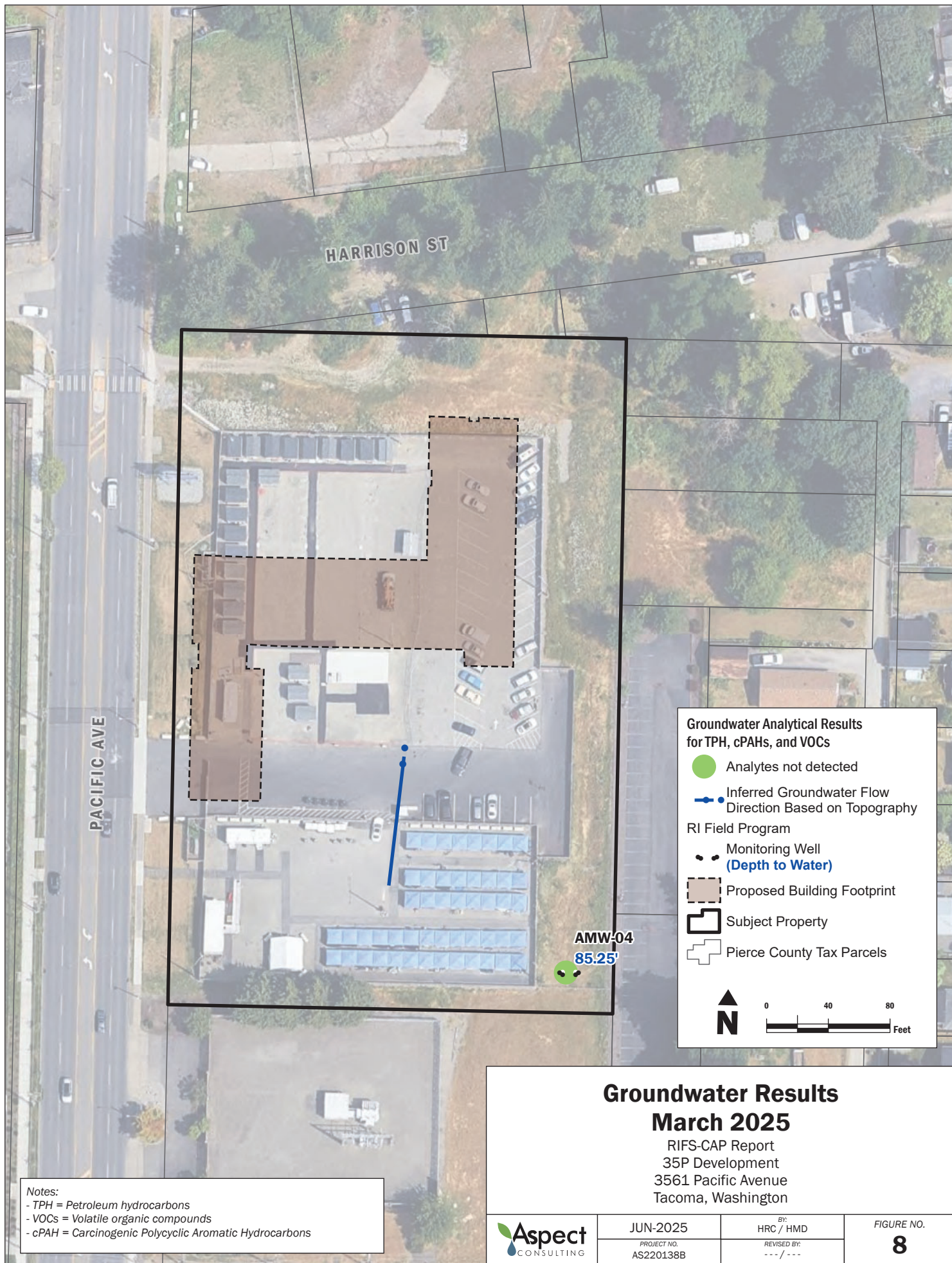


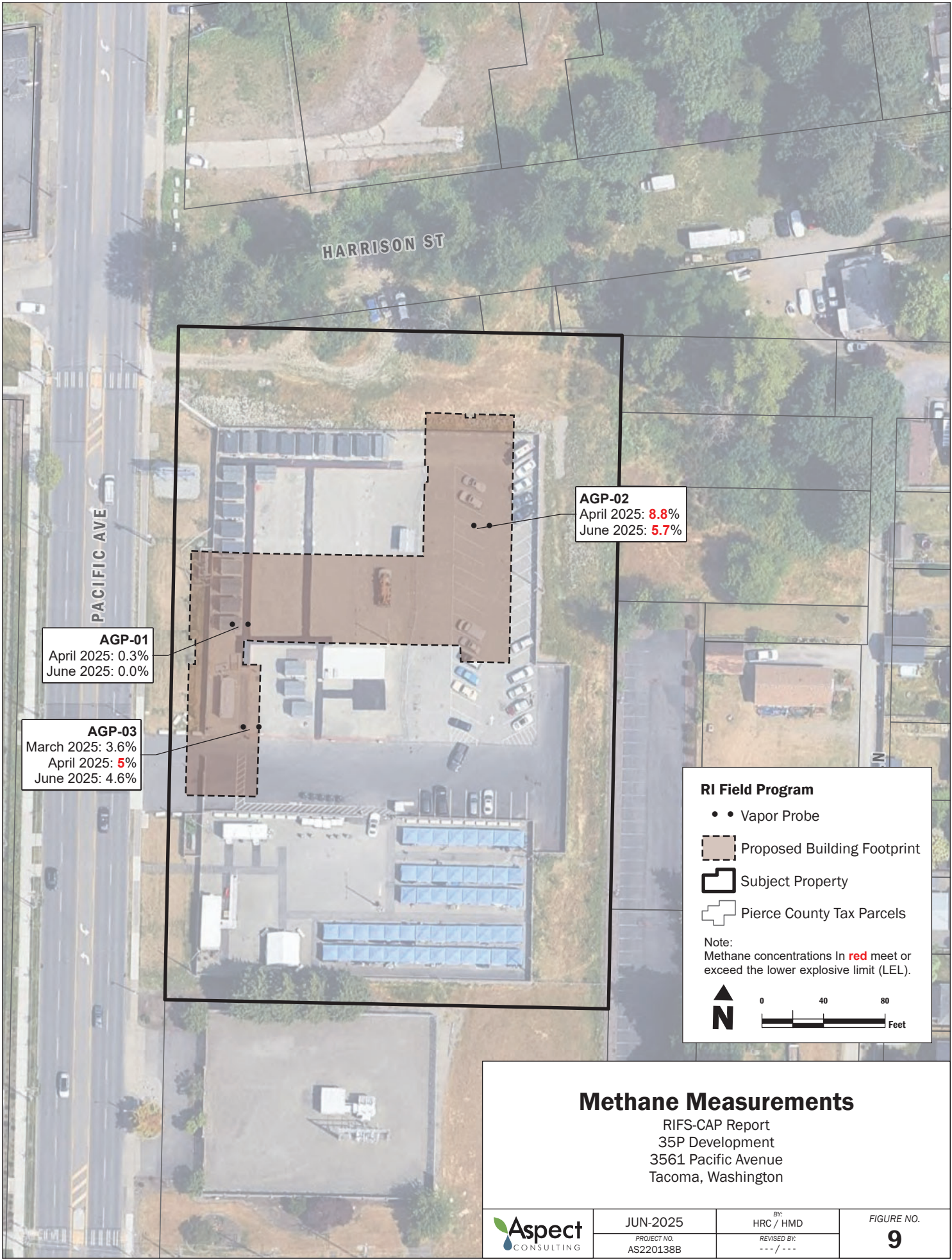
MAY-2025
PROJECT NO.
AS2201388-45-01

BY:
JBM/CMT
REVISED BY:
ALC

FIGURE NO.
6







Methane Measurements

