STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

January 14, 2014

Mr. Gary Dyson
20072 N Organ Pipe Dr
Surprise AZ 85374-4623

Re: Further Action at the following Site:

- **Site Name:** AAMCO Transmissions
- **Site Address:** 2728 Martin Way, Olympia, WA
- **Facility/Site No.:** 39192823
- **Cleanup Site No.:** 12240
- **VCP Project No.:** SW1335

Dear Mr. Dyson:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the AAMCO Transmissions facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

YES. Ecology has determined that further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

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

- Petroleum constituents into the soil.

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. *Phase II Environmental Site Assessment Report*, Stemen Environmental, Inc., January 7, 2011.

2. *Hydraulic Lift Removal and Remedial/Corrective Actions Report*, Stemen Environmental, Inc., April 10, 2011.

3. *Groundwater Sampling Event Report*, Stemen Environmental, Inc., April 24, 2011.

4. *Groundwater Sampling Event Report*, Stemen Environmental, Inc., September 9, 2011.

5. *Groundwater Sampling Event Report*, Stemen Environmental, Inc., April 20, 2012.

These documents are kept in the Central Files of the SWRO Regional Office of Ecology (SWRO) for review by appointment only. You may make an appointment by calling the SWRO resource contact at (360) 407-6365.

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

Analysis of the Cleanup

Ecology has concluded that **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is not sufficient to establish cleanup standards and select a cleanup action.

The Site is located at 2728 Martin Way East, Olympia, Thurston County, Washington (Figure 1). The Site is 0.49 acres and is used as a commercial property. It is bounded on the south by Martin Way East, on the east by Indian Creek, on the west by commercial properties, and on the north by an undeveloped area covered with vegetation. The surrounding area is light industrial/commercial/retail businesses and residential properties.

The current building was constructed in 1980. The rest of the property is paved and used for vehicle parking.

Four underground storage tanks (USTs), installed in 1980, were used for storage of gasoline, used oil, and transmission fluid. They were removed from the Site in 1989. No report detailing this work was available for Ecology review. An UST Closure/Site Assessment form submitted to Ecology did not note any contamination. Six in-ground hydraulic hoists are located in the building on Site. Five have been abandoned in place and one was in use until removed during recent remediation work. In previous years, an oil/water separator and a storm water management system was located on the eastern portion of the Site.

In October 2006, a complaint was received by Ecology alleging that the oil/water separator was not properly maintained. An investigation by the Thurston County Health Department found that the function of the oil/water separator and the storm water system was questionable. Another finding of the investigation was that portions of the oil/water separator and storm water system were not properly connected to the public sewer system.

The oil/water separator and a drywell were excavated in 2006 and over 290 tons of petroleum contaminated soils removed from the Site. Laboratory results confirmed that no petroleum-contaminated soils remained in the excavation. No groundwater was encountered in the excavation. The excavation was backfilled and compacted. No report detailing this work was available for Ecology review.

On January 21, 2011, 11 borings were advanced at the Site (Figure 2). Six borings were advanced in the area of the hoists (samples locations HDL). Samples collected in these borings were analyzed only for Total Petroleum Hydrocarbons-Diesel (TPH-D) and Total Petroleum Hydrocarbons-Lube Oil (TPH-LO). The sample collected at 8 feet bgs at Hoist 5 (location HDL-5) had TPH-LO at 31,000 milligrams per kilogram (mg/kg), which is above the Method A cleanup level of 2,000 mg/kg. The sample collected near Hoist 6, HDL06, had TPH-LO at 1,600 mg/kg. One other detection of 200 mg/kg TPH-LO was found at Hoist 2.

Three borings were advanced in the location of the former USTs. Total depth reached was 16.5 feet below ground surface (bgs). Soil samples collected were analyzed for Total Petroleum Hydrocarbons-Gasoline (TPH-G), TPH-D, and benzene, toluene, ethylbenzene, and xylenes (BTEX). Sample T3-10 at 10 feet bgs had TPH-G at 170 mg/kg. This detection was above the Method A cleanup level of 100 mg/kg. This value was used since benzene has not been detected in any samples.

Two borings were advanced in the area of the former dry well and oil/water separator. Samples were analyzed only for TPH-D and TPH-LO, neither of which was found above Method A cleanup levels.

Groundwater was encountered at approximately 12 feet bgs in one boring at the former UST location and one at the location of the former dry well and oil/water separator. Samples collected were analyzed for TPH-G, TPH-D, TPH-LO, BTEX, and lead (Pb). The results were all non-detect for petroleum. One detection of total Pb was found at 6.5 micrograms per liter (µg/l), below the Method A cleanup level of 15 µg/l.

In late March 2011, excavation of the former Hoist 5 was commenced. During excavation in this area, a large amount of concrete and asphalt debris was encountered to approximately 9 feet bgs. The debris was commingled with the petroleum-contaminated soil and stockpiled on Site.

After removal of all apparent contamination in the Hoist 5 area, confirmation samples were collected at the furthest extent of the excavation and analyzed for TPH-D and TPH-LO. Results confirmed that TPH-D and TPH-LO contamination had been removed to concentrations below Method A cleanup levels in the western most portion of the excavation.

Due to stability concerns, the Hoist 5 area was backfilled before excavation of Hoist 6 was started. Concrete and asphalt debris was again encountered in the excavation of this hoist. After removal of the hoist system, all apparently contaminated soil was removed and confirmation samples collected. One sample, NF-HDL6, was found to have contamination above the cleanup level. The area was over excavated and resampled. This sample confirmed that the contamination had been successfully removed. The deepest point in the excavation was approximately 12 feet bgs. At the lowest portions of the excavation, water started to seep in. It was not sampled. The excavation was then backfilled with clean fill.

The former UST area that had previously been found to be contaminated with petroleum was then excavated. Again, large chunks of asphalt and concrete were found in this area. The debris was stockpiled along with the contaminated soil. The excavation was extended to 12 feet bgs where apparently clean soil was found. Three confirmation samples were then collected at the excavation base and analyzed for TPH-G and BTEX. The only detection was TPH-G at 11 mg/kg, well below the cleanup level. Excavation and sampling locations are shown in Figure 3.

A total of 267.26 tons of contaminated soil was transported to Wasco County Landfill, The Dalles, Oregon for disposal.

In April 2011, three groundwater monitoring wells were installed to approximately 20 feet bgs. Screens were set at 10-20 feet bgs. Locations of the wells are shown in Figure 4. The text does not mention any soil samples collected during well installation. After the wells were developed, groundwater samples were collected and analyzed for TPH-G, TPH-D, TPH-LO, and BTEX. Although depth to groundwater information has been collected, the wells have not been surveyed so determination of groundwater flow direction has not been

made. It is assumed to flow east toward Indian Creek and the wells were located using this assumption.

To date, three rounds of groundwater samples have been collected and all results have been non-detect.

Based on the review of the above-listed reports, Ecology has the following comments:

1. Soil samples were not analyzed consistent with Table 830-1 (enclosed) for TPH-G, BTEX in the area of the dry well and oil/water separator.

2. In accordance with WAC 173-340-7490, a Terrestrial Ecological Evaluation (TEE) needs to be completed for the Site. Please fill out the TEE form and any supporting information (as appropriate) and submit it to Ecology. The form can be found on our website at http://www.ecy.wa.gov/biblio/ecy090300.html.

3. In accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840 (Data Submittal Requirements), data generated for Independent Remedial Actions shall be submitted simultaneously in both a written and electronic format. For additional information regarding electronic format requirements, see the website http://www.ecy.wa.gov/eim. Be advised that according to the policy, any reports containing sampling data that are submitted for Ecology review are considered incomplete until the electronic data has been entered. Please ensure that data generated during on-site activities is submitted pursuant to this policy. **Data must be submitted to Ecology in this format for Ecology to issue a No Further Action determination.** Please be sure to submit the previous data not submitted yet, as well as any future data, in this format. Be advised that Ecology requires up to two weeks to process the data once it is received.

2. Establishment of cleanup standards.

a. Cleanup levels

MTCA Method A Cleanup Levels for unrestricted land use for soil and groundwater are being used to characterize the Site.

b. Points of compliance

Standard points of compliance are being used for the Site. The point of compliance for protection of groundwater shall be established in the soils throughout the Site. For soil cleanup levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance

shall be established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for groundwater shall be established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site does not meet the substantive requirements of MTCA.

Excavation of contaminated soil was selected as the remedy for the Site soils. Groundwater monitoring was selected to determine any impacts to groundwater. Additional actions are warranted to determine whether these cleanup actions were sufficient.

4. Cleanup.

Ecology has determined the cleanup you performed does not meet any cleanup standards at the Site.

Cleanup actions taken at the Site to date consist of excavation of petroleum-contaminated soil with off-Site disposal. A total of 267.26 tons of contaminated soil was disposed of at the Wasco County Landfill outside of The Dalles, Oregon in 2013.

Groundwater monitoring wells were installed to determine if contamination had impacted groundwater.

Additional actions are warranted to determine whether these cleanup actions were sufficient.

Limitations of the Opinion

1. 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 70.105D.040(4).

2. **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* RCW 70.105D.080 and WAC 173-340-545.

3. **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 70.105D.030(1)(i).

Contact Information

Thank you for choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion, please contact me by phone at (360) 407-6263 or e-mail at cjoh461@ecy.wa.gov.

Sincerely,

Carol A. Johnston
SWRO Toxics Cleanup Program

CAJ/ksc:AAMCO Site FA 01162014

Enclosures (5 figures)

By certified mail: (7012 2210 0002 6581 0676)

cc: Arlene Woodring, Woodring Olympia LLC, PO Box 21555, Mesa AZ 85277
Paul Stemen, Stemen Environmental, PO Box 3644, Lacey WA 98509
Gerald Tousley, Thurston County Health
Scott Rose, Ecology
Dolores Mitchell, Ecology (w/o enclosures)

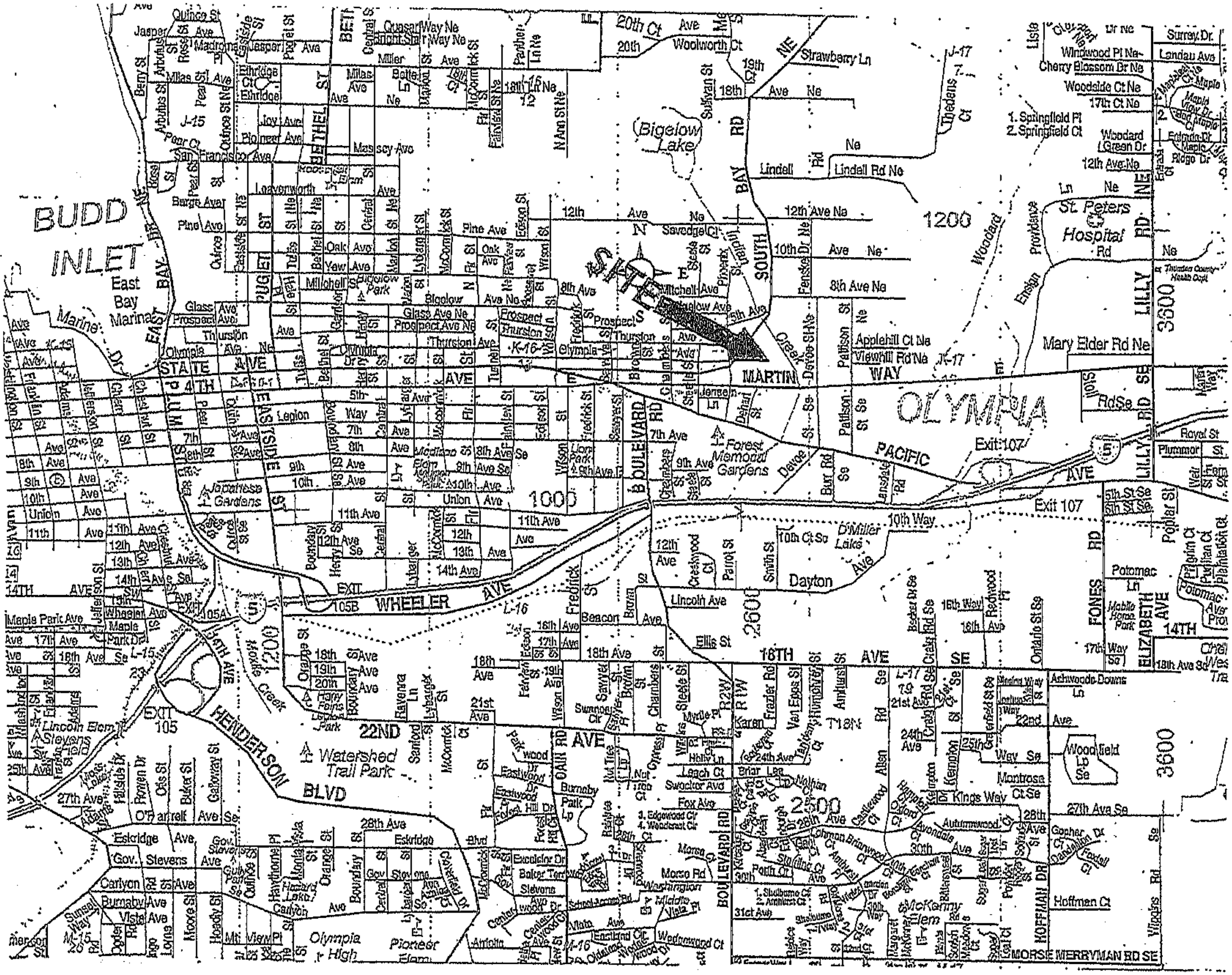
BUDD INLET
OLYMPIA
SITE
MARTIN WAY
PACIFIC AVE
WHEELER AVE
HENDERSON BLVD
16TH AVE SE
22ND AVE
BOULEVARD RD
LILLY RD
SOUTH BAY RD
STATE AVE
4TH AVE
PLUM ST
EASTSIDE ST
Bigelow Lake
St. Peters Hospital
Forest Memorial Gardens
Watershed Trail Park
Exit 107
EXIT 105
1200
1000
2600
2500
3600

FIGURE 1

COMMERCIAL PROPERTY
2728 MARTIN WAY E.
OLYMPIA, WA.

SAMPLE LOCATION MAP

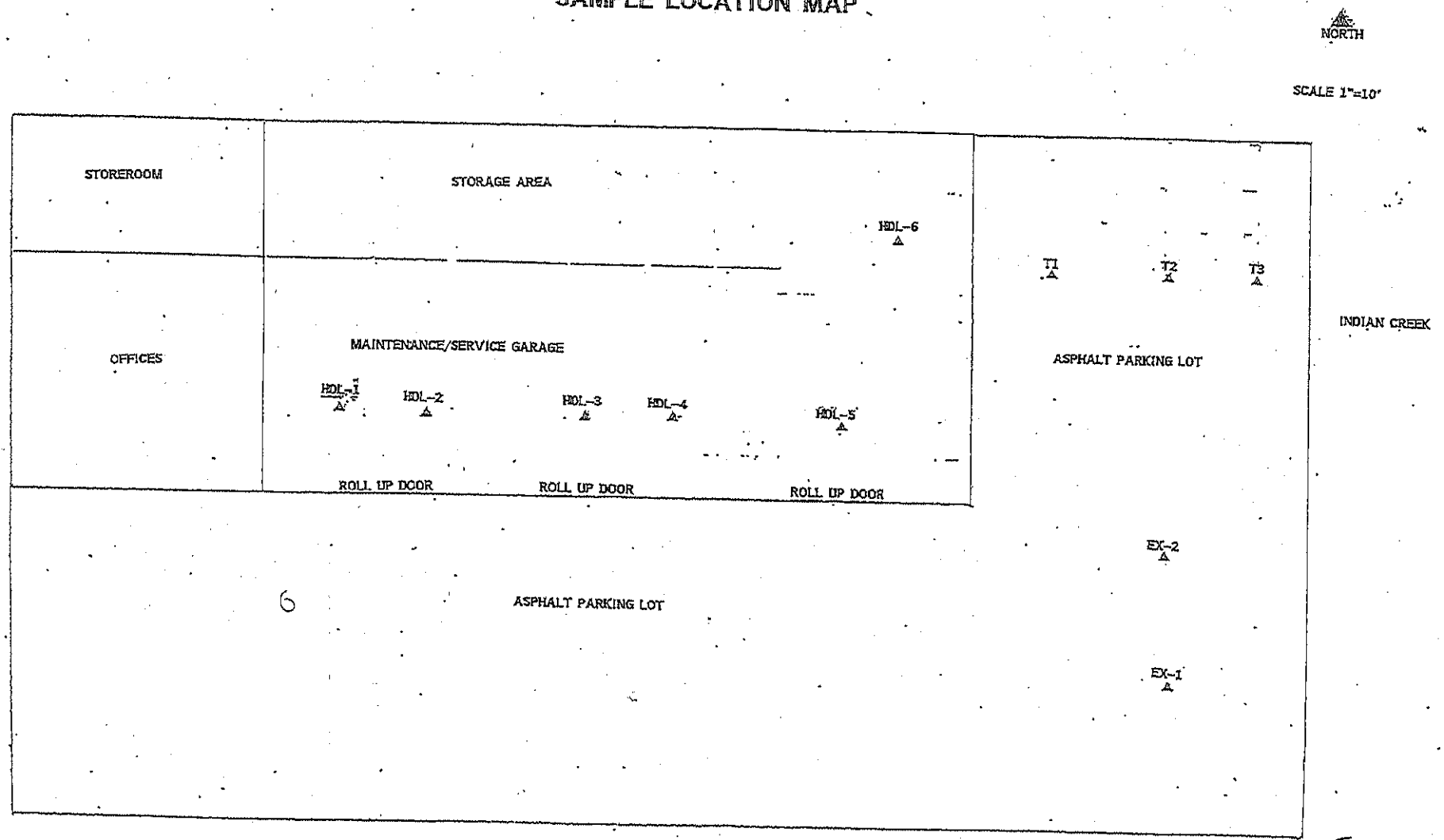

FIGURE 2

COMMERCIAL PROPERTY
2728 MARTIN WAY E.
OLYMPIA, WA.

SAMPLE LOCATION MAP

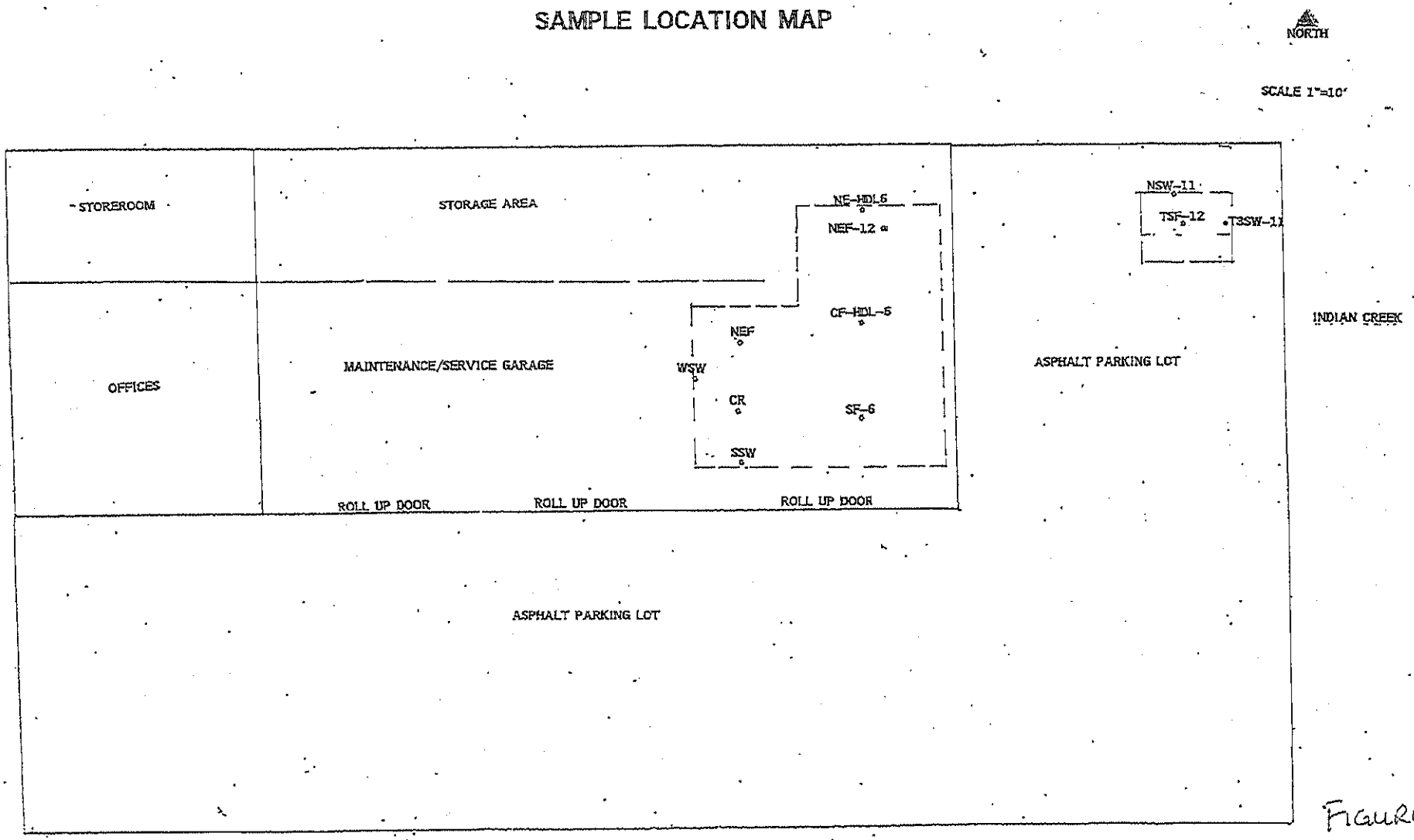

FIGURE 3

COMMERCIAL PROPERTY
2728 MARTIN WAY E.
OLYMPIA, WA.

MONITORING WELL LOCATION MAP

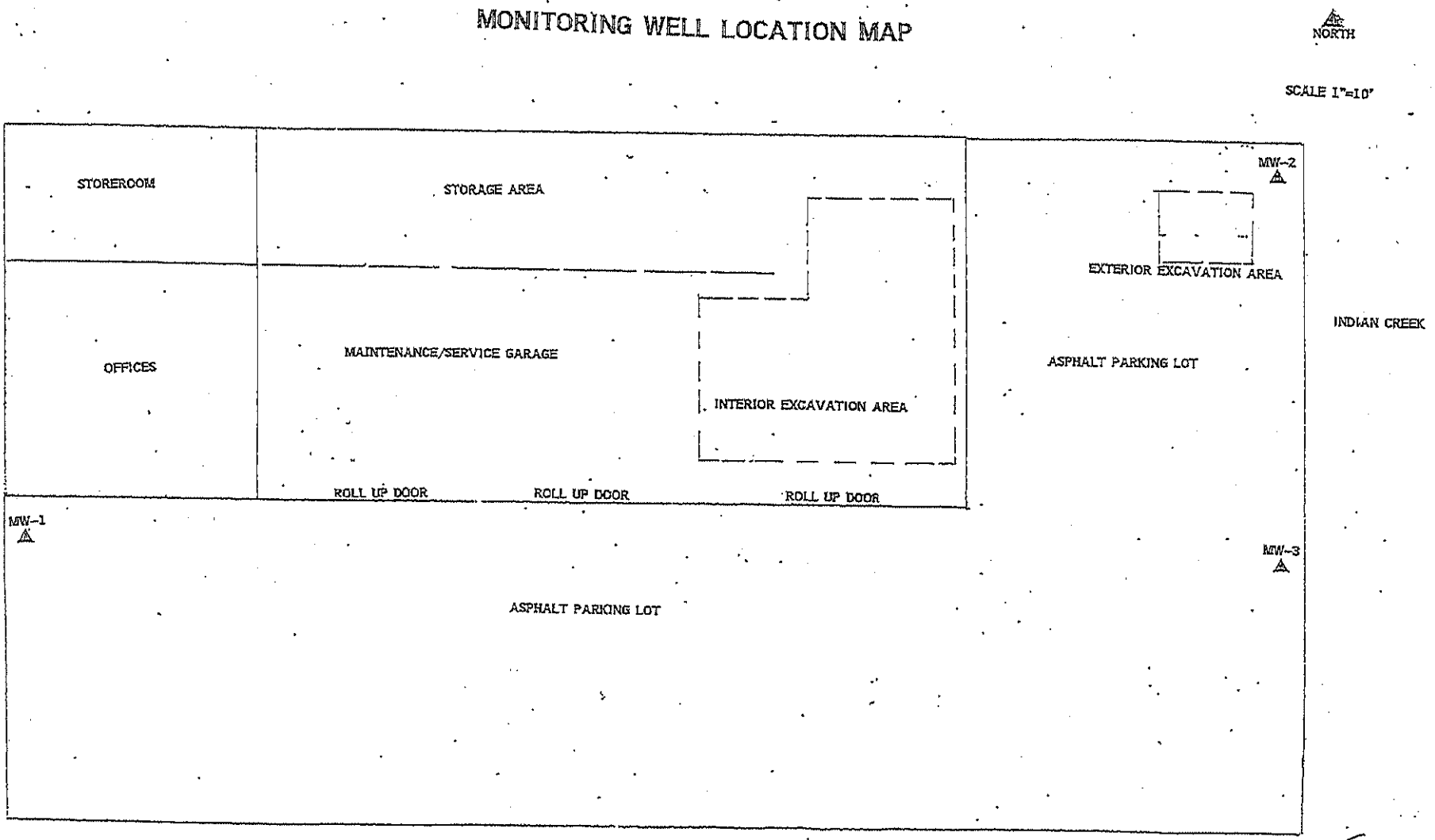

FIGURE 4