

June 19, 2017

Ms. Carol Johnston
Site Manager
Washington State Department of Ecology
Toxics Cleanup Program
P.O. Box 47775
Olympia, Washington 98504-7775

Project: **Work Plan**
 Main Street Grocery
 901 Martin Luther King Jr. Way
 Tacoma, Washington 98405-4149
 AEG Project# 16-144
 Ecology VCP# SW1481

Dear Ms. Johnston:

Associated Environmental Group, LLC (AEG) has prepared this Work Plan for completing a subsurface investigation at the Main Street Grocery, located at the above-referenced address in Tacoma, Washington (Site).

In accordance with Washington Administrative Code (WAC) 173-340 – Model Toxics Control Act (MTCA) and the information provided in an opinion letter, dated January 20, 2016, by the Washington State Department of Ecology (Ecology), AEG will investigate the location of subsurface source areas via a geophysical survey, and evaluate potential impacts to soil and groundwater throughout the Site. The objective of this investigation is to provide Ecology with an accurate assessment of the Site to be able to identify appropriate options for cleanup, if needed, or to be able to demonstrate that no further action is warranted. The general location of the Site is shown in Figure 1, *Vicinity Map*. Figure 2, *Site Map*, presents the current layout of the Site and location of previous subsurface investigation.

SCOPE OF WORK

AEG's scope of work (SOW) would include the following primary tasks: Geophysical Survey; and Subsurface Investigation and Reporting. These tasks are described in greater detail as follows:

Geophysical Survey

AEG will mobilize to the Site and perform a ground penetrating radar (GPR) survey to identify the location of a closed-in-place underground storage tank (UST) and any associated piping or other anomalies that may be present on Site. Specific tasks associated with these activities include the following:

- Coordinate with Site representatives to schedule the work and arrange for access to the areas to be investigated.
- Arrange to have Applied Professional Services, Inc. (APS) perform a GPR survey to identify whether any additional USTs and associated piping may be present on Site.

Subsurface Investigation

Specific tasks associated with subsurface investigation activities include the following:

- Arrange for public and private utilities to be located.
- Provide oversight during the advancement of six soil borings throughout the Site. Each boring will be advanced to a total depth of 20 feet below ground surface (bgs). Soil samples will be collected at 5-foot intervals. Groundwater will be collected (if encountered) prior to backfilling the boring. Up to two soil samples and one groundwater sample will be collected from each boring location. The locations of the proposed borings will be dependent on the results of the geophysical survey. However, it is anticipated that boring locations will include the vicinity of a closed-in-place UST, the eastern corner of the canopy, as well as previous sampling locations where either the required analyses were not performed or the extent of detected constituents had not been adequately defined.
- Continuously log the subsurface media during the advancement of all borings. Soil samples will be observed to document soil lithology, color, moisture content, and sensory evidence of impairment. Soil samples will be classified in the field and field-screened utilizing a Photoionization Detector (PID) to facilitate the selection of appropriate soil samples to be submitted to the analytical laboratory.
- Collect all soil and groundwater samples in laboratory-provided containers. The containers will be labeled and placed in a portable chilled ice chest and transported to the laboratory following standard chain-of-custody procedures.
- Submit samples to a Washington State-accredited analytical laboratory for analysis for the following parameters:
 - Diesel- and oil-range petroleum hydrocarbons (TPH) using Northwest Method NWTPH-Dx/Dx Extended.
 - Gasoline-range TPH using Northwest Method NWTPH-Gx.

- Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, methyl tert-butyl ether (MTBE), and ethylene dichloride (EDC) using EPA Method 8260.
- Ethylene dibromide (EDB) using EPA Method 8011.
- Submit selected samples to a Washington State-accredited analytical laboratory for analysis for the following additional parameters:
 - Polycyclic aromatic hydrocarbon (PAHs) using EPA Method 8270.
 - Lead using EPA Method 6020 (including dissolved lead in groundwater).

AEG will compile the analytical results and create a Subsurface Investigation Report summarizing the results of the geophysical survey, and the soil and groundwater data collected from the Site. The report will include Site figures and cross-sections illustrating the extent of contamination, as well as tables summarizing the data collected to date.

A Washington State licensed geologist will perform all work. All reports generated by AEG will be reviewed by a Washington State licensed hydrogeologist.

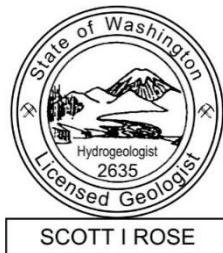
AEG anticipates completing field work within 2 to 3 weeks following Work Plan approval. This schedule can be impacted by factors outside the control of AEG, including changes in project information material to the analysis.

If you have any questions or concerns regarding this Work Plan, please do not hesitate to contact our office at (360) 352-9835.

Sincerely,

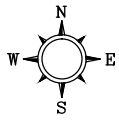


Scott Rose, L.H.G.
Senior Hydrogeologist

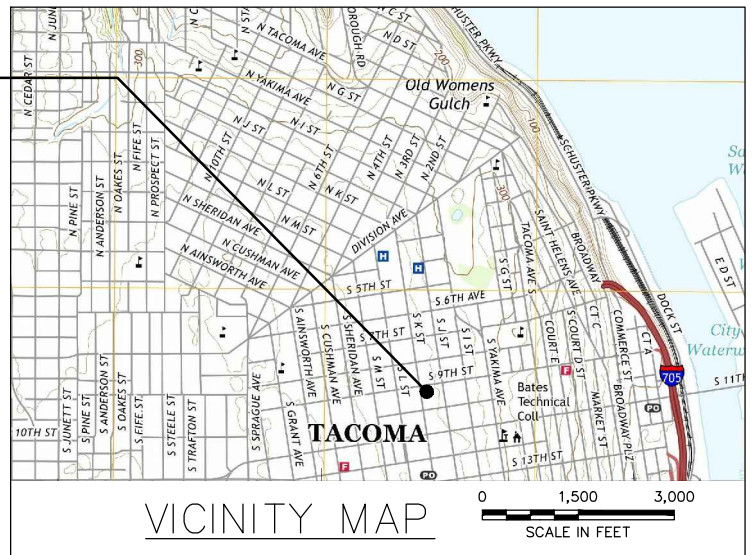


Attached: Figure 1 – *Vicinity Map*
 Figure 2 – *Site Map*

FILENAME	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
16-144_1702.DWG	ICD	6/15/2017	NP	6/15/2017