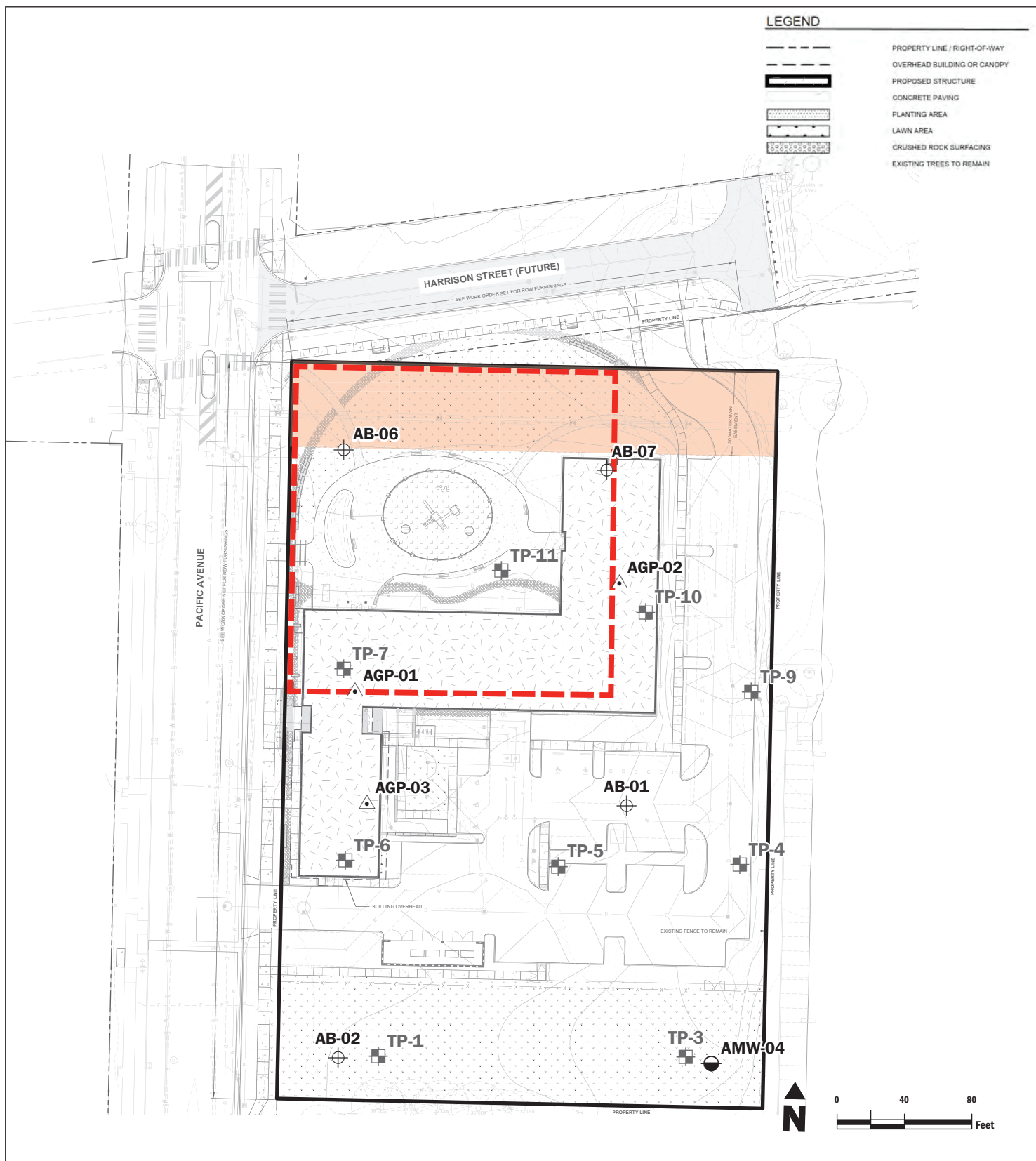
RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington



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BY:
HRC / HMD
REVISED BY:
--- / ---

FIGURE NO.
9



RI Field Program

- ⊕ Soil Boring
- ⦿ Monitoring Well
- △ Vapor Probe

Historical Explorations

- ⊕ Interek PSI Test Pit



Contaminated Fill Area



City Easement Area



Subject Property



Pierce County Tax Parcels

Notes:

