



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, Washington 98504-7600 • 360-407-6300

December 19, 2025

Sarah Bluvas
City of Mercer Island, Public Works
9601 SE 36th St
Mercer Island, WA 98040
sarah.bluvas@mercerisland.gov

Re: NFA Likely Opinion for Proposed Cleanup of the following Site:

Site Name: Luther Burbank Park
Site Address: 2040 84th Ave SE, Mercer Island, King County, WA 98040
Facility/Site ID: 74911249
Cleanup Site ID: 4749
VCP Project ID: XN0067

Dear Sarah Bluvas:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your proposed independent cleanup of the Luther Burbank Park 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

Issue Presented and Opinion

Ecology has determined that upon completion of your proposed cleanup (excavation and offsite disposal of contaminated soil and groundwater), no further remedial action will likely be necessary at the Site.³

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

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

³ Note that achieving cleanup levels via the proposed remedial technologies and methods carries uncertainties. Determination of No Further Action by Ecology will be contingent on sampling results confirming that MTCA cleanup levels have been achieved at approved points of compliance. This determination is also contingent on sediment characterization activities being conducted at the Site that demonstrate no impacts to sediment.

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](#)⁴ WAC (collectively called “MTCA”).

The Site consists of petroleum (diesel- and heavy oil-range) in soil and groundwater associated with historical operations on the Property. The contamination release(s) were in close proximity to Lake Washington; hence Ecology has required characterization of sediments prior to issue of a No Further Action (NFA) opinion letter. Should sediment contamination be found, then Ecology will likely opt for formal (i.e. Agreed Order) Site management to address sediments contamination.

Ecology notes that the proposed uplands cleanup work is applying direct contact, human health-based cleanup levels for soil and groundwater, and soil protective of groundwater-based cleanup levels. Should sediment contamination be found, these cleanup levels may not be sufficiently protective of surface water and sediments. Hence, this NFA Likely opinion applies only if no sediment contamination is found.

Summary of Opinion

A Remedial Investigation (RI)/ Feasibility Study (FS)/Cleanup Action Plan (CAP)⁵ was received by Ecology on November 5, 2025, along with an opinion request. The following evaluations are based on that report. This section summarizes Ecology’s NFA Likely opinion. More detailed discussions (Site Description, Basis of Opinion, and Analysis of the Proposed Cleanup) follow.

The Property

The Property consists of one King County parcel (062405-9014) totaling 22.86 acres. The Property is a portion of an assemblage of parcels totaling approximately 77 acres that comprise Luther Burbank Park, owned and operated by the City of Mercer Island. The Property was historically used as a juvenile correctional school.

⁴ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340>

⁵ GeoEngineers. *Remedial Investigation/Feasibility Study/Cleanup Action Plan, Luther Burbank Park, Mercer Island, Washington*. October 7, 2025.

Site Contamination and Impacted Media

Releases of petroleum (diesel- and heavy oil-range) to soil and groundwater have occurred from underground storage tanks (USTs) associated with a historical steam plant used for heating the historical school facility. Carcinogenic polycyclic aromatic hydrocarbons (CPAHs) were also found in soil samples at concentrations above MTCA cleanup levels. Metals (arsenic and lead) were found in one soil sample at concentrations above MTCA cleanup levels. That sample was collected inside the steam heating building and was removed during previous cleanup work. The Site may include sediments within Lake Washington which have not yet been characterized.

Proposed Cleanup Action

Excavation and offsite disposal was selected within the 2025 RI/FS/CAP for the petroleum-contaminated soil and groundwater on the Property. The excavation is planned to be conducted concurrently with the construction of park improvements.

Excavation and offsite disposal is considered a permanent cleanup option under MTCA, and no disproportionate cost analysis (DCA) is therefore needed. Ecology concurs with the selection of excavation and offsite disposal to address petroleum-related soil contamination. Sufficiency of cleanup will need to be demonstrated through confirmation soil sampling and providing disposal receipts from a permitted disposal facility.

There is a possibility that some soil contamination could remain at excavation sidewalls if structural constraints prevent excavation close to the steam plant building or the bulkhead along Lake Washington. If contamination remains that cannot be excavated, then an environmental covenant (EC) is anticipated to be needed.

Groundwater at the Site is shallow, with groundwater near the bulkhead as shallow as two feet below ground surface (ft bgs), but more commonly at about five feet bgs. Excavation is expected to extend into the saturated zone, with dewatering discharge to sanitary sewer likely needed. Note that discharges to the sanitary sewer must be appropriately permitted and characterization of dewatering discharge water may be required. Soils consist of silt with some sand and clay; hence, saturated soils are anticipated to be excavatable to some extent.

The excavation work is anticipated to take place prior to conducting sediments characterization, due to the park improvement construction schedule. Excavation cleanup is proposed to achieve Method A cleanup levels for soil (2,000 milligrams per kilogram [mg/kg])

for diesel-plus heavy oil range petroleum and 0.1 mg/kg for total CPAHs) and groundwater (500 micrograms per liter [$\mu\text{g/L}$] for diesel-plus heavy oil range petroleum and 0.1 $\mu\text{g/L}$ for total CPAHs). **Ecology recommends that cleanup target removal of all detected contamination rather than cleanup to Method A cleanup levels since these cleanup levels may not be sufficiently protective of surface water or sediments, should sediment contamination be later found.**

There is some uncertainty regarding the excavation cleanup of the petroleum contaminated groundwater. Hence, a treatment chemical, such as PetroFix™ by Regenesis is anticipated to be added at the base of the excavation. This product includes carbon to adsorb contaminants and electron acceptors to enhance biodegradation. If limited residual groundwater contamination remains following excavation cleanup, then monitored natural attenuation (MNA) may be applied for such remaining contamination. Ecology notes that if any monitoring wells are destroyed during the excavation work, they will need to be replaced.

Deliverables needed prior to NFA Determination

Ecology is requesting the following deliverables be submitted for our review and comment. These documents will be needed prior to Ecology issuance of an NFA determination:

1. **Cleanup Action Completion Report** for excavation work that includes confirmation soil and groundwater sampling results and receipts documenting proper disposal of contaminated soils and groundwater. This report should also include documentation of regulatory approvals for dewatering discharges, and dewatering discharge monitoring results.
2. **Compliance Monitoring Plan** for continued monitoring of groundwater following excavation cleanup. Depending on the results of confirmation soil and groundwater sampling following excavation, and results of sediments characterization, Ecology may require additional monitoring locations.
3. **Recorded Ecology-signed Environmental Covenant** memorializing institutional controls to address contamination concerns following cleanup activities conducted at the Property, if soil contamination remains on the excavation sidewalls or floor.
4. **Sediment Characterization Report.** As discussed above, Ecology's NFA Likely opinion letter only applies if no sediment contamination is found.

