

Phase I Environmental Site Assessment

**271-273 Windsor Street
Hartford, Connecticut**

March 11, 2014

Prepared for:

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Department of Development Services
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ENGINEERING SUCCESS TOGETHER

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1. Executive Summary

This report documents findings from the Phase I Environmental Site Assessment (ESA) that BETA Group, Inc. (BETA) has conducted for the property located at 271-273 Windsor Street in Hartford, Connecticut (the Site, see Figure 1). The 271 Windsor Street property consists of an approximately 1.140-acre parcel of land that is further identified as Hartford Assessor's Parcel ID 267-290-015. The 273 Windsor Street property consists of an approximately 0.866-acre parcel of land that is further identified as Hartford Assessor's Parcel ID 267-290-014. Currently, besides pavement and foundation remnants, both Site lots are undeveloped.

The purpose of this Phase I Environmental Site Assessment was to assess current Site conditions and render an opinion as to the presence of Recognized Environmental Conditions* (RECs) in connection with the property, within the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13. Any exceptions or deletions from the ASTM practice or Scope of Work are described in Section 2.0 of this Report. Refer to Section 10.0 for a list of acronyms and their definitions.

Site History

According to the historical resources reviewed for this Phase I ESA, the Site has been either undeveloped or used for parking since the late 1960s. Prior to this time, the Site was occupied by numerous multi-story buildings with various commercial and residential uses. The 1922 Sanborn map identified an auto repair facility in the southwestern portion of the Site. The 1950 Sanborn map identified a filling station in the southwestern corner of the Site and the auto body repair facility just north of the filling station (both on the 271 Windsor Street parcel). The 1934, 1957, and 1962 aerial photographs depict buildings at these two locations with similar footprints as those depicted on the 1950 Sanborn map. The 1950 Sanborn map identified other businesses at the Site including an awning manufacturer, a woodworking shop, furniture repair, upholstery shop, doctor's offices, a shirt shop, and several storage buildings.

Site Reconnaissance

At the Client's request, BETA's Site reconnaissance was limited to off-site observations and was further limited by snow cover. From the publicly accessible areas, the Site appears to have been a parking lot though the asphalt has degraded (severely in some areas). A fence surrounds the majority of the Site. A concrete wall was observed in the northwest corner of the Site.

* Recognized Environmental Conditions are defined in the American Society for Testing and Materials (ASTM) Standard E1527-05 as, "...the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimus conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Adjacent and Surrounding Properties

The property is located in a commercial area of Hartford. Based on the reviewed information, it appears that the Site vicinity has been developed with commercial buildings, including Rensselaer Polytechnic Institute's Hartford campus, and parking lots since the late 1960s. Prior to this time,, the Site vicinity consisted of numerous small multi-story buildings with various commercial and residential uses. Online historical resources indicate that Hartford underwent an extensive "urban renewal" process in the 1960s that included the construction of Interstate 84. The Site vicinity appears to have been part of the urban renewal area that included the construction of numerous parking lots.

Previous Site Investigations

BETA did not review previous reports for the Site.

Database Search

The search of environmental databases did not identify the Site as a release or spill site, as having underground storage tanks, or as a generator of hazardous waste. Additionally, the database search did not identify any properties in the Site vicinity that pose a threat of release to the Site.

Transfer Act

The Connecticut Property Transfer Program requires the disclosure of environmental conditions when certain real properties and/or businesses ("establishments") are transferred. When an establishment is transferred, one of four Property Transfer Forms must be executed and a copy of the form must be filed with the Connecticut Department of Energy & Environmental Protection (CTDEEP). CTDEEP defines an "establishment" as follows:

"Establishment means any real property at which or any business operation from which: (A) on or after November 19, 1980, there was generated, except as the result of remediation of polluted soil, groundwater, or sediment, more than one hundred kilograms of hazardous waste in any one month; (B) hazardous waste generated at a different location was recycled, reclaimed, reused, stored, handled, treated, transported, or disposed of; (C) the process of dry cleaning was conducted on or after May 1, 1967; (D) furniture stripping was conducted on or after May 1, 1967; or (E) a vehicle body repair facility was located on or after May 1, 1967."

