

December 22, 2023
File No. 04223059.00

MEMORANDUM

TO: Mike Davis, Clark County Public Health

CC: Joelle Loescher and Tina Kendall, Clark County Public Health

FROM: Barbara E. Lary and Gregory D. Helland, SCS Engineers

SUBJECT: Notification of Landfill Gas Monitoring Network Modifications,
WCI- Vancouver Operations Center, 9411 NE 94th Avenue, Vancouver, Washington

On behalf of Waste Connections, Inc. (WCI), SCS Engineers (SCS) is notifying Clark County Public Health (CCPH) that planned redevelopment changes to the Vancouver Operations Center (9411 NE 94th Street) will require modification of the groundwater and landfill gas (LFG) monitoring network located on the property but associated with the closed Leichner Landfill (Landfill) (Figure 1). The scope of the modifications includes (1) decommissioning compliance landfill gas (LFG) probes GP-03, GP-04, GP-05 and GP-07 (see Figure 1) and (2) decommissioning nested monitoring wells MW-1N, MW-1S and MW-1E (Figure 2), and (3) reinstallation of the above listed wells and probes as needed following construction.

The rationale for making the proposed modifications to the groundwater and LFG monitoring networks noted above are as follows:

- The changes to operations facility include reduction in ground elevation by 1.5 to 3 feet, depending on the location. These probes and wells are completed at higher elevations than the planned land surface for the site improvements.
- There are no Washington Department of Ecology (Ecology) records for the probes or wells, so modifying the probe and well casing and monuments is not an option under Washington regulations; they will all require decommissioning.
- Construction is currently underway and the four LFG probes (GP-3, GP-4, GP-5 and GP-7) are within the active construction footprint and need to be removed as soon as feasible.
- The monitoring wells are not located in the current construction zone and WCI will provide a work plan for submittal to Ecology, requesting approval for decommissioning and replacing the three wells.



FIELDWORK ACTIVITIES

The LFG probe points are 10 to 15 feet in depth and do not intersect groundwater. However, since there are no boring logs on file with Ecology, each of these will need to be over drilled and then backfilled with hydrated bentonite chips. WCI will contract with a driller and schedule removal of these four probe points as soon as the driller's schedule allows. A hollow stem auger rig will be used to over drill each of the probe points. All monuments, backfill and well casing will be removed and the boring backfilled with hydrated bentonite chips. SCS will provide field personnel to oversee this work and ensure the correct probe points are decommissioned and document decommissioning procedures. A letter report documenting this work will be provided to CCPH.

Monitoring well and LFG probe decommissioning and replacement activities will be performed in accordance with Washington Administrative Code (WAC) regulation 173-160, Part 2 (General Requirements for Resource Protection Well Construction and Geotechnical Soil Borings). A licensed drilling contractor will decommission and install the monitoring wells and LFG probes.

WORK PLAN

Since the nested monitoring well is not in the immediate active construction zone, WCI will have SCS prepare a work plan for submittal to Ecology, detailing the proposed decommissioning of the nested monitoring well and proposed well replacement locations, if needed. WCI understands that two of the three monitoring wells were dry and may not need to be replaced. In addition, the work plan would describe how the LFG probes were decommissioned and propose replacement locations for all probes deemed necessary for future monitoring.

The work plan will be developed in coordination with CCPH and submitted to Ecology following review and approval from CCPH and the Lechner Landfill Oversight Committee (LLOC).