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:

- Petroleum (diesel- and heavy oil-range) in soil and groundwater.
- CPAHs and Metals (arsenic and lead) in soil.

As discussed above, arsenic and lead were historically found in one shallow soil sample inside the steam plant building and were removed via excavation. The Site may include sediments within Lake Washington which have not yet been characterized.

Appendix A includes a detailed description and diagrams of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. GeoEngineers. *Remedial Investigation/Feasibility Study/Cleanup Action Plan, Luther Burbank Park, Mercer Island, Washington*. October 7, 2025.
2. GeoEngineers. *Soil Sampling and Analytical Results Summary, Luther Burbank Park, Mercer Island, Washington*. October 24, 2023.
3. Ecology. *No Further Action (NFA) Letter, Independent Remedial Action, Luther Burbank Park, Mercer Island, Washington*. June 12, 2003.
4. Camp Dresser & McKee Inc. (CDM). *Final Report – Soil Remediation, Former Steam Plant – Luther Burbank Park, Mercer Island, Washington*. November 7, 2002.

You can request these documents by filing a [records request](#).⁶ For help making a request, contact the Public Records Officer at publicrecordsofficer@ecy.wa.gov or call 360-407-6040.

⁶ <https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests>

Before making a request, check whether the documents are available on [Ecology's Cleanup and Tank Search web page](#).⁷

This opinion is void if any of the information contained in the 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 Site.⁸ That conclusion is based on the following analysis:

Characterizing the Site

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action.⁹ The Site is described above and in **Appendix A**.

Soil Characterization

Soil was characterized through the collection of 84 soil samples from 58 locations between 2002 and 2025 (sampling events in 2002, and 2022-2025). Soil samples were collected at depths ranging from 0.7 to 10 ft bgs. Maximum concentrations of contaminants detected in soil samples and numbers of cleanup level exceedances are summarized in Table 1:

Table 1. Soil Sample Cleanup Level Exceedances at the Property

Contaminant	Method A Cleanup Level (mg/kg)	2002 Maximum Concentration (mg/kg)	2022-2025 Maximum Concentration (mg/kg)	2002 Number of Cleanup Level Exceedances	2022-2025 Number of Cleanup Level Exceedances
DRPH	2,000	25,000	4,320	3/26	3/53
HRPH	2,000	8,500	2,610	3/26	1/58
DRPH+HRPH	2,000	33,500	5,440	3/26	5/53
Total CPAHs	0.1	0.377	0.215	1/13	2/15
Arsenic	20	330	<13	1/9	0/4
Lead	250	620	12	1/9	0/4

mg/kg = milligrams per kilogram.

Bold = concentration above preliminary cleanup level.

DRPH = diesel range petroleum hydrocarbons.

HRPH = heavy oil range petroleum hydrocarbons

⁷ <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=4749>

⁸ See conditions and caveats discussed above.

⁹ See conditions and caveats discussed above.

The 2002 cleanup level exceedances were removed via excavation in 2002 and Ecology issued an NFA letter in 2003. Additional soil characterization was conducted between 2022 and 2025, and contamination above cleanup levels was discovered in 2023. As can be seen from the results in Table 1, the soil contamination found in 2022-2025 was of lower magnitude than the previously found contamination. The maximum depth of this contamination was 5 ft bgs at location B4 (see Figure 7 in Appendix A).

No further characterization of soil at the Site prior to implementing the cleanup action appears to be warranted. Confirmation soil sampling will be needed following cleanup to demonstrate that cleanup levels have been achieved. In addition, based on the outcome of sediment characterization investigation activities, additional soil characterization could be needed.

Groundwater Characterization

Groundwater occurs at the Site at a depth between approximately 2 and 8 ft bgs (generally about 5 ft bgs away from the bulkhead next to the lake). The lake level varies about two feet each year with winter levels at about 20-21 feet above mean sea level (amsl) and summer levels at about 22 ft amsl. Cross sections presented within the RI/FS/CAP show water levels dropping with distance from the shoreline (see Figures 4 and 5 in Appendix A); however, Ecology anticipates that groundwater will likely flow toward the lake during periods of uplands recharge. The bulkhead will likely limit groundwater flow in the vicinity of the Site.

The shallow groundwater occurs within a predominantly silty unit with lesser sand and clay. Hence, groundwater is anticipated to move relatively slowly within this unit.

Groundwater at the Property was characterized through the collection of 16 samples between 2002 and 2025. Maximum concentrations of contaminants detected in groundwater samples and number of exceedances are summarized in Table 2:

Table 2. Groundwater Sample Cleanup Level Exceedances at the Property

Contaminant	Method A Cleanup Level (µg/L)	Maximum Concentration (µg/L)	Number of Cleanup Level Exceedances/ Samples	Location and Month/Year of Maximum
DRPH	500	3,100	6/16	MW-3 (8/2024)
HRPH	500	<500	0/16	--
DRPH+HRPH	500	3,100	8/16	MW-3 (8/2024)
Total CPAHs	0.1	0.02	0/5	--

Bold = concentration above preliminary cleanup level.

Contaminant concentrations at location MW-3 were below cleanup levels in February of 2025. This decrease may be reflective of seasonal variations in groundwater flow.

Arsenic and lead were detected in one soil sample within the steam plant building at a depth of 0.7 feet in 2002. Because no additional metals in soil concerns were found and since this shallow soil contamination was cleaned up, no characterization of metals in groundwater at the Site was conducted or appears to be warranted. However, if metals contamination is found in sediment samples, this conclusion could be revised in the future.

No further characterization of groundwater at the Site prior to implementing the cleanup action appears to be warranted. Confirmation groundwater monitoring will be needed following cleanup to demonstrate that cleanup levels have been achieved. In addition, based on the outcome of sediment characterization investigation activities, additional groundwater characterization could be needed.

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 3. Selected Cleanup Levels and Screening Levels

Contaminant	Method A Soil Cleanup Level (mg/kg)	Method A Groundwater Cleanup Level (µg/L)
DRPH	2,000	500
HRPH	2,000	500
DRPH+HRPH	2,000	500
Total CPAHs	0.1	0.1
Arsenic	20	5.0, 8.0*
Lead	250	15

*Method A cleanup level and the Puget Sound regional background concentration, respectively.

As discussed above, the sufficiency of the proposed Method A cleanup levels at the Site are dependent on the outcome of sediment characterization activities. Hence, Ecology recommends that cleanup of soil and groundwater target all contamination above detection limits rather than solely Method A cleanup level exceedances, to the extent possible.

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. No soil contamination was found below a depth of 5 ft bgs. Groundwater cleanup levels apply throughout the Site.

Terrestrial Ecological Evaluation (TEE)

The Site is located within the Luther Burbank Park which consists of approximately 77 acres of primarily open space. According to the park's website:

Much of the park has been left undeveloped to foster a variety of wildlife, including 135 species of birds, 50 species of waterfowl, raccoons, beaver, muskrats, tree frogs, and rabbits. Many of these animals live in the wetlands at the park's north and south ends.