- Proposed redevelopment features shown are preliminary

Contaminated Fill Area and Proposed Development Plan

RIFS-CAP Report
35P Development
3561 Pacific Avenue
Tacoma, Washington



JUN-2025

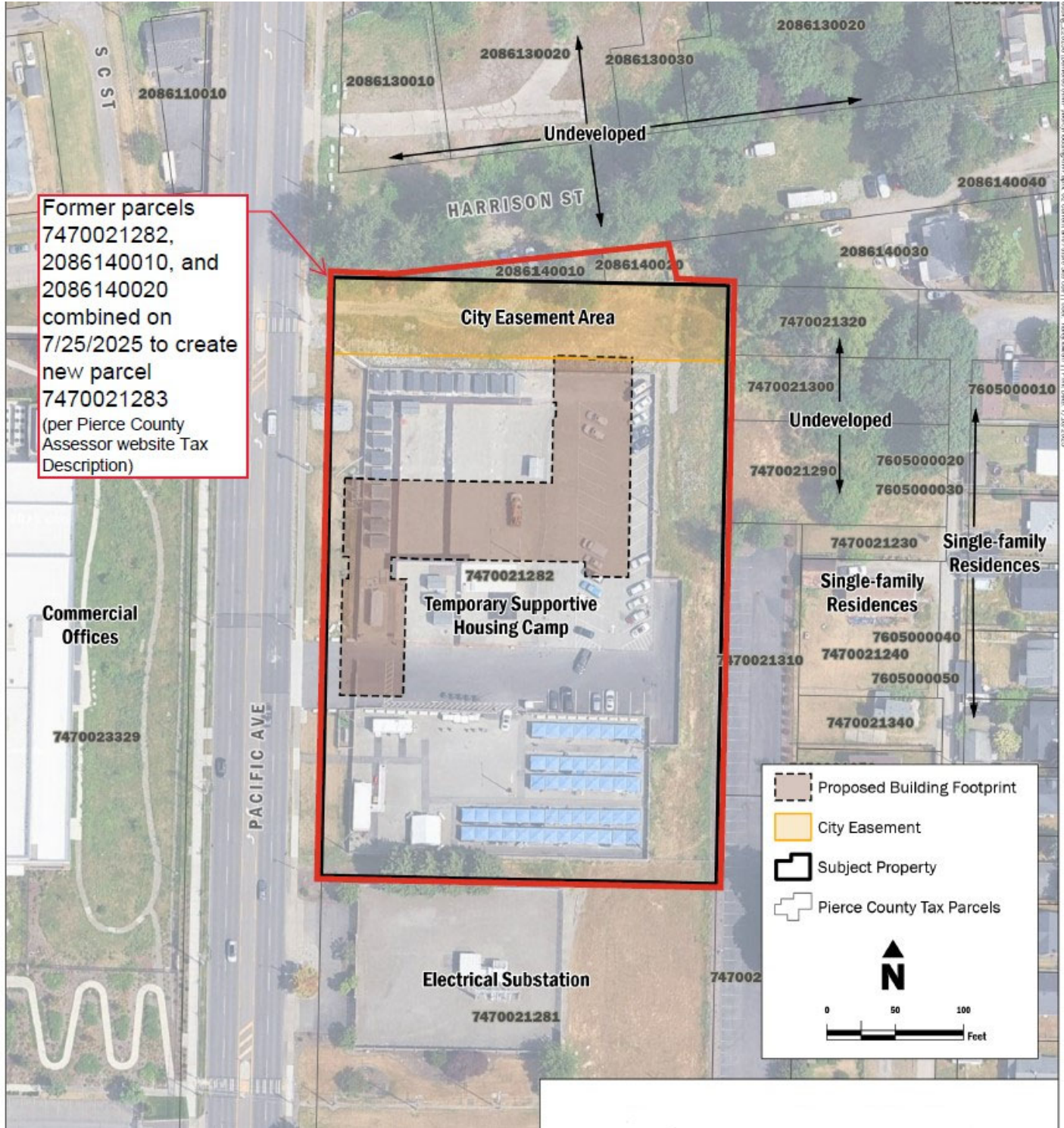
PROJECT NO.
AS220138B

BY:
HMD / ALC

REVISED BY:
--- / ---

FIGURE NO.

10



Former parcels
7470021282,
2086140010, and
2086140020
combined on
7/25/2025 to create
new parcel
7470021283
(per Pierce County
Assessor website Tax
Description)

Appendix B

Basis for the Opinion: Documents List

Documents List

1. Aspect. *Remedial Investigation/Feasibility Study and Cleanup Action Plan, 35P Development, South 35th Street & Pacific Avenue*. June 19, 2025.
2. Ecology. *35th Street Landfill, Additional Comments on the RI Work Plan*. December 19, 2024.
3. Ecology. *35th Street Landfill, RI Work Plan – Ecology Responses to Mercy Housing from Responses received on September 30, 2024*. November 14, 2024.
4. Ecology. *Affordable Housing Cleanup Grant Project funded for the following site: 35th St Landfill*. June 12, 2023.
5. Landau Associates. Report, *Limited Phase II Environmental Site Assessment, South 35th Street and Pacific Avenue, Tacoma, Washington*. March 31, 2021.
6. SCJ Alliance. *Townsmith Developments LLC, Soil and Hydrology Report, Pierce County, Washington*. August 2018.
7. Intertek PSI. *Geotechnical Engineering Report, Proposed Multi-Story Complex, 3561 Pacific Avenue, Tacoma Washington*. July 13, 2018.
8. Landau Associates. *Remedial Investigation Work Plan 35th Street Landfill Tacoma, Washington*. August 5, 2008.
9. Tacoma Refuse Utility. *Environmental Site Assessment, 35th Street Landfill*. April 1992.
10. Applied Geotechnology Inc. *Phase 2 Environmental Site Assessment, South 37th Street and Pacific Avenue, Tacoma, Washington*. May 30, 1990.