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October 31, 2024

Attn: David Unruh, LHG  
Department of Ecology Toxics Cleanup Program  
15700 Dayton Avenue North  
Shoreline, Washington 98133

and

Amrinder Singh  
Ishaan Group LLC  
9525 14th Avenue South  
Seattle, Washington 98108

Re: Supplemental Subsurface Investigation Work Plan  
South Park Shell  
9525 14<sup>th</sup> Avenue South  
Seattle, King County, Washington 98108  
Terracon Project No. 81247635

Dear Mr. Unruh and Mr. Singh:

Terracon Consultants, Inc. (Terracon) is pleased to submit the Supplemental Subsurface Investigation (SSI) Work Plan for the South Park Shell Property. This work plan is being submitted to the Washington State Department of Ecology (Ecology) for review and opinion as part of the enrollment into the Voluntary Cleanup Program (VCP) and request for an intake meeting.

## 1.0 PROJECT INFORMATION

The property is an approximate 1.02-acre tract of land located at 9525 14<sup>th</sup> Avenue South, Seattle, King County, Washington (King County Tax Parcel No. 562420-0097), hereinafter, the Property. It is Terracon's understanding that the Property is a part of a multi-parcel Site identified by Ecology as All City Auto Wrecking & Sales (herein referred to as the Site). It should be noted that this SSI Work Plan is intended to assess the Property (Western Parcel) only and is not intended to assess any other portions of the Site.

According to the Ecology's February 2023 Periodic Review, the Site was formerly occupied by All City Auto Wrecking & Sales, which is located off State Highway 99 in

Seattle, King County, Washington. The former address was 9438 Des Moines Way South. Currently, there are two addresses for the Site: 9525 14th Avenue South and 9510 14th Avenue South.

The Site reportedly operated as an auto wrecking yard for approximately 40 years. The two parcels cover a total of approximately 56,000 square feet and are noncontiguous. The two parcels include:

- King County tax parcel 5624200097, addressed 9525 14th Avenue South (Western Parcel), herein referenced as the South Park Shell Property. It is about two-thirds of the total Site area and included the former parts storage and disassembly building (also formerly a grocery store and tavern). This parcel contained the majority of the wrecked cars, motor-core and transmission-core storage, and other parts storage. Currently, the Property is operating as a Shell branded gasoline station and mini-mart with an auxiliary storage building and a drive-thru espresso booth.
- King County tax parcel 5624200091, addressed 9510 14th Avenue South (referred to as the Eastern Parcel). It included a small office building and approximately 20 to 30 wrecked cars. Currently, Vitalitree (an arborist company) occupies the Eastern Parcel.

Based on Terracon's review of the Ecology's February 2023 Periodic Review, the wrecking yard operated from at least 1965 to 1996 during which time releases to the soil and groundwater of petroleum and petroleum-related constituents occurred. Subsurface investigations were conducted at the Property and the Eastern Parcel in 1997 and 1999 by Terra Associates and Floyd & Snider, Inc. (FSI). Of the 15 soil borings advanced by FSI, samples from two borings in the northern portion of the Property were analyzed for gasoline-range total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylenes (BTEX), and samples from all 15 borings were analyzed for diesel- and oil-range TPH and lead. Diesel- and oil-range TPH and lead were detected in soil in multiple locations at concentrations above the 1999 Washington State's Model Toxics Control Act (MTCA) industrial cleanup levels (CULs). Gasoline-range TPH and benzene were reported above the 2024 MTCA Method A CULs for one soil sample. Three permanent groundwater monitoring wells were installed at the Property (MW-1 through MW-3), and one was installed on the Eastern Parcel (MW-4). Diesel-range TPH, arsenic, and lead were also detected in groundwater at concentrations above their respective CULs.

According to the Periodic Review, cleanup activities at the site were completed by FSI in 1999. Remedial excavations and subsequent confirmation sampling were completed in areas with soil impacts identified during the subsurface investigations. Approximately 200 cubic yards (cy) of impacted soil was removed from the Property and the Eastern Parcel and exported for disposal. Confirmation samples were analyzed only for diesel-range TPH and lead, and reported concentrations of analytes were below industrial CULs.

However, diesel-range TPH and/or lead were reported at concentrations above 2024 Method A CULs in 12 of the 20 soil samples left in place by FSI, and confirmation samples were not analyzed for other compounds (e.g. gasoline-range TPH, BTEX). Well MW-2 was removed during excavation activities and replacement well MW-2R was subsequently installed nearby. A Restrictive Covenant was implemented at the Site in 1999, and Ecology issued a No Further Action (NFA) opinion for cleanup of the Site.