Therefore, ecological receptors are of potential concern at the Site. MTCA Table 749-3 and Ecology's Implementation Memo #19 dated August 11, 2017, include concentrations protective of ecological receptors. This includes a concentration of 260 mg/kg for petroleum, and a concentration of 12 mg/kg for total CPAHs (based on benzo(a)pyrene). No CPAH in soil concentrations exceeded the TEE-based concentration; however, petroleum in soil concentrations currently do exceed the TEE-based concentration. **Thus, if any petroleum concentrations remain following cleanup at concentrations greater than 260 mg/kg, then Ecology anticipates that an Ecology-signed EC will be needed to ensure that the paved cap in the area of contamination remains in place in the future to protect potential ecological receptors.**

Selecting the Cleanup Action

Ecology has determined the cleanup actions you proposed for the Site within the RI/FS/CAP meet the substantive requirements of MTCA. The following cleanup actions were proposed within the RI/FS/CAP:

- Excavation and offsite disposal for petroleum in soil and groundwater.
- Addition of PetroFix™ or other remedial chemical to the base of the excavation to treat any remaining groundwater contamination following excavation cleanup.

- Monitored Natural Attenuation (MNA) for petroleum in groundwater should any groundwater contamination remain above cleanup levels.
- Institutional Controls memorialized within an Environmental Covenant if any soil or groundwater contamination remains following cleanup.

A remedial excavation will take place to a depth of approximately 5 ft bgs. Dewatering will likely take place within the excavation, with permitted discharge to the sanitary sewer system. The need for treatment of dewatering water prior to discharge to the sanitary sewer will be determined by the permitting entity. Regardless of permit requirements, a pre-treatment dewatering discharge sample should be collected near the end of dewatering and analyzed for petroleum by NWTPH-Dx.

Excavation and offsite disposal is considered a permanent cleanup option under MTCA, and no DCA is therefore needed. Ecology concurs with the selection of excavation and offsite disposal to address CPAHs in soil contamination. Sufficiency of cleanup will need to be demonstrated through confirmation soil sampling and providing disposal receipts from a permitted disposal facility. **Ecology recommends the submittal of confirmation sampling locations and depths during the excavation work to ensure Ecology's concurrence on the sufficiency of confirmatory sampling.**

If excavation floor samples cannot be collected due to ponding, Ecology requests sampling and analysis of a pit water sample near the end of excavation cleanup work for analysis of petroleum by NWTPH-Dx. If any monitoring wells are destroyed during the excavation cleanup work, Ecology requests that they be replaced.

MNA is a contingency measure should any cleanup level exceedances in groundwater remain. The appropriateness for MNA at the Site is supported by the Site groundwater data which show concentration reductions over time indicating biodegradation of the petroleum and a stable or receding plume.

Ecology anticipates the need for a minimum of four consecutive quarters of groundwater data with petroleum concentrations all below cleanup levels prior to NFA issue. Ecology notes that if sediment contamination concerns are found that additional monitoring requirements may follow.

If soil and/or groundwater contamination above cleanup levels remains beneath the Property following cleanup work, then an Ecology-signed Environmental Covenant (EC) that memorializes institutional controls will be needed. The restrictions within an EC would be anticipated to include:

- Protection of the cap that prevents direct contact with remaining contaminated soil by human or ecological receptors.
- Notifying Ecology prior to performing any subsurface work in areas with remaining soil contamination.
- Prohibition of drinking water wells on the Property.

Next Steps

Ecology anticipates the following next steps at the Site, not necessarily in this sequence:

1. Submittal of a Cleanup Action Completion Report to Ecology presenting confirmation soil samples and disposal receipts for the excavation and offsite disposal cleanup work. In addition, this report should include documentation of the sampling of monitoring wells following excavation cleanup, dewatering authorizations, and dewatering discharge data.
2. Submittal of a Compliance Groundwater Monitoring plan following the groundwater sampling event that follows the excavation cleanup.
3. Submittal of a draft EC for Ecology's review and comment. Once Ecology has provided concurrence on the EC and it has been signed, it will need to be recorded at King County.
4. Following Ecology concurrence on a sediment characterization work plan and execution of field work, submittal of a Sediments Characterization Report for Ecology review and comment.

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 chapter [70A.305.040\(4\)](#)¹⁰ RCW.

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 performed is substantially equivalent. Courts make that determination. See chapter [70A.305.080](#)¹¹ RCW and chapter [173-340-545](#)¹² WAC.

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 chapter [70A.305.170\(6\)](#)¹³ RCW.

¹⁰ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.040>

¹¹ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.080>

¹² <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-340-545>

¹³ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.305.170>

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](#).¹⁴

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

Sincerely,



Frank P. Winslow, LHG
Toxics Cleanup Program
Headquarters Section

FPW/tam

Appendix: A – Site Description and Diagrams

cc by email: Phil Cordell, GeoEngineers, pcordell@geoengineers.com
Mark Havighorst, GeoEngineers, mhavighorst@geoengineers.com
Chase Williams, Ecology, chase.williams@ecy.wa.gov
Treasure Mitchell, Ecology, treasure.mitchell@ecy.wa.gov
Ecology Site File

¹⁴ <https://www.ecy.wa.gov/vcp>

Appendix A

Site Description and Diagrams

Site Description

Site

The Site is defined by the extent of contamination that has been found during various environmental investigations. This includes the petroleum (diesel- and heavy oil-range) in soil and groundwater, and carcinogenic polycyclic aromatic hydrocarbons (CPAHs) in soil. This contamination was attributed to releases from underground storage tanks (USTs) that fueled a steam plant.

Arsenic and lead were found in one soil sample within the steam plant building at concentrations exceeding Method A cleanup levels. That soil contamination was removed in 2003.

The Site may include sediments within Lake Washington which have not yet been characterized.

Area and Property Description

The Property consists of one parcel of land (King County parcel 062405-9014) totaling 22.86 acres. The Property is a portion of an assemblage of parcels totaling approximately 77 acres that comprise Luther Burbank Park, owned and operated by the City of Mercer Island.

The Site is on the edge of Lake Washington, with a bulkhead separating the uplands and in-water portions of the Site.

Site History

The Property was historically used as a juvenile correctional school. The steam plant was used to heat the school. The City acquired the Property in 1965 and started developing the Property as a park in about 1969. Soil contamination was discovered in 2002 with excavation cleanup work resulting in an NFA determination by Ecology in 2003. Additional contamination was discovered in 2023, with contamination characterization conducted between 2022 and 2025.

