

Executive Summary

Johnston & Wales University (JWU, the Client) engaged Vanasse Hangen Brustlin, Inc. (VHB) to conduct a Phase I Environmental Site Assessment (ESA) and a Phase II Limited Subsurface Investigation of Plat 56, Lot 326 located at 55 Shipyard Street, Providence, Rhode Island. This assessment was prepared in general accordance with the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation: E1527-05), All Appropriate Inquiry (AAI) except as stated specifically herein, and the scope of services set forth in our proposal to JWU dated February 18, 2011 and contains all of the limitations inherent in these methodologies in addition to those limitations presented in **Appendix A** of this report. No other warranties, expressed or implied, are made as to the professional services provided under the terms of our contract and included in this report. There were no areas that were inaccessible during the Site inspection; however, some areas of the parking lot and some areas of the concrete slab inside the building could not be observed due to parked vehicles and other obstructions. We were also unable to open a manhole for inspection inside the building.

The purpose of this Phase I ESA was to identify, to the extent feasible, recognized environmental conditions (RECs) in connection with the subject property. This assessment included a Site reconnaissance as well as research and interviews as described herein.

The subject property is commercial property most recently occupied by City Towing and Recovery in a building that was built in approximately 1970. It occupies Lot 56 on Providence Tax Assessor's Map 326. The subject property is in zone W2 – Waterfront District. There is one commercial building on the Site.

The Site appears to have been used for wax manufacturing in 1950, detergent manufacturing in 1956, metals recycling from 1988-2006, and auto salvage in 2011.

The Site buildings are serviced by municipal water and sewer and are heated via electric heat. The date the Site connected to the municipal sewer system was not available in the Providence municipal records we reviewed.

An environmental database search conducted by Environmental Data Resources, Inc. revealed that the Site was listed on the following databases:

- Spills; and
- RCRA (Resource Conservation and Recovery Act).

File reviews conducted at the Rhode Island Department of Environmental Management (RIDEM) revealed the following associated with the Site:

- A spill of 35 gallons of hydraulic oil on the asphalt parking lot of the Site occurred on May 6, 1997; and
- The Site was listed as a former RCRA generator.

Files reviewed at the RIDEM for other relevant properties identified in the database search revealed that petroleum and/or hazardous material releases at sites in the vicinity of the Subject Property may have impacted the Site. These include:

- Harborside Park – 100 Shipyard Street, Providence, Rhode Island;
- Former Citgo Terminal – 25 Ernest Street, Providence, Rhode Island;
- Providence DPW Garage – 20 Ernest Street, Providence, Rhode Island; and

A review of Sanborn Maps and aerial photographs revealed that other buildings existed at the Site that have since been demolished. It also appears from the aerial photographs that wetlands may have existed at the Site which are no longer present.

VHB inspected interior and exterior portions of the Site on April 18, 2011 as described in Section 5.

VHB made the following observations during the Site inspection:

- The Site consists of one parcel with one, commercial, slab on grade building and a paved parking lot;
- The Site was most recently occupied by City Towing and Recovery;
- Staining was observed on the asphalt parking lot, on the concrete and on the soil in the northeast portion of the Site, on the concrete slab in the northwest portion of the Site, and on the concrete slab inside the Site building;
- A transformer was observed in the northeast portion of the Site;
- Possible fill or vent pipes for an underground storage tank (UST) were observed in the northeast portion of the Site;
- Several parked vehicles were observed in the parking lot and in the interior portions of the Site building;
- Six hydraulic lifts were observed in the loading docks on the eastern portion of the building;
- Several containers of oil, waste oil, paint, and other materials were observed inside the Site building;
- Two manholes were observed on the exterior of the Site, and one manhole was observed inside the Site building; and

- Suspected asbestos piping insulation was observed in the northwest portion of the Site building.

The results of this assessment have revealed the following known or suspected **recognized environmental conditions (RECs)** associated with the subject property:

- A release of 35 gallons of hydraulic fluid occurred on the asphalt parking lot of the Site on May 6, 1997;
- A transformer and other electrical equipment on the Site may contain polychlorinated biphenyls (PCBs);
- Possible fill or vent pipes were observed in the northeast portion of the Site, indicating the potential presence of an underground storage tank (UST) on the Site.
- A manhole inside the Site building could not be opened for inspection, therefore, we don't know what it contains or where it discharges;
- Stained areas of soil and concrete at the Site;
- Petroleum and/or hazardous material releases at the following upgradient properties:
 - Harborside Park – 100 Shipyard Street, Providence, Rhode Island;
 - Former Citgo Terminal – 25 Ernest Street, Providence, Rhode Island; and
 - Providence DPW Garage – 20 Ernest Street, Providence, Rhode Island.

The results of this assessment have revealed the following **historical RECs** associated with the subject property:

- Historic use of the Site for wax manufacturing, detergent manufacturing, metals stripping and recycling, and towing and automotive repair;
- Sanborn Maps indicate that commercial buildings have been demolished at the Site and, therefore, residual demolition debris may be encountered in the subsurface;
- Historic aerial photographs show possible filling of wetlands that formerly existing at the Site. The potential presence of impacted fill materials on the Site represents a recognized environmental concern; and
- The connection date to the municipal sewer was not confirmed during research at the municipal offices. The potential historic use of an individual sewage disposal system at the Site is a recognized environmental concern.

The results of this assessment have revealed the following **de minimis conditions** associated with the subject property. Note that while de minimis conditions must be indicated under the ASTM guidance they are *not* considered RECs:

- There is the potential for lead-based paint and/or asbestos containing material to be present in building materials due to the age of the building.

The results of the Phase II Limited Subsurface Investigation at the Site revealed the following:

- Copper in soil above the Rhode Island Department of Environmental Management (RIDEM) Industrial/Commercial Direct Exposure Criteria (I/C DEC) and RIDEM Upper Concentration Limit (UCL);
- Lead and polycyclic aromatic hydrocarbons (PAHs) in soil above the RIDEM I/C DEC;
- Antimony, beryllium, and total petroleum hydrocarbons (TPH) above the RIDEM Residential Direct Exposure Criteria (RDEC); and
- Low levels of polychlorinated biphenyls (PCBs) in surface soil samples collected adjacent to the transformer pad.

The presence of contaminants above the RIDEM Residential and Industrial/Commercial Direct Exposure Criteria and above the UCLs for copper constitutes a reportable condition for the responsible party at the Site. JWU is not a responsible party at the current time.

Based on the results of the Phase I and II assessments, VHB recommends the following:

- Conducting a lead and asbestos survey;
- Investigating the manholes at the Site (interior and exterior) to determine if any drywells are present;
- Removing the hydraulic lifts if they are not going to be utilized;
- Determining if there is a UST associated with the suspect vent observed on the east side of the building; and
- Preparing a bona-fide prospective purchaser (BPP) letter for submission to the RIDEM prior to Site acquisition in order to complete response actions as a voluntary party rather than a responsible party.
- Contacting National Grid to obtain more information regarding the transformer on the Site.