



June 7, 2012

Ms. Alisa Luber
Mercy Housing Northwest
2505 3rd Avenue, Suite 204
Seattle, WA 98112

Via Email: aluber@mercyhousing.org

Re: Proposal for Phase II Investigation
114 and 116 Columbia Street NW, Olympia, Washington
PBS Proposal No. WA24664

Dear Ms. Luber:

PBS Engineering and Environmental Inc. (PBS) is pleased to submit this proposal to provide a Phase II Investigation at the above-referenced subject property. This investigation is based on your request to assess the subsurface environmental conditions of the site.

We understand that Mercy Housing Northwest would like to further evaluate environmental concerns on the subject properties as identified in the Phase I Environmental Site Assessment (ESA) conducted by PBS for the property ("site" or "*subject property*") located at 114 and 2916 100th Street SW in Olympia, Washington in September 2011.

BACKGROUND AND APPROACH

The property consists of two tax lots (100 and 400) and a segment of a third tax lot (200), consisting of asphalt and gravel- surfaced parking lots, and is currently in use as parking for the City of Olympia. The Phase I ESA (2011 ESA) was conducted for Mercy Housing Northwest. Based upon the findings of the 2011 ESA, the assessment had revealed the following *recognized environmental conditions* in connection with the property:

- A dry-cleaning facility occupied the northwest portion (tax lot 100) of the subject property in the 1940s and 1950s. The former dry cleaner is not listed in the regulatory database and a preliminary subsurface investigation conducted in June 2002 did not observe or detect the presence of subsurface contamination in this area. However, the 2002 investigation did not analyze for dry cleaner chemicals. This historical use poses a high concern for soil and groundwater contamination, and for the presence of soil vapors.
- A gas station historically operated on the east parcel (tax lot 200) of the *subject property* from the early 1940s through approximately the early 1970s. Building permits indicate a gasoline station system with tanks and fuel pumps was installed at 107 W State Avenue in 1960. The Intercity Transit Key Shop which occupied the property in the 1990s reportedly





received a no further action designation from the Washington Department of Ecology on 11/08/2002.

- There are reportedly three monitoring wells located on the *subject property*. However, no record of the well logs or use of wells was discovered during this assessment. The wells represent a conduit for potential surface contaminants to the ground water on the *subject property*.

SCOPE OF SERVICES

Based on the site background and proposed redevelopment plans for the project site, it is PBS' opinion that additional investigation is warranted in the following areas:

- 1) Review Ecology regulatory files of adjoining or up-gradient properties.
- 2) Subsurface testing of soils and groundwater on the subject property to identify potentially contaminated soils or groundwater from historic on-site dry cleaner operations and historic adjoining gasoline station operations, and potential petroleum contaminant migration in groundwater from historic adjacent or up-gradient underground storage tank operations.
- 3) Evaluate ownership, condition, and compliance of apparent on-site monitoring wells. These may be associated with adjacent properties and should be decommissioned if not actively monitored.

TASK 01 FILE REVIEW

PBS will request review of Department of Ecology files for three adjoining properties to the *subject property* in order to evaluate potential for migration of contaminants to the *subject property*. The sites to be evaluated include:

Address: State and Capitol, SE corner (tax lot 200)	Ecology#: 19684117
Located east (up gradient) of subject property	
The Intercity Transit Key Shop, location of former gas station facility at 107 State Avenue, is reported as a completed cleanup site. The site received a No Further Action designation from Ecology on 11/08/2002. Review file for ground water conditions and closure documentation.	
Address: State and Capitol, NW corner	Ecology #: 91513596
Located north (cross/down gradient) of subject property	
The Olympia Fire Station #1 is reported to have removed five USTs in 1996. The USTs were reportedly installed in 1962. There is no violation or cleanup reported according to the regulatory database. Review file for documentation of UST closure findings.	
Address: 126 5th Avenue W	Ecology #: 5377602
Located 1,000 feet south (up gradient) of subject property	
The 5 th and Columbia Parking Lot is listed on the Confirmed or Suspected Contaminated Site List. Petroleum contamination cleanup was started in 2008. The site is enrolled in Ecology's Voluntary Cleanup Program (VCP). Review file for groundwater conditions and cleanup status.	





TASK 02 SUBSURFACE INVESTIGATION

The subsurface investigation will consist of the placement of four (4) temporary borings for soil and groundwater sampling. All work will be completed or supervised by a PBS Washington licensed Geologist. A licensed driller will advance temporary borings to approximately 12 feet below ground surface (bgs) at designated locations using a direct-push probe rig. The licensed well driller is required to submit well log reports to Washington Department of Ecology for each completed boring location.

Prior to beginning work, a public utility clearance request will be filed. The morning on the day of drilling, PBS will oversee a private utility locator to clear the borings for subsurface obstructions. A health and safety plan will be prepared and reviewed with the drilling contractor prior to beginning site work.

Samples will be placed into laboratory-provided containers and placed on ice for the duration of sampling and transport to the laboratory.

As soil cores are removed from each borehole, soil will be field-screened for evidence of contamination by visual observation and photoionization detector (PID) measurements. PBS personnel will wear disposable nitrile gloves to protect against cross-contamination between samples. All sampling equipment will be decontaminated with a detergent and distilled water rinse between each sample location. Soil to be retained for analysis will be packed into laboratory-provided containers with zero headspace, sealed and labeled and put on ice in a cooler and chain of custody documentation initiated.

One soil sample per boring will be collected from the 6-foot depth for laboratory analysis.

Groundwater samples will be collected from each temporary boring using low-flow groundwater monitoring techniques. All sampling equipment will be decontaminated prior to use and between samples. At each groundwater sampling point, new disposable polyethylene tubing will be used. PBS' representative will wear clean nitrile gloves during the collection of each sample to prevent cross contamination.

At the completion of sampling, all borings will be backfilled with bentonite and patched to match surrounding surfaces.

Investigation-Derived Wastes

If there are field indications of contamination, all soil and water wastes will be containerized and stored in small containers on site pending laboratory analysis and appropriate disposal (such costs not included at this time). Otherwise, soil and water wastes will be discretely applied to onsite areas. We anticipate one drum of purge/decontamination water may require disposal as non-hazardous waste.





Laboratory Analysis

A total of (4) soil and (4) groundwater samples will be submitted to the project laboratory with chain-of-custody documentation. Each soil sample will be analyzed for the following constituents:

- Northwest Total Petroleum Hydrocarbons as Diesel/Heavy Oil Range Organics by Method NWTPH-Dx
- NWTPH as Gasoline (NWTPH-Gx)
- Volatile Organic Compounds (VOCs) by EPA Method 8260B

Two soil samples will be selected for additional analysis, if NWTHP-Dx concentrations are detected in the soil samples. The additional analysis would include:

- Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270

All analysis will be conducted by a Department of Ecology certified lab, under regular turnaround time (7 to 10 business days). Upon receipt of the laboratory report, PBS will review the results of the labs' data quality control/quality assurance testing, discuss any discrepancies with the laboratory, and determine if follow-up analytical is warranted.

TASK 03 MONITORING WELL EVALUATIONS

PBS will evaluate the ownership, condition, and compliance of apparent on-site monitoring wells. The wells were observed at the site during a 2002 site assessment, but no well records were obtained and no sampling data was available. The purpose and installation records of the wells have not been identified to date.

PBS will conduct physical inspection of the wells by removing the surface cover to see if there are any well tags or identification numbers associated with the wells. The general condition of the wells will be recorded. An electronic water level meter will be used to measure depth to water and depth of the well.

Given the unknown installation record and condition of the wells, PBS does not recommend the collection of water samples from these apparent wells.

REPORTING

A written report will be prepared that presents PBS' findings, evaluation of the findings with respect to applicable state cleanup levels, and conclusions as to whether additional assessment and/or remedial action is warranted. Field activities will be described, a site plan will show the approximate sample locations, and laboratory results will be tabulated. The report will include copies of laboratory reports and chain of custody documentation. One electronic draft copy will be provided for review. One hardcopy and one CD will be provided of the final report.





SCHEDULE

Task 01: Regulatory file review requires a request for information to Ecology. Appointments for file review are typically scheduled by Ecology within 2 to 3 weeks after receiving request for information.

Task 02: Drilling field work (estimated one day) can be scheduled upon receipt of notice to proceed (NTP), and should occur within two weeks of NTP depending on subcontractor availability. The laboratory analyses will be available within about 10 days, and the results will be communicated verbally to the client upon receipt from the lab.

Task 03: The monitoring well evaluation will be conducted during the same field day as the subsurface drilling activities.

Reporting: The report can be completed within two weeks of receiving the final lab report.

COMPENSATION

The estimated time and material cost to complete the scope of work is \$9,318.00:

PBS Services

Regulatory File Review	\$950.00
Coordination and Field Investigation	\$1,210.00
Report Preparation.....	\$1,895.00
Reimbursable Materials, Equipment and Expenses	\$350.00
Subtotal	\$4,405.00

Subcontractor Cost Breakdown

Drilling Subcontractor (1-Day rate)	\$1,540.00
Private Utility Locator (pre-drill).	\$375.00
IDW non-hazardous disposal (20-gallons).....	\$350.00
*Laboratory Analysis:	<u>\$2,648.00</u>
NWTPH-Dx (4 soil + 4 water @ \$66.00 ea)	
NWTPH-Gx (4 soil + 4 water @ \$60.00 ea)	
VOCs EPA 8260B (4 soil + 4 water @ \$154.00 ea)	
*SVOCs EPA 8270C (2 soil samples @ \$204 ea)-included, but optional	
Subtotal	<u>\$4,913.00</u>

Total Estimated Cost **\$9,318.00**

*Note: Laboratories fees will be based on the number of samples analyzed, based on field conditions.

Costs for this project will be based on actual accrued time and expenses. PBS will not exceed proposal stated cost limits without client authorization. You will be notified of any conditions that would require an increase in the services and/or associated costs. Additional project management services would be charged at the hourly rate of \$95.





ASSUMPTIONS

The proposed scope of work and cost estimate is based on these assumptions:

- All four boreholes will be placed within asphalt-paving (no concrete coring required).
- Field work will be conducted during normal business hours Monday through Friday. Field work conducted outside of normal business hours will be subject to overtime premium.
- Client will ensure that the proposed boring locations are clear of parked vehicles on the day of drilling.
- The driller will obtain necessary Department of Ecology permits (i.e., Start Cards) for the drilling.
- Right-of-way work is not anticipated for this project so there are no city or other local permits that will need to be obtained.
- Unforeseen subsurface conditions such as impenetrable geologic formations or coarse fill material may prevent the completion of the proposed soil probe investigation. In this event, the work will stop and the client will be notified immediately.

LIMITATION OF SCOPE

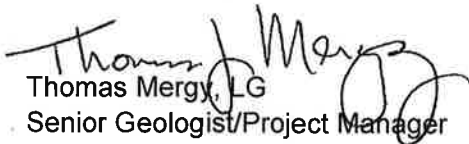
The study will be limited to the tests, locations and depths as indicated to determine the absence or presence of certain contaminants. The site as a whole may have other contamination that will not be characterized by this study. Further study may be recommended. The findings and conclusions of this work are not scientific certainties but, rather probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. PBS is not able to represent that the site or adjoining land contains no hazardous waste, oil, or other latent conditions beyond that detected or observed by PBS.

APPROVAL

The estimated fee and the terms under which our services are provided are in accordance with our General Terms and Conditions dated 3/2012. You may indicate acceptance of this Agreement by returning a signed copy or a purchase order incorporating the terms of the Agreement.

PBS appreciates the opportunity to submit its proposal to you and looks forward to your favorable consideration. If you have any questions or wish to further discuss the scope of services or compensation, please contact us at 206.233.9639.

Sincerely,
PBS Engineering + Environmental


 Thomas Mergy, LG
 Senior Geologist/Project Manager

ACCEPTED BY:

Signature

Name (Please Print)

_____ Title _____ Date