Underground Storage Tanks (USTs)

According to the RI/FS/CAP report, two diesel fuel USTs that were used to fuel the steam/boiler plant were decommissioned-in-place in 1983. The following is from that report:

1983. King County Parks staff observed indications of oil leaking in the vicinity of boiler plant USTs. U.S. Environmental Protection Agency (EPA) provided oversight of pumping remaining oil from the USTs, and excavation and removal of contaminated soil. The USTs were filled with water ballast to prevent them from floating during high water table conditions.

2002. The City of Mercer Island assumes ownership of Luther Burbank Park from King County Parks. During transfer negotiations King County Parks discovered that the boiler plant USTs were filled with oily water and made provisions to have the tanks pumped and cleaned...

The RI/FS/CAP proposed cleanup work includes permanent decommissioning of any USTs that are encountered during the excavation cleanup work.

Sources of Contamination

The RI/FS/CAP report stated:

The COCs for the Site are associated with releases from the former UST system that historically provided fuel for operation of the boiler plant. COCs were detected in the plaza proximate to the historical UST system and boiler plant.

Physiographic Setting

The Site is located near the northern tip of the Mercer Island, Washington, on an east-facing slope adjacent to Lake Washington. Mercer Island has undulating glacial terrain within the Puget Lowland Physiographic Province.

Surface/Storm Water

Stormwater at the Site is expected to generally flow to the east toward Lake Washington, which is the nearest surface water body and immediately adjacent to the Site. Lake Washington is at an elevation of 20-22 feet above mean sea level (ft amsl). The former steam plant is located on a flat area a few feet above the lake just west of the bulkhead. Behind the steam plant, the ground raises abruptly to an elevation of 50 to 60 ft amsl, throughout most of the eastern part of the park.

Ecological Setting

The Site is located in an area of significant open space along the shoreline of Lake Washington. The park is approximately 77 acres in area. According to the park's website:

Much of the park has been left undeveloped to foster a variety of wildlife, including 135 species of birds, 50 species of waterfowl, raccoons, beaver, muskrats, tree frogs, and rabbits. Many of these animals live in the wetlands at the park's north and south ends.

Therefore, ecological receptors are of potential concern at the Site.

Geology

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

The soils encountered at Luther Burbank Park generally consist of shallow fill overlying glacially consolidated soils. These materials are described as follows.

- *Shallow fill encountered proximate the Luther Burbank Park boiler plant consists of approximately 4 inches of base course material underlain by fill extending to a depth of up to approximately 7 feet bgs. Observed fill generally consists of stiff sandy silt which was interpreted to be reworked native soil.*
- *Glacially consolidated soils encountered at the Luther Burbank Park boiler plant generally consist of layered deposits of very hard silt with sand and sandy silt with variable gravel extending to the maximum depth explored of 15 feet bgs.*

Groundwater

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

Shallow groundwater was encountered between 1.98 and 10.05 feet bgs in seven monitoring wells installed at the Site and in the surrounding area... The depths are representative of the regional shallow groundwater table. Groundwater appears to be confined locally by the till-like deposits encountered throughout the Site which is demonstrated by the variation in depth to groundwater observed in monitoring wells at the Site (Table 1). The depth to groundwater at the Site apparently is at times less than the observed depth to surface water in Lake Washington as viewed from the top of the bulkhead. Based on this observation it is anticipated that groundwater at the Site may be in communication with the surface waters of Lake Washington.

Water Supply

The following discussion of water supply is from the RI/FS/CAP report:

Potable water is provided to Luther Burbank Park and the Mercer Island area by Seattle Public Utilities. The watersheds of the South Fork Tolt River and Cedar River provide a majority of the potable water to the City of Mercer Island. There are no drinking water supply wells within a 1-mile radius of Luther Burbank Park (Ecology, 2024a). There are seven groundwater monitoring wells in the vicinity of the boiler plant building at Luther Burbank Park. Groundwater at Luther Burbank Park currently is not used for any beneficial purpose.

Site Diagrams

Figure from CDM's *Final Report – Soil Remediation*, dated November 7, 2002.

Figure 1 Site Plan

Figures from GeoEngineer's Remedial Investigation/Feasibility Study/Cleanup Action Plan, dated October 7, 2025.

Figure 2 Property Plan

Figure 3 Site Plan

Figure 4 Cross Section A-A'

Figure 5 Cross Section B-B'

Figure 6 Groundwater Analytical Results - TPH

Figure 7 Soil Analytical Results – TPH

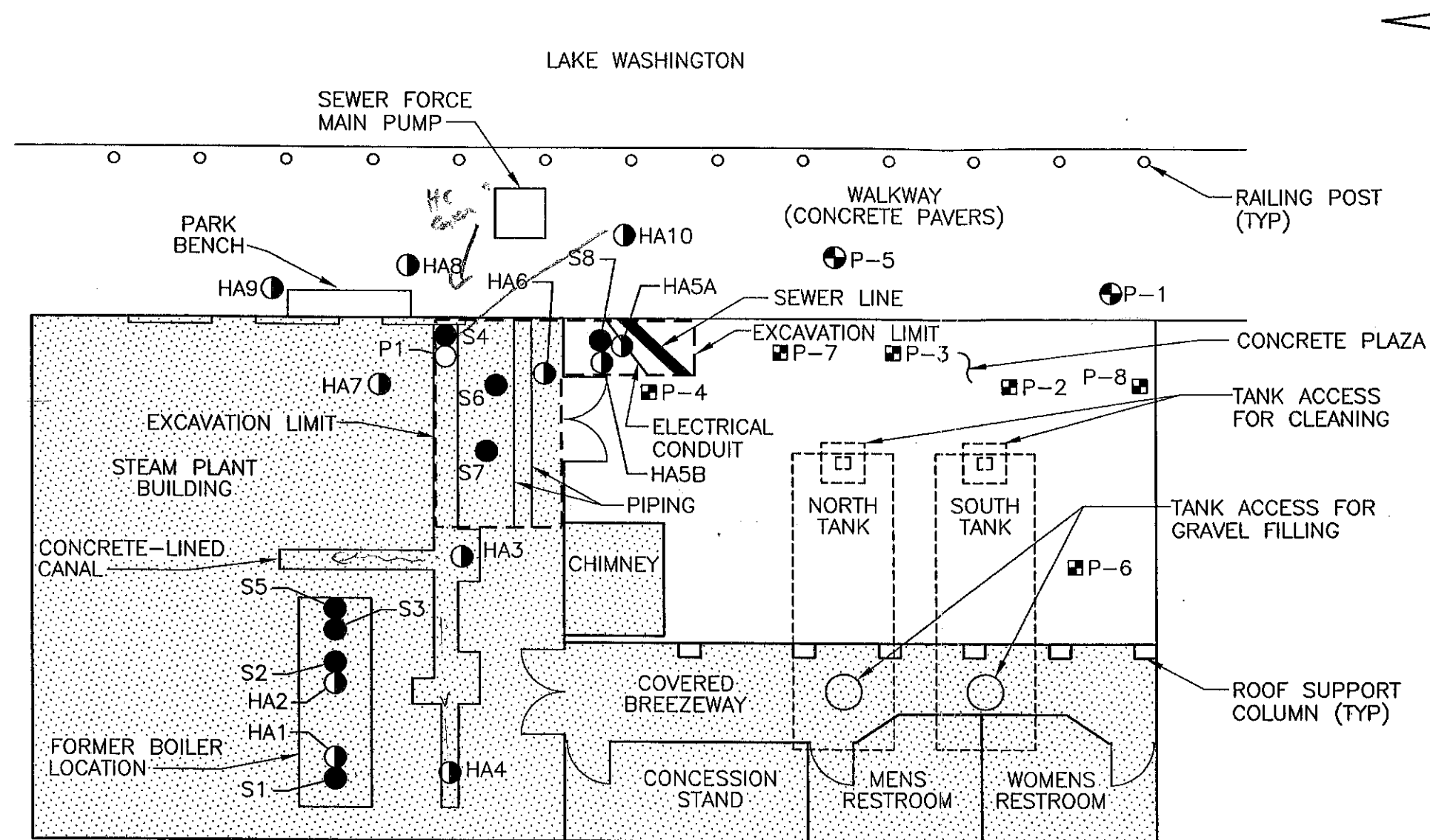
Figures from Google Streetview, July 2022.