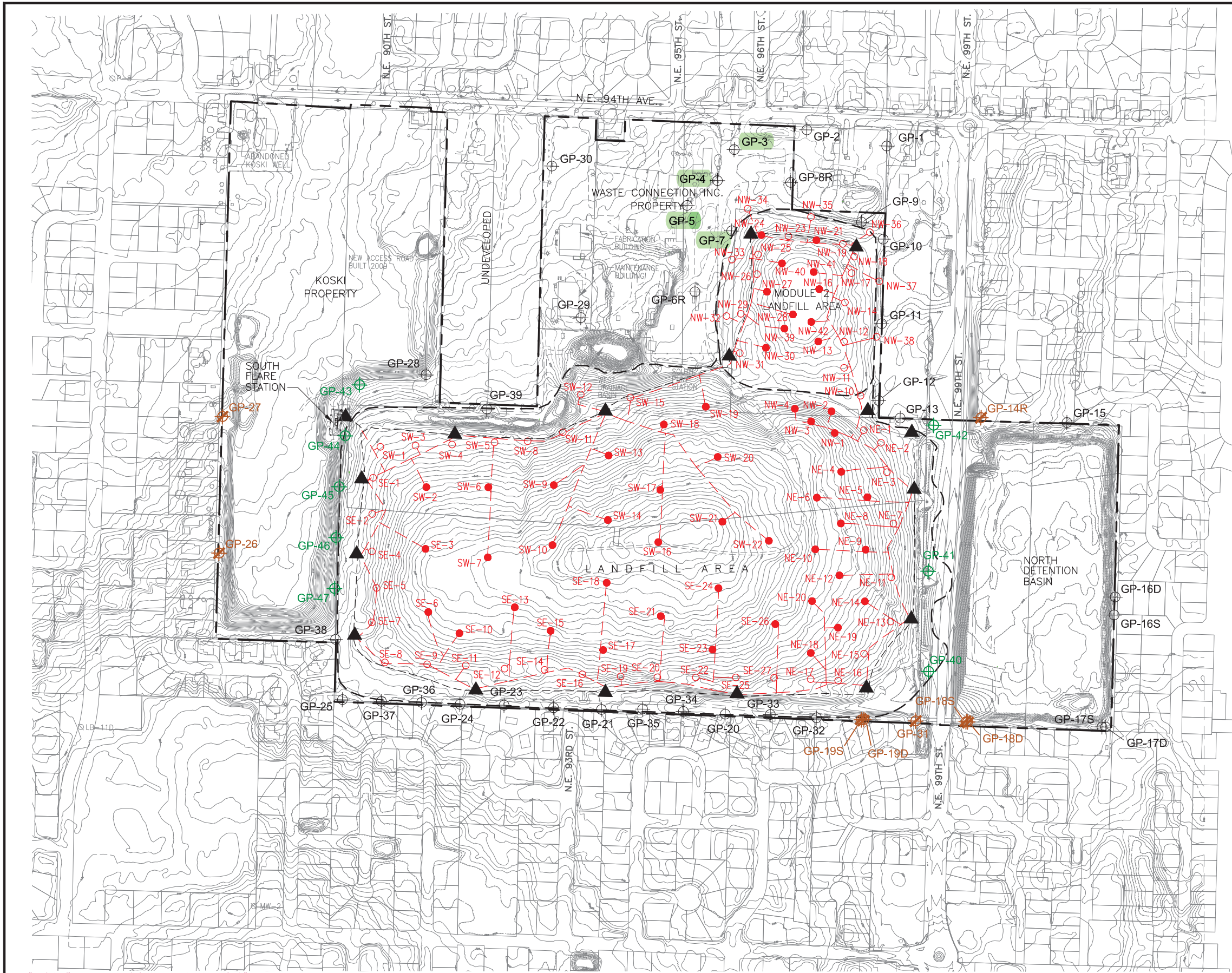
SCHEDULE AND REPORTING

The four probe points are planned to be decommissioned during early January of 2024, following approval by CCPH and LLOC and pending availability of a driller.

A work plan for decommissioning the monitoring wells and replacement of wells and probes will be submitted to CCPH during January for review and submitted to Ecology once it has been approved by all parties. Once Ecology's approval has been obtained, this work will be scheduled with the driller and coordinated with the contractor and onsite activities.

Within 45 days after the monitoring wells are decommissioned in 2024, a report will be submitted to CCPH and Ecology documenting the work. Following installation of the replacement wells and LFG probes, another report will be submitted to CCPH and Ecology.

Attachments: Figure 1 – Landfill Gas Probe Locations
Figure 2 – Groundwater Monitoring Well Locations



LEGEND:

- ⊕ GP-30 Compliance Landfill Gas Monitoring Probe Location
- ⊕ GP-47 New Compliance Landfill Gas Monitoring Probe Location
- ⊗ GP-31 Decommission Landfill Gas Monitoring Probe Location
- SW-1 Vertical Landfill Gas Extraction Well
- SW-2 Extraction Wells Proposed for Additional Data Collection
- ▲ Condensate Sump
- Gas Collection Piping
- Property Boundary
- Limit of Landfill Cover and Approximate Edge of Waste

NOTE:

Topography taken from Clark County GIS, December 2023.



Green highlighted LFG probes are proposed for decommissioning and replacement.

SCS ENGINEERS

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SCALE



PROJECT NO.	04223030.20	DES BY	B.L.
SCALE	AS SHOWN	CHK BY	B.L.
CAD FILE	FIGURE 2	APP BY	L.C.