PROJECT LOCATION



NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.
VICINITY IMAGE SOURCE: U.S. GEOLOGICAL SURVEY-2017, 7.5 MINUTE QUADRANGLE MAP
TACOMA NORTH, WASHINGTON



0 50 100
SCALE IN FEET



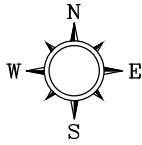
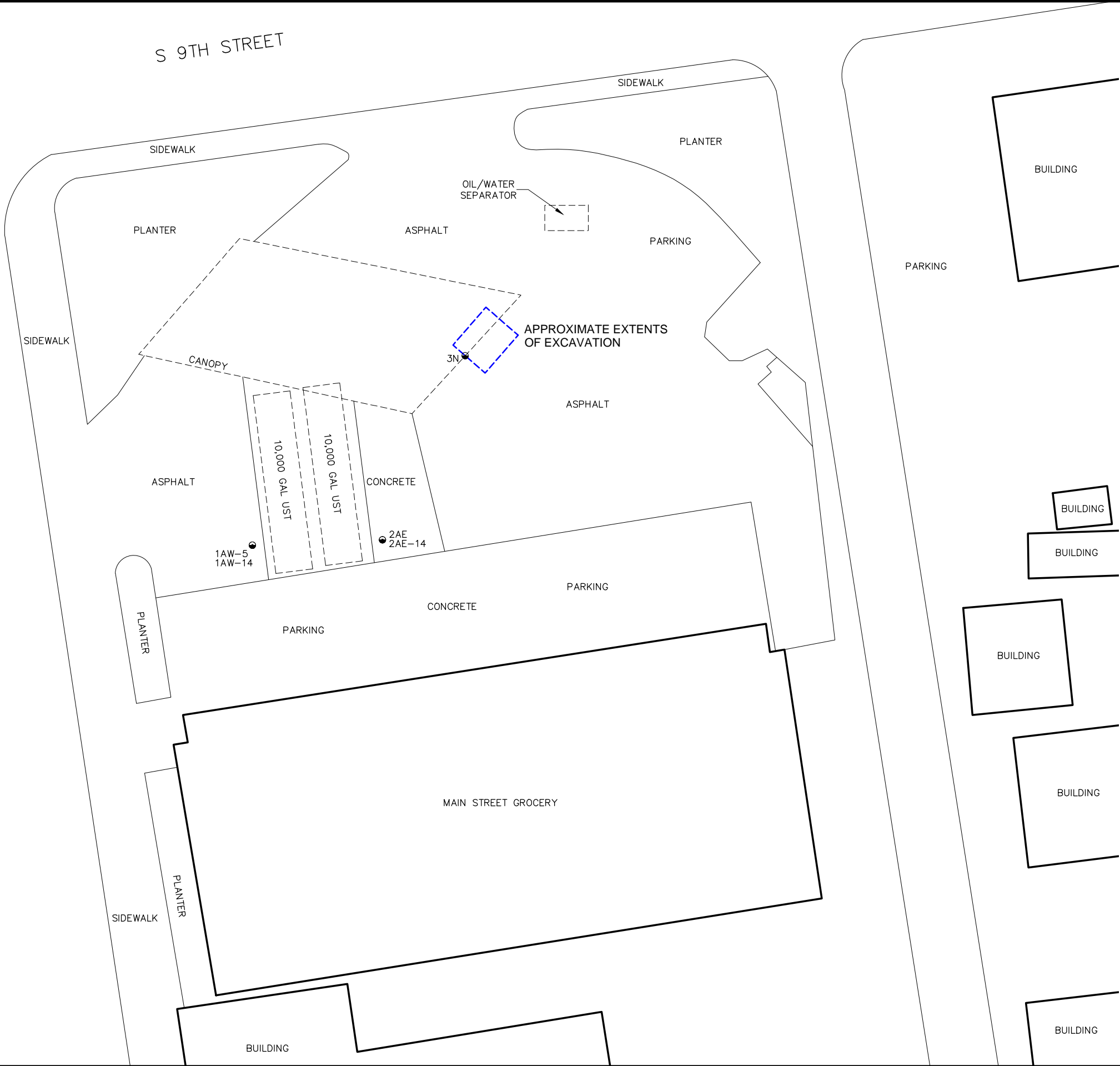
FIGURE 1

VICINITY MAP

MAIN STREET GROCERY
901 MARTIN LUTHER KING JR. WAY
TACOMA, WASHINGTON

FILENAME	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
16-144_1702.DWG	ICD	NP	NP	16-144
	6/15/2017	6/15/2017	6/15/2017	

MARTIN LUTHER KING JR. WAY



LEGEND	
2AE ●	SOIL SAMPLING LOCATION
---	APPROXIMATE EXTENTS OF EXCAVATION

- NOTES
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FIGURE 2
SITE MAP

MAIN STREET GROCERY
901 MARTIN LUTHER KING JR. WAY
TACOMA, WASHINGTON