Figure 8 View to North






Figure 9 View to South

Figure from Google Earth, June 6, 2025.

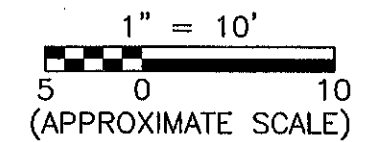
Figure 10 Oblique View to North



LEGEND

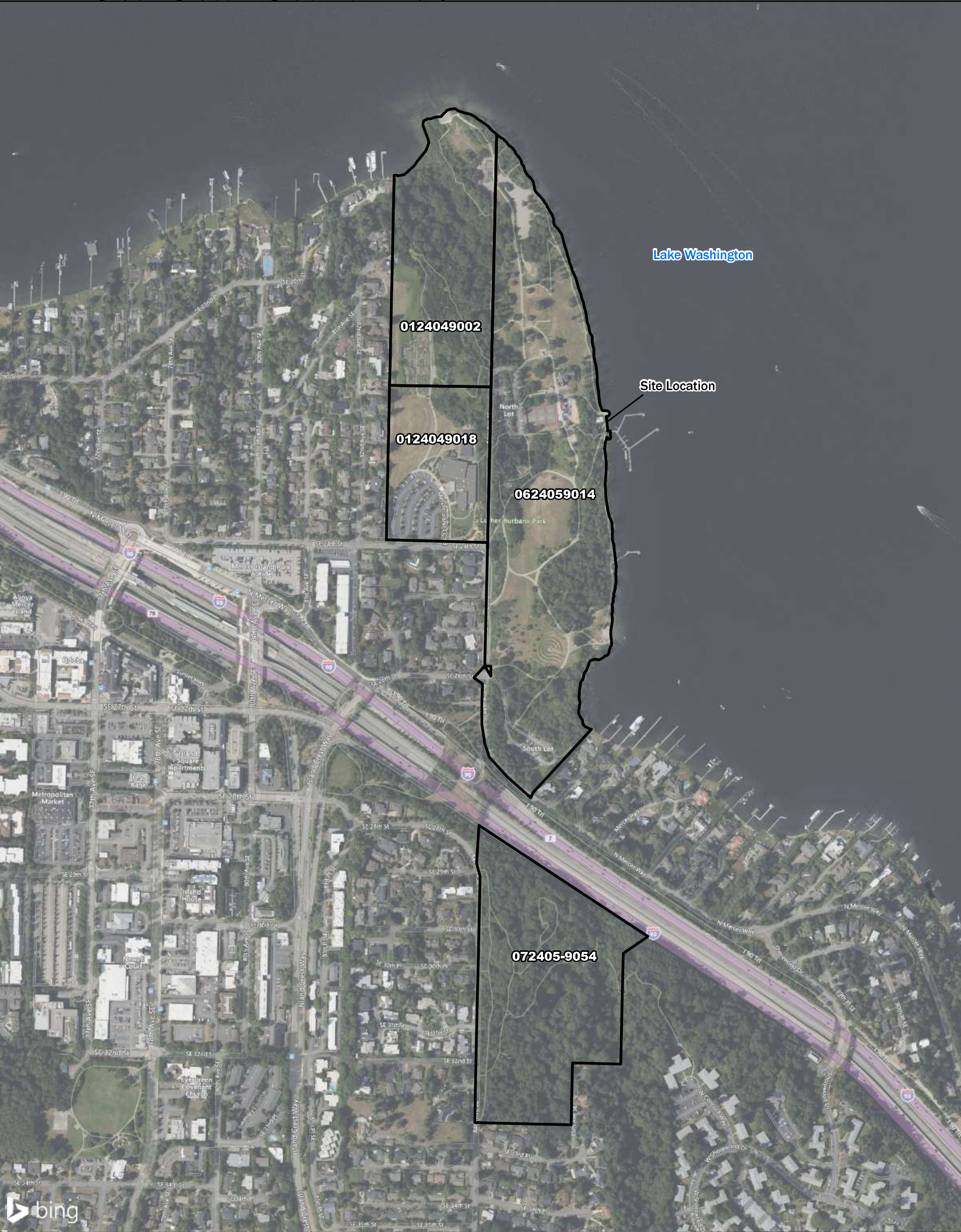
- P-4  PUSH PROBE CONDUCTED BY
HART CROWSER
- P-5  MONITORING POINT INSTALLED BY
HART CROWSER
- HA1  HAND AUGER LOCATION AND
DESIGNATION
- S1  SOIL SAMPLE LOCATION AND
DESIGNATION
- P1  PRODUCT SAMPLE LOCATION AND
DESIGNATION

NOTE: SHADED AREA REPRESENTS BUILDING
ROOF FOOTPRINT



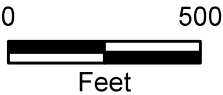
KING COUNTY
LUTHER BURBANK PARK
MERCER ISLAND, WASHINGTON

Figure No. 1
Site Plan



Legend

 Luther Burbank Park Property Boundary



Source(s):
• King County 2021 imagery

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet
Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

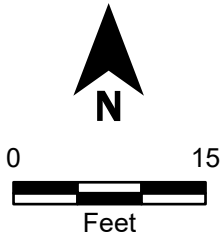
Property Plan	
Luther Burbank Park Upland Improvements Mercer Island Washington	
	Figure 2




Legend

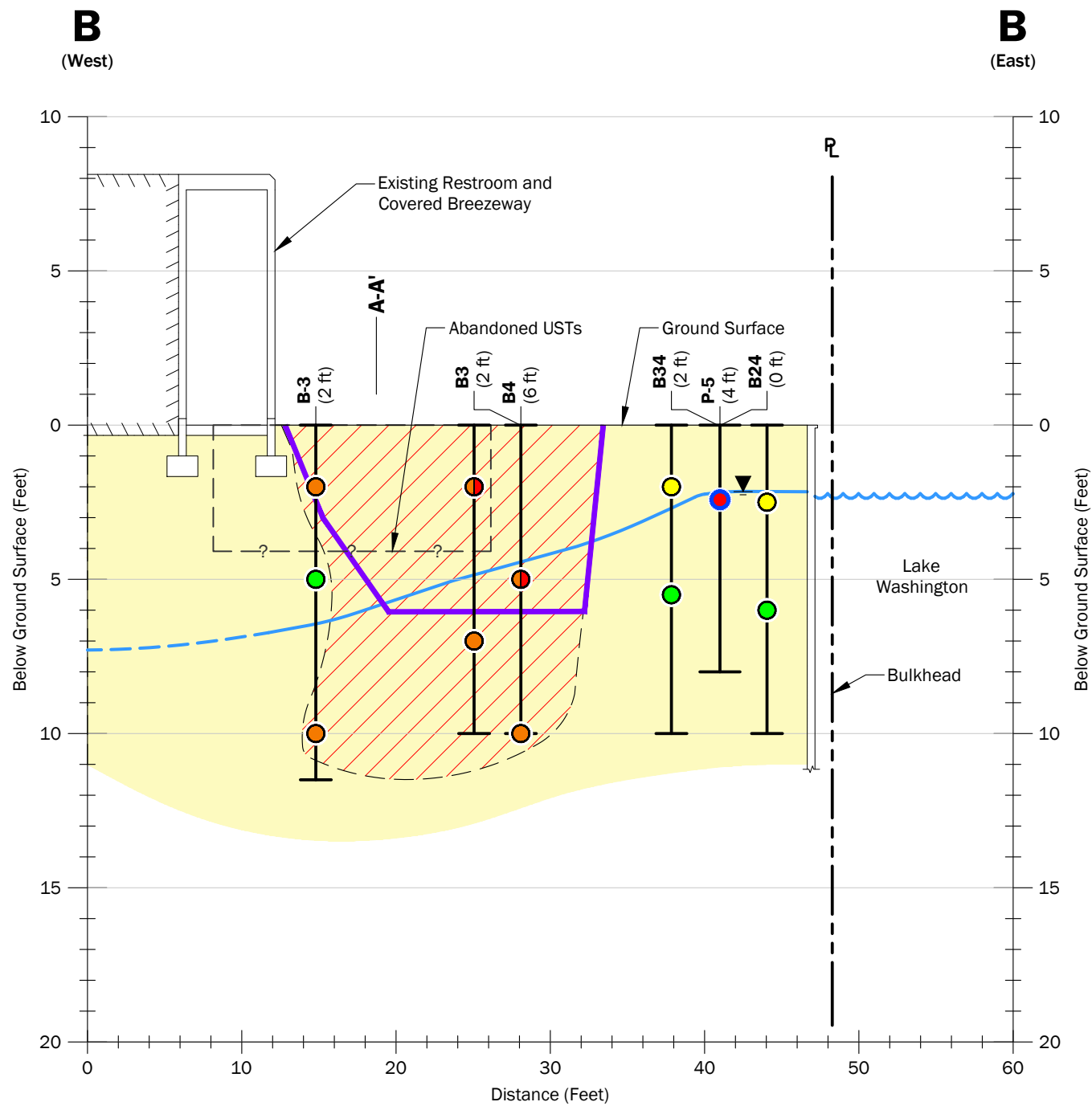
- | | |
|---|---|
| ○ Boring Location | Site Boundary |
| ● Boring Location with No Chemical Data | Approximate Location of Abandoned Underground Storage Tanks |
| ⊕ Monitoring Well | Approximate Location of August 2023 Stairway Excavation |
| ⊕ Surface Water Monitoring Location | Cross-Section Location |
| ● Excavation Confirmation Sample Location | Approximate Location of Boundary with Washington State Department of Natural Resources Owned Shorelands |

Source(s):
• King County GIS, Aerial Imagery 2023
Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet
Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.



Site Plan	
Luther Burbank Park Upland Improvements Mercer Island, Washington	
GEOENGINEERS 	Figure 3

P:\0817024\CAD\04\RFIS\CAP\081702404_F04-05_Cross Sections.dwg 5 Date Exported:5/19/2025 9:34 AM - by Gabby Register



Legend

Boring ID (Offset)

Boring

Inferred Soil Contact

Approximate Groundwater Level "Inferred where Dashed"

Groundwater Observed at Time of Drilling

Silt with Sand/Sandy Silt

Estimated Extent of Soil with Concentrations of COC's Greater than MTCA Method A CUL

Anticipated Alternative 2 Excavation Extent

Contaminants of Concern (COCs)

Total Petroleum Hydrocarbons as Diesel-Range Organics (TPH-D) and Oil-Range Organics (TPH-O)

Polycyclic Aromatic Hydrocarbons (PAHs) and carcinogenic PAHs

Sampling Results Summary

COC(s) not detected in Soil Sample

COC(s) Detected in Soil Sample at Concentrations Less than MTCA Cleanup Level (CUL)

PAHs Detected in Soil Sample at Concentrations Greater than MTCA CUL

TPH Detected in Soil Sample at Concentrations Greater than MTCA CUL

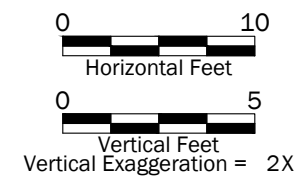
Groundwater Sample

Note(s):

- The subsurface conditions shown are based on interpolation between widely spaced explorations and should be considered approximate; actual subsurface conditions may vary from those shown.

Datum: NAVD88

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.



Cross Section B-B'

Luther Burbank Park Upland Improvements
Mercer Island, Washington

GEOENGINEERS

Figure 5



Legend

- Grab Groundwater Samples
- Monitoring Well
- Surface Water Monitoring Location
- Estimated Groundwater Flow Direction
- Approximate Location of Abandoned USTs
- Estimated Extent of Petroleum Contaminated Groundwater

Notes:

- Bold text indicates constituent detected at a concentration above the laboratory practical quantitation limit
- Grey shading indicates constituent detected at concentration exceeding MTCA cleanup level

Source(s):

- Bing Maps

Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Definitions:

MTCA = Washington State Department of Ecology Model Toxics Control Act

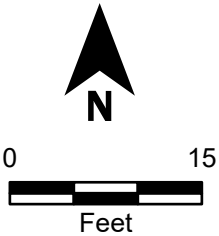
TPH = Total Petroleum Hydrocarbons

TPH-D = TPH as diesel-range organics

TPH-O = TPH as oil-range organics

Total Dx = Sum of TPH-O + TPH-D

SGC = Sample analyzed using silica gel cleanup procedure

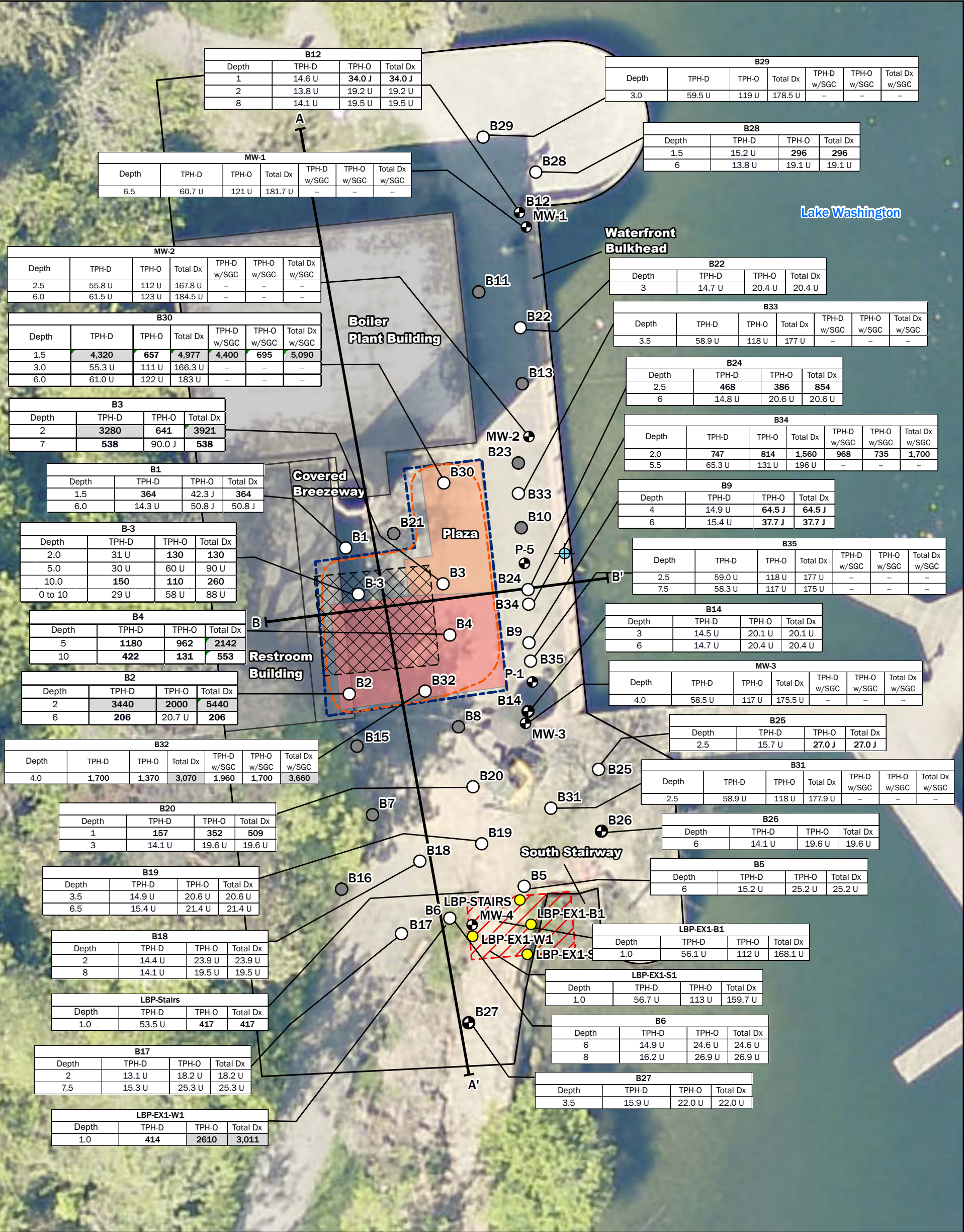


Groundwater Analytical Results - TPH

Luther Burbank Park Upland Improvements
Mercer Island Washington

GEOENGINEERS

Figure 6



Legend

- Boring Location
- Boring Location with No Field Indications of Contamination
- Monitoring Well
- Surface Water Monitoring Location
- Excavation Sample
- Site Boundary

- Estimated Extent of Diesel- and Oil-Range Petroleum Hydrocarbons Exceeding the MTCA Method A Cleanup Level
- Anticipated Alternative 2 Excavation Extent
- Approximate Location of Abandoned USTs
- Approximate Location of August 2023 Stairway Excavation

- Proposed Alternative 2 Excavation to Approximately 3' bgs
- Proposed Alternative 2 Excavation to Approximately 5' bgs

Notes:

- Bold text indicates constituent detected at a concentration above the laboratory practical quantitation limit
- Grey shading indicates constituent detected at concentration exceeding MTCA cleanup level
- Source(s):
- Bing Maps
- Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet
- Disclaimer:** This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Definitions:

MTCA = Washington State Department of Ecology Model Toxics Control Act

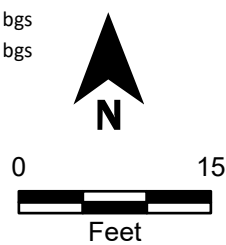
TPH = Total Petroleum Hydrocarbons

TPH-D = TPH as diesel-range organics

TPH-O = TPH as oil-range organics

Total Dx = Sum of TPH-O + TPH-D

SGC = Sample analyzed using silica gel cleanup procedure

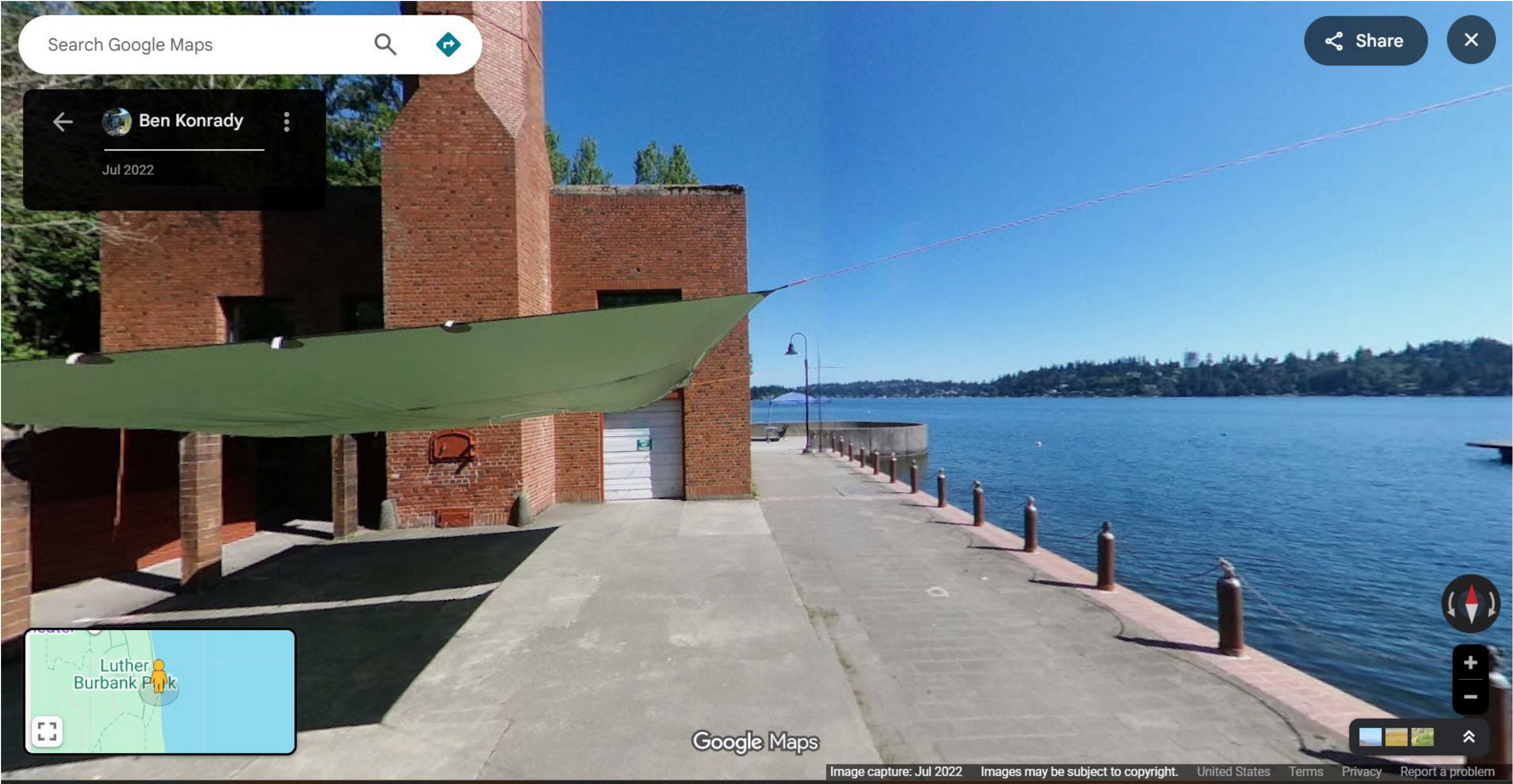


Soil Analytical Results - TPH

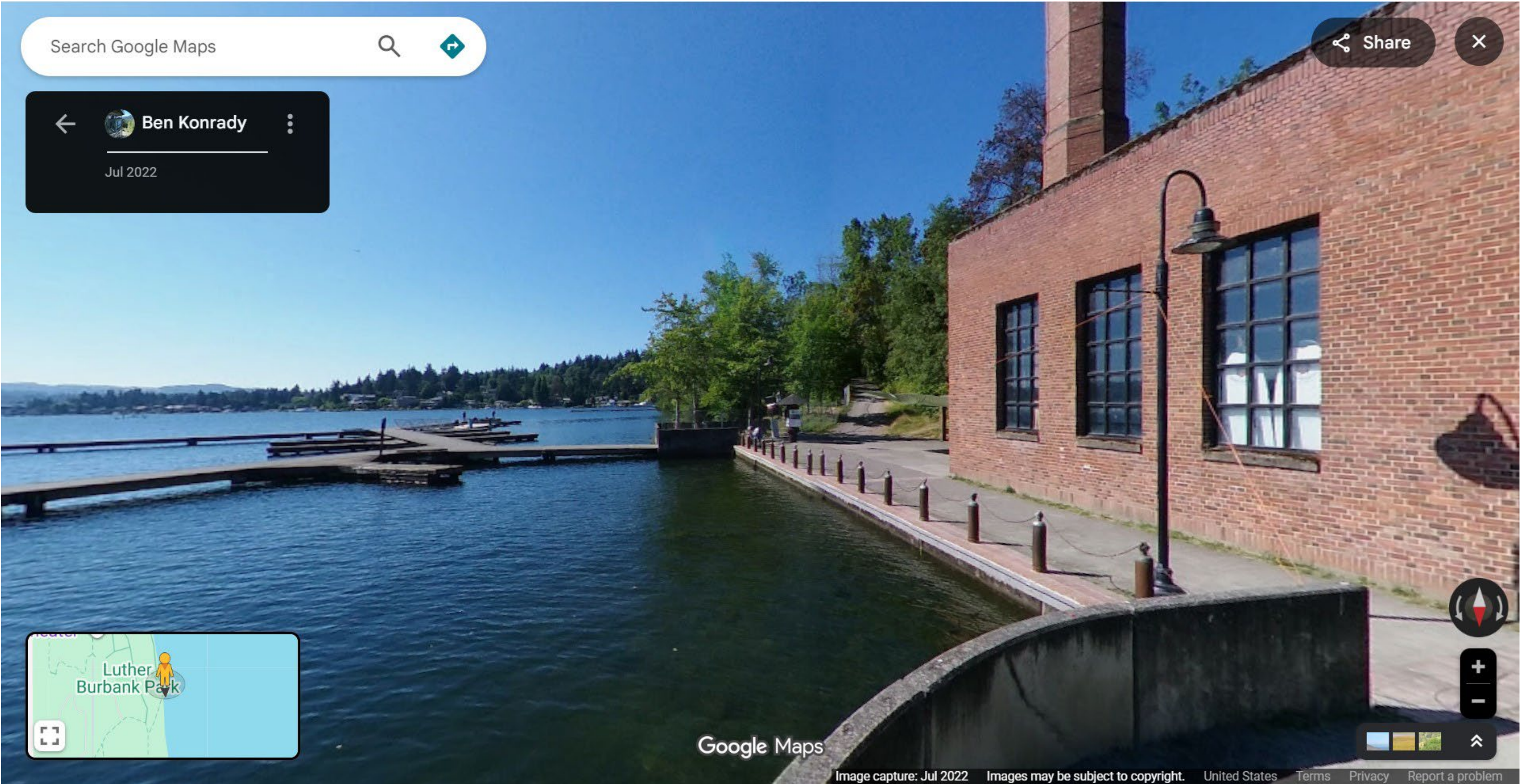
Luther Burbank Park Upland Improvements
Mercer Island Washington



Figure 7



Google Street View – July 2022	Figure 8
Luther Burbank Park – View to North	



Google Street View – July 2022	Figure 9
Luther Burbank Park – View to South	



Google Earth View – June 6, 2025	Figure 10
Luther Burbank Park – Oblique View to North	