Since construction of the current South Park Shell gasoline station in 2000 at the Property and issuance of the NFA, Ecology conducted periodic reviews of the Site. During their 2023 periodic review, Ecology identified the following outstanding data gaps at the Property (Western Parcel):

- MTCA Method A soil CULs for industrial land uses were selected for the Site in 1999. Although the Site parcels are zoned industrial by King County, the Site does not meet the definition of an industrial property, per WAC 173-340-745; therefore, Method A soil CULs for unrestricted land uses should apply.
- Arsenic exceeded the MTCA Method A CUL and the regional natural background value in well MW-3. While prior reports indicated that the elevated arsenic concentrations were similar to area background, the samples used for the area background evaluation were collected from monitoring wells at nearby industrial and commercial facilities and open drainage ditches along streets (stormwater). The sampling locations did not meet the criteria to be background samples. Furthermore, cleanup levels can only be adjusted to natural background, not area background. The source could also be from the petroleum releases at the Site mobilizing arsenic into the groundwater or other former auto wrecking activities. Based on the limited available data, the source and extent of arsenic-contaminated groundwater is unknown.
- Lead exceeded the MTCA Method A CUL during the last sampling event in 1999 in well MW-2R. The extent of lead-contaminated groundwater is unknown. Groundwater contamination at the Site has not been adequately characterized for nature and extent, in accordance with MTCA requirements.

Based on the findings of their 2023 periodic review, Ecology rescinded the NFA designation on August 17, 2023, with the Restrictive Covenant remaining active, and recommended that the Property owner re-enroll in the VCP and complete additional characterization and/or cleanup actions required to comply with MTCA.

Therefore, at the request of the Property owner, Ishaan Group LLC (Client), Terracon has prepared this SSI Work Plan to complete additional investigation activities in an effort to further characterize the Property and address the data gaps identified in Ecology's August 2023 recession letter. In addition, this SSI will also assess for a release associated with the current on-Property fueling operations in an effort to separate the

previously documented impacts associate with historical operations from the current operations in the event a release has occurred.

## 2.0 SSI WORK PLAN

This SSI is intended to assess the potential environmental impacts that may be present as a result of current on-Property fueling operations and to also assess potential impacts on-Property associated with the prior documented releases, but is limited to the Property boundaries. This proposed limited assessment is not intended to delineate the extent of off-Property impacts, if present. It should be noted that based on the findings of this investigation, additional investigation may be warranted to assess the extent of on-Property impacts.

### Underground Utility Locating and Geophysical Survey

Terracon will mobilize to the Property to oversee a subcontracted utility location service to identify the locations and depths of the various utilities located near the proposed borings and a subcontracted geophysical professional to complete the geophysical survey at the Property in the selected locations. The survey will include a non-destructive, geophysical survey of the Property using ground-penetrating radar (GPR) and magnetometer survey methods. The purpose of the survey is to attempt to determine the location of potential additional tanks and/or piping associated with the former on-Property operations, hoists, and suspect excavations and/or other anomalies that may be present. The geophysical survey will consist of scanning the areas of interest with an electromagnetic (EM) instrument with a follow-up survey using GPR to further evaluate EM anomalies, if present. We anticipate completing the geophysical survey at least five day(s) prior to drilling activities.

### Soil Sampling

Sixteen soil borings, identified as B1 through B12 and MW-5 through MW-8, will be advanced on-Property. Soil borings will be completed by a subcontracted Washington State-licensed driller utilizing hand tools and a direct push technology (DPT) drill rig. Due to the potential presence of subsurface product lines and/or utilities, soil borings located in the immediate vicinity of the existing USTs and/or dispenser islands will be cleared with hand tools to approximately 5 feet bgs prior to the advancement of drill rig tooling. Seven soil borings, identified as B7 through B9 and MW-5 through MW-8, will be advanced to a maximum depth of 15 feet bgs, five feet into groundwater, or refusal, whichever occurs first. Nine soil borings, identified as B1 through B6 and B10 through B12, will be advanced to five feet bgs. The proposed boring locations are presented with respect to Property features on a Property Diagram, which is attached as Exhibit 1.

Twenty soil samples, two each from soil borings B7, B8, B9, and MW-6 and one each from the remaining 12 borings, will be submitted for laboratory analyses. At least one additional sample will be collected from each boring and submitted to the laboratory on hold. The 20 soil samples will be submitted for laboratory analysis to be analyzed for gasoline-, diesel-, and oil-range TPH by NWTPH Method Gx/Dx, VOCs by EPA Method 8260, metals (arsenic, lead, cadmium, chromium) by EPA 6010/7470/7471, and cPAHs by EPA Method 8270.

The proposed boring locations may be modified in the field in response to the geophysical survey or to account for access limitations and/or Property conditions. Investigation and sample collection procedures will be conducted in accordance with local industry standard practices. Temporary investigation locations will be plugged and abandoned in accordance with applicable state requirements.

## Permanent Monitoring Well Installation and Groundwater Sampling

Upon completion of drilling activities, borings MW-5 through MW-8 will be converted to permanent groundwater monitoring wells to facilitate the collection of representative groundwater samples. The anticipated well construction will be completed in accordance with Chapter 173-160 Washington Administrative Code (WAC) *Minimum Standards For Construction and Maintenance of Wells*. The groundwater monitoring well will be constructed as follows:

- Ten feet of two-inch diameter, 0.010-inch machine slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap
- A two-inch diameter, threaded, flush-joint PVC riser pipe to surface
- Pre-sieved 10/20 grade silica sand for annular sand pack around the well screen from the bottom of the boring to approximately two feet above the top of the well screen and overlain by hydrated bentonite chips and concrete
- A lockable plug secured with a ground surface flush monument plate

Following installation, the top of casing (TOC) of the four new groundwater monitoring wells and the three existing on-Property groundwater monitoring wells previously installed will be surveyed by a licensed surveyor to a referenced and established datum.

To reduce the risk that turbid groundwater will be collected at the time of sampling, all on Property groundwater monitoring wells (i.e., four new wells and three existing wells) will be developed by the driller by surging with a decontaminated, electric down-hole submersible pump to remove turbid groundwater.

Prior to sampling, all the groundwater monitoring wells located at the Property will be gauged to determine the static groundwater elevations. The groundwater monitoring

event will include collecting groundwater samples from each of the four new permanent groundwater monitoring wells and collecting samples from each of the three existing permanent groundwater monitoring wells using dedicated tubing and a peristaltic pump utilizing low-flow sampling techniques. In order to facilitate groundwater monitoring wells to equilibrate with surrounding aquifer conditions, Terracon will wait up to 48 hours following groundwater monitoring well development prior to the collection groundwater samples.

Prior to groundwater sample collection, each monitoring well will be purged with a peristaltic pump. During the purging process, groundwater quality parameters including temperature, electrical conductivity (EC), pH, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) will be measured at regular intervals using a water quality meter. Purging at a given well will be considered complete when three consecutive readings for EC, pH, turbidity, DO and ORP are observed within 10% of one-another.

Once purging at a given well has been completed, a groundwater sample will be collected for laboratory analyses. During the collection of the groundwater samples, the discharge will be maintained at the same flow rate as used for low-flow purging. Investigation and sample collection procedures will be conducted in accordance with local industry standard practices.

A maximum of seven groundwater samples will be submitted for laboratory analysis of gasoline-, diesel-, and oil-range TPH by NWTPH Method Gx/Dx, VOCs by EPA Method 8260, metals (arsenic, lead, cadmium, chromium) by EPA 6010/7470/7471, and cPAHs by EPA Method 8270.

## Preparation of SSI Report

Following Property activities and receipt of the laboratory analytical results, a report will be prepared that will include the following:

- Documentation of field activities;
- Site plan showing pertinent Property features;
- Soil boring logs;
- Analytical laboratory results;
- Conceptual Site Model;
- Data evaluation and presentation of findings; and,
- Recommendations concerning further action, if necessary.

The final written report will reflect results, findings, and recommendations, and, as such, will take precedence over any verbal reports that Terracon personnel may have provided.

The analysis, comments and recommendations presented in the final written report will be based on the information collected as discussed in this work plan.

### 3.0 CLOSING

Terracon respectfully requests Ecology's review and approval of this SSI Work Plan. If you have any questions or comments pertaining to the material presented herein, please contact the undersigned.

Sincerely,

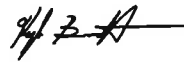
**Terracon Consultants, Inc.**



Jeff Dobbins, L.G.  
Senior Staff Geologist



Matt Wheaton, L.G. P.E.  
Senior Principal

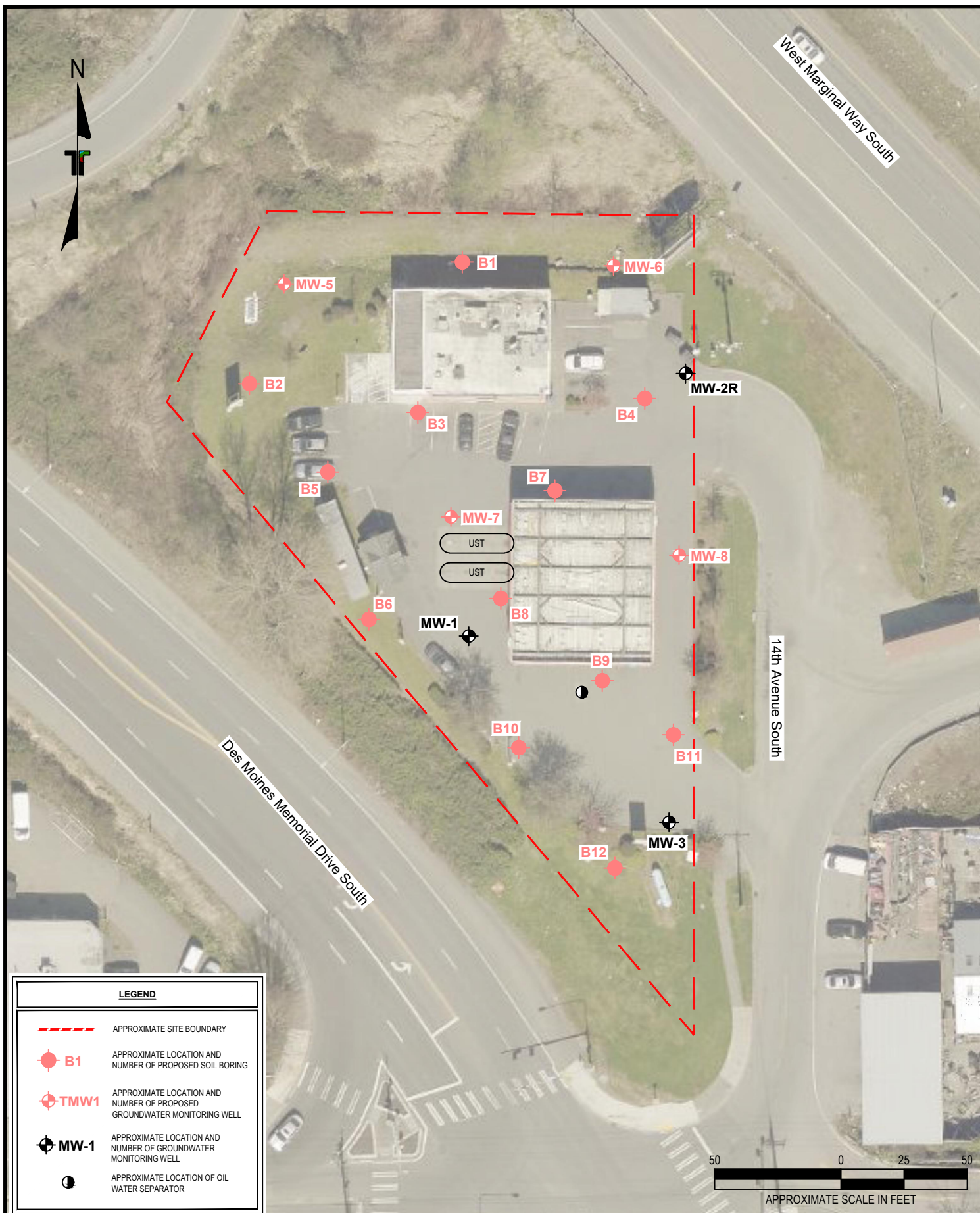


Kyle Bennett, L.G.  
Group Manager



Attachment: Exhibit 1 – Site Diagram





Project Mngnr:	KSB
Drawn By:	JWD
Checked By:	KSB
Approved By:	MYW
Project No.	81247635
Scale:	AS SHOWN
File No.	Exhibit 1
Date:	October 2024



**SITE DIAGRAM**  
South Park Shell  
9525 14th Avenue South  
Seattle, Washington

**EXHIBIT**  
1