Although portions of the Site lots appear to have been used for an upholstery business and an auto repair shop in the past (see Section 6.1), both of these uses appear to have ended before May 1, 1967. Thus, it is BETA's opinion that the historic use of the Site does not meet the definition of an "establishment."

Municipal Information

BETA visited the Hartford Fire Department to inquire about current and historical Site conditions, including current or former intact or leaking USTs, ASTs, hazardous materials spills or hazardous materials or wastes used or stored on a property. However, the fire department did not have any records for the Site addresses.

Data Gaps

The inability to interview a current or former Site owner with respect to the past operations of the Site, conducting the Site inspection from publicly accessible areas (adjacent sidewalks), and the presence of snow cover represent data gaps pursuant to is ASTM E1527-13. Based on the findings of this assessment, the Site inspection data gaps are considered significant and have affected our ability to identify RECs at the Site. Based on the history of the Site, the lack of an interview with a current or former Site owner is not considered significant.

Phase I ESA Findings and Conclusions

BETA performed a Phase I ESA in conformance within the scope and limitations of ASTM Practice E1527-13 for the property at 271-273 Windsor Street in Hartford, Connecticut. Any exceptions to, or deletions from, this practice are described in Section 2.2 of this report and Appendix A.

The urban renewal of the Site vicinity in the 1960s may have resulted in the placement of urban fill at the Site. Since the Site was covered with snow and access was restricted, BETA could not make observations of surficial soils. The possible presence of urban fill represents a possible REC.

The former use of portions of the Site as a filling station and auto repair facility represents a potential REC due to the possible presence of contamination related to these former uses.

Recommendations

BETA recommends conducting a limited subsurface investigation (LSI) to determine if the urban fill contains contaminants at concentrations above the Connecticut Department of Energy and Environmental Protection's (CTDEEP's) standards and/or if the historic use of the Site as a filling station and auto repair facility have impacted soil and/or groundwater at the Site. In many instances, urban fill contains elevated concentrations of heavy metals and polynuclear aromatic hydrocarbons. The investigation should include the advancement of soil borings, the installation of groundwater monitoring wells, and laboratory analysis of soil and groundwater samples.

2. Introduction

2.1 General

At the request of the City of Hartford (the Client), BETA conducted an ASTM Phase I Environmental Site Assessment (ESA) of the property at 271-273 Windsor Street in Hartford, Connecticut (the Site, see Figure 1). The 271 Windsor Street property consists of an approximately 1.140-acre parcel of land that is further identified as Hartford Assessor's Parcel ID 267-290-015. The 273 Windsor Street property consists of an approximately 0.866-acre parcel of land that is further identified as Hartford Assessor's Parcel ID 267-290-014. Currently, besides pavement and foundation remnants, both lots are undeveloped.

2.2 Purpose and Scope

This report was prepared for the sole and exclusive use of the Client and is subject to and issued in connection with the Agreement and the provisions thereof. The ESA was conducted to identify Recognized Environmental Conditions (RECs) based on a review of available environmental information and observations of the Site and adjacent properties for overt evidence of a release or threat of release of oil or hazardous materials (OHM). The scope of services for this ESA included a federal and state environmental database search, local research, Site reconnaissance, and interviews with people knowledgeable about the Site. This ESA is subject to the terms of the Agreement between the Client and BETA and the Limitations included in Appendix A.

The scope of services for this report did not include the assessment of the following "additional issues" that are outside the scope of the ASTM Phase I ESA: asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, and mold. At the Client's request, BETA inspected the Site from the perimeter (adjacent sidewalks).

2.3 Site Visit Information

Site Visit Conducted By:	Joseph R. McLoughlin II, LEP, LSP
Date of Site Visit:	February 28, 2014
Site Representative:	None
Weather:	30°F and cloudy

The Site was covered with snow at the time of the Site visit and BETA's observations were limited to publicly accessible areas as access to the Site was no permitted.