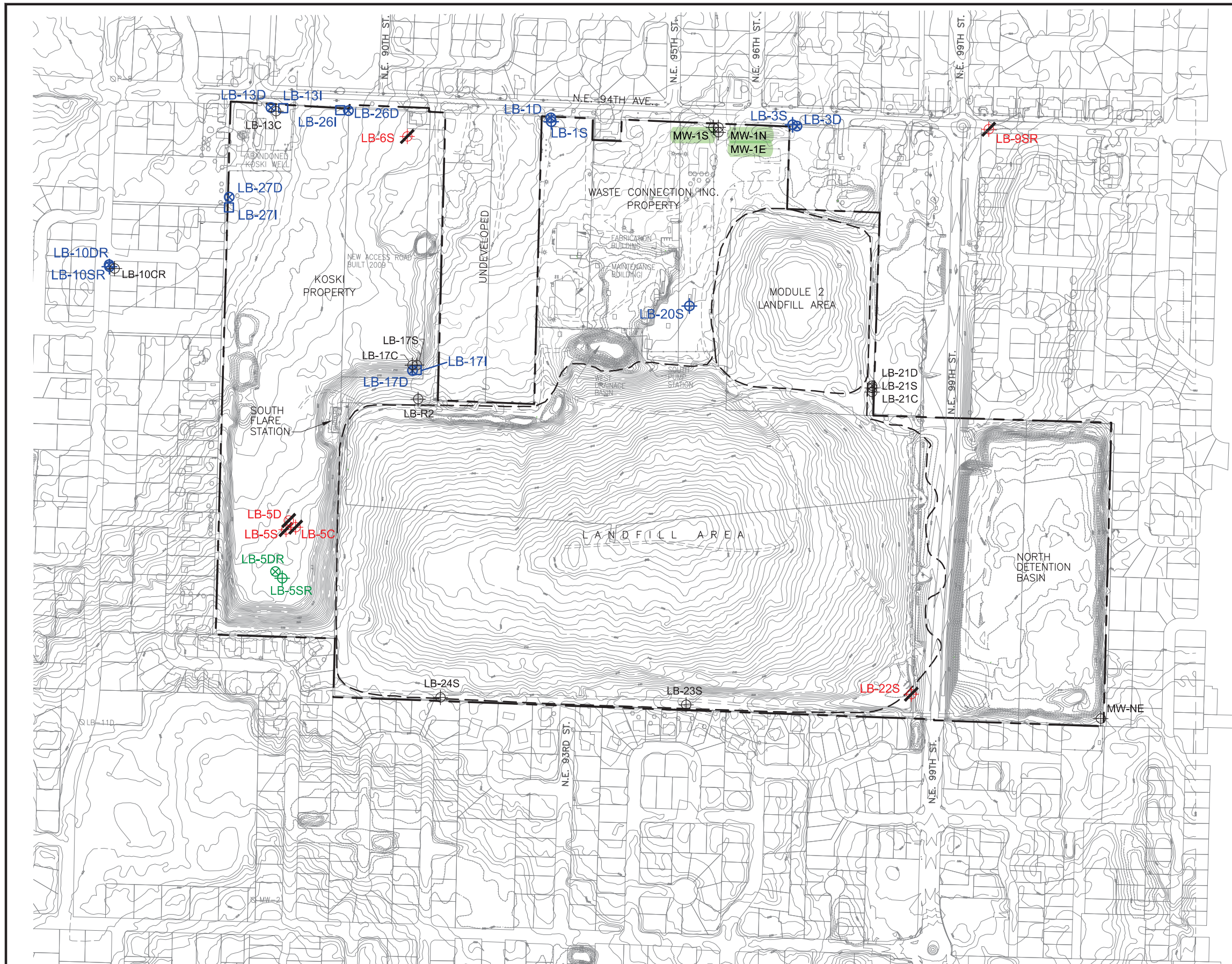
LANDFILL GAS PROBE AND EXTRACTION WELL LOCATIONS

LEICHER LANDFILL
 VANCOUVER, WASHINGTON

DATE
 DECEMBER 2023

FIGURE
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LEGEND:

- LB-5SR ⊕ New Monitoring Well Location, Alluvial Water-Bearing Zone
- LB-5S ⊕ Monitoring Well Location, Alluvial Water-Bearing Zone
- LB-5DR ⊗ New Monitoring Well Location, Troutdale Aquifer
- LB-5D ⊗ Monitoring Well Location, Troutdale Aquifer
- LB-171 □ Monitoring Well Location, Middle of Alluvial Water-Bearing Zone
- LB-22S / Decommissioned Monitoring Well Location
- Property Boundary
- - - - - Limit of Landfill Cover and Approximate Edge of Waste

NOTES:

1. Monitoring wells designated by blue color are compliance monitoring wells.
2. Topography taken from Clark County GIS, December 2023.



Green highlighted wells are proposed for decommissioning and replacement.



PROJECT NO.	04223030.20	DES BY	B.L.
SCALE	AS SHOWN	CHK BY	B.L.
CAD FILE	FIGURE 1	APP BY	L.C.

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