3. Project Description

3.1 Site Description

The Site consists of an approximately 1.140-acre parcel of land at 271 Windsor Street and an approximately 0.866-acre parcel of land at 273 Windsor Street in Hartford, Connecticut (the Site, see Figure 1). Currently, besides pavement and foundation remnants, both Site lots are undeveloped. The approximate geographic coordinates of the property are N 41° 46' 18" latitude and W 72° 40' 23" longitude.

3.2 Current Operations

Besides pavement and foundation remnants, both Site lots are undeveloped.

3.3 Building Description

No structures currently exist at the Site.

3.4 Building Heating and Cooling System

No structures currently exist at the Site.

3.5 Plans and Specifications

A copy of the City of Hartford Assessor's Map 267 is provided as Figure 2.

3.6 Utilities

Connecticut Light and Power supplies electricity to the Site vicinity. Municipal water and sewer are available in Windsor Street.

3.7 Environmental Land Use Restrictions

BETA did not encounter any evidence of an Environmental Land Use Restriction (ELUR) or other restriction on the deed for the Site.

3.8 Purchase Price

BETA was not provided with any information regarding the purchase price of the Site or whether the property has been devalued by contamination.

3.9 User Provided Information

As required by Section 6 of the ASTM 1527-13 standard, the City of Hartford, the prospective purchaser of the Site, provided BETA with information summarized in this report based on actual and specialized knowledge of the Site. The Client informed BETA that this Phase I ESA was being conducted as part of a pending real estate transaction. BETA did not interview the current or any former owners as part of this Phase I ESA.

3.10 Property Transfer Act

The Connecticut Property Transfer Program requires the disclosure of environmental conditions when certain real properties and/or businesses ("establishments") are transferred. When an establishment is transferred, one of four Property Transfer Forms must be executed and a copy of the form must be filed with the Connecticut Department of Energy & Environmental Protection (CTDEEP). CTDEEP defines an "establishment" as follows:

"Establishment means any real property at which or any business operation from which: (A) on or after November 19, 1980, there was generated, except as the result of remediation of polluted soil, groundwater, or sediment, more than one hundred kilograms of hazardous waste in any one month; (B) hazardous waste generated at a different location was recycled, reclaimed, reused, stored, handled, treated, transported, or disposed of; (C) the process of dry cleaning was conducted on or after May 1, 1967; (D) furniture stripping was conducted on or after May 1, 1967; or (E) a vehicle body repair facility was located on or after May 1, 1967."

Although portions of the Site lots appear to have been used for an upholstery business and an auto repair shop in the past (see Section 6.1), both of these uses appear to have ended before May 1, 1967. Thus, it is BETA's opinion that the historic use of the Site does not meet the definition of an "establishment."

4. Site Characteristics

4.1 Surface Waters

BETA did not observe any surface water bodies at the Site. The Site is located approximately 500 feet west of the Connecticut River. Refer to Figure 1.

4.2 Site Drainage/Sensitive Receptors

Stormwater at the Site either infiltrates into the ground surface or runs off the Site into catch basins along Windsor, Trumbull, or Pleasant Streets.

4.3 Topography

The Site is located at an elevation of approximately 46 feet above the 1929 National Geodetic Vertical Datum. The Site and vicinity slopes downward to the east.

4.4 Soils and Geology

Soils

According to the United States Department of Agriculture Soil Conservation Service (SCS) Soil Map, soils at the Site consist of Urban Land. Urban Land soils consist of areas where 85 percent of the land surface is covered by structures or impervious surfaces such as buildings, pavement, industrial sites, and railroad yards. These areas are mapped throughout the survey area, typically in central business areas and along major roads and highways. Since this mapping unit is covered by structures and pavement, a site investigation would be necessary in order to assess the land's suitability for specific uses.

Geology

Bedrock outcrops were not observed at or in the vicinity of the Site. According to the Bedrock Geologic Map of Connecticut (1985), bedrock beneath the Site consists of the Portland Arkose, reddish, poorly sorted arkose.

4.5 Groundwater

According to the CTDEEP's March 2011 Water Quality Classifications Map, groundwater at the Site is classified as GB. Groundwater classified as GB is presumed not suitable for human consumption without treatment. Based on local topography and surface water bodies, BETA infers groundwater flow to be to the east towards the Connecticut River.

4.6 Wetlands

BETA did not observe any obvious wetlands areas at or near the Site.

4.7 Floodplain Information

According to the Federal Emergency Management Association (FEMA) Flood Insurance Rate Map (FIRM) Number 09003C0368G dated September 16, 2011, the Site is located in “Other Flood Area” identified as Zone X, which has been determined to be in an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

5. Adjacent and Surrounding Properties

The property is located in a commercial area of Hartford. Information concerning surrounding properties was compiled from the Site reconnaissance, as summarized below:

Direction	Adjacent Properties	Surrounding Properties
North	Pleasant Street	Rensselaer Polytechnic Institute (RPI) Hartford campus
South	Trumbull Street	Parking lot
East	Windsor Street	Commercial building
West	Parking lot	NA

6. Site History

6.1 Sanborn Fire Insurance Maps

Sanborn maps identify prior uses of real property for many cities and towns in the United States. The maps were originally created to assist insurance underwriters in understanding the potential fire risk of structures requiring insurance; however, they are also useful for determining the previous uses of a property. Sanborn maps often contain information relating to uses of individual structures, location of certain fuel storage tanks, chemical storage tanks, or both, and storage of other potentially toxic substances. Sanborn maps begin their coverage in 1867 and continue through the present. BETA requested copies of Sanborn maps for the Site from Environmental Data Resources, Inc. (EDR). EDR provided copies of 1885, 1900, 1917, 1920, 1922, 1950, and 1979 Sanborn Maps. A copy of the EDR Sanborn Map Report is included in Appendix B. The following summarizes our review of these maps.

- **1885** – This map depicts ten multi-story residential buildings and portions of nine additional multi-story residential buildings at the Site. Additionally, this map depicts Orchard Street crossing the southern portion of the Site. Please note that the streets in the Site vicinity were laid out in different locations than they are currently. This map depicts the Site vicinity as consisting of multi-story residential buildings.
- **1900** – This map depicts the Site and vicinity as similar to the 1885 map.
- **1917** – This map depicts the Site and vicinity as similar to the 1900 map.
- **1920** – This map depicts the Site and vicinity as similar to the 1917 map.
- **1922** – This map depicts the Site and vicinity as similar to the 1920 map except that an auto repair facility now exists in the southwestern portion of the Site and the buildings along Windsor Street now have stores on the first floors including a bank and a shirt store.
- **1950** – This map depicts nine multi-story buildings and portions of six multi-story buildings on the Site. This map now depicts Trumbull and Orchard Street in the southern portion of the Site as well as a “Filling Station.” This map depicts an “Auto Body Works” facility in the southwestern portion of the Site just north of where Orchard Street meets the western Site boundary. The remaining buildings have stores or businesses on the first floor and apartments on the upper floors. Businesses depicted include an awning manufacturer, a woodworking shop, furniture repair, upholstery shop, doctor’s offices, a shirt shop, and several storage buildings.
- **1979** – This map depicts the Site as undeveloped and shows Trumbull Street as having been relocated slightly to the south and Windsor Street slightly to the west. This map does not depict Pleasant Street to the north. This map depicts the Site vicinity as having been completely redeveloped with only a building to the west still existing from the 1950 map.

6.2 Aerial Photographs

BETA requested copies of historical aerial photographs for the Site from EDR. EDR provided copies of 1934, 1957, 1962, 1967, 1970, 1977, 1989, 1990, 1992, 1995, 2005, 2006, 2008, 2010, and 2012 aerial photographs. A copy of the EDR aerial photograph report is included in Appendix B. The following summarizes our review of these aerial photographs:

- **1934** – This photograph depicts ten buildings and portions of six buildings at the Site. The buildings that house the auto body shop and filling station depicted on the 1950 Sanborn map are depicted in this photograph. This photograph depicts the Site vicinity as extensively developed.
- **1957** – This photograph depicts the Site and vicinity as similar to the 1934 photograph.
- **1962**: This photograph depicts the Site and vicinity as similar to the 1957 photograph except that Interstate 84 is now under construction south of the Site.
- **1967** – Due to the poor quality of this photograph, specific Site details could not be ascertained. However, the Site and vicinity appear to be much less developed than depicted in the 1962 photograph. Additionally, several streets have been moved/realigned and Pleasant Street no longer exists north of the Site.
- **1970** – This photograph depicts the Site as undeveloped with numerous cars parked at the Site. The Site vicinity appears much less developed than the 1962 photograph. A building appears to be under construction across Windsor Street to the east as does the RPI building north of the Site
- **1977** – This photograph depicts the Site as similar to the 1970 photograph. The buildings under construction in the 1970 photograph now appear to be complete.
- **1989** – This photograph depicts the Site as undeveloped and the vicinity as similar to the 1977 photograph, except that Pleasant Street now appears north of the Site.
- **1990** – This photograph depicts the Site and vicinity as similar to the 1989 photograph.
- **1992** – This photograph depicts the Site and vicinity as similar to the 1990 photograph.
- **1995** – This photograph depicts the Site and vicinity as similar to the 1992 photograph.
- **2005** – This photograph depicts the Site and vicinity as similar to the 1995 photograph except that no cars are parked at the Site. Additionally, the pavement in the southern portion of the Site now appears to be overgrown.
- **2006** – This photograph depicts the Site and vicinity as similar to the 2005 photograph.
- **2008** – This photograph depicts the Site and vicinity as similar to the 2006 photograph.
- **2010** – This photograph depicts the Site and vicinity as similar to the 2008 photograph.
- **2012** – This photograph depicts the Site and vicinity as BETA observed them to be during our recent Site reconnaissance.

6.3 Topographic Maps

BETA requested copies of historical United States Geologic Survey (USGS) maps for the Site from EDR. EDR provided copies of 1892, 1906, 1945, 1952, 1953, 1964, 1972, 1984, and 1992 USGS Topographic Maps. Due to the urban nature of the Site vicinity and the scale of these maps, specific site details could not be ascertained. A copy of the EDR topographic map report is included in Appendix B.

6.4 City Directories

Historical City directories and Cross Reference directories are often useful for obtaining historical tenants for a property. City directories provide tenant listings, by address, for every year covered by the directory service. BETA requested City directories for the Site from EDR. EDR searched copies of 1963, 1970, 1990, 1999, 2003, 2008, and 2013 City directories. A copy of the EDR City Directory Abstract is included in Appendix B. The following summarizes these directories.

Year	Site Address	Adjoining Properties
1963	135, 141, 147, 149, 151, 161, and 165 Windsor: Vacant	All nearby addresses listed as “Vacant”
1970	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: No listing; 275 Windsor: No listing; 300 Windsor: Travelers Data Center
1990	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: No information; 275 Windsor: Hartford Graduate Center and United Technologies; 300 Windsor: No listing
1999	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: No listing; 275 Windsor: Advanced Video Technology, CT Quality Control, and RPI Hartford; 300 Windsor: No listing
2003	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: No listing; 275 Windsor: CT Quality Control, Harford Graduate Center, and RPI Hartford; 300 Windsor: ICG Communications and Point One Telecommunications
2008	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: Bank of America; 275 Windsor: Cole Library, CT Quality Control, Lally School of Management, and RPI Hartford; 300 Windsor: Enterprise Rent-a-Car, Saint Paul Travelers Co. Inc., and Scott B Clendaniel, law office
2013	271 Windsor: No listing 273 Windsor: No listing	150 Windsor: No listing; 275 Windsor: CT Quality Control and RPI Hartford; 300 Windsor: Charles Walker, Attorney and Williams Communications Group

6.5 Interviews

BETA did not interview the current Site owner or any former Site owners as part of this Phase I ESA.

6.6 Previous Assessments or Investigations

BETA did not identify previous assessments covering the Site during the research for this Phase I ESA.

6.7 Ownership History

According to the City of Hartford Assessor's records, the Site has been owned by the Rensselaer Hartford Graduate Center Inc. since 1996. The following table summarizes Site ownership back to 1968. BETA could not determine ownership history prior to 1968.

Owner	Date of Purchase	Book/Page
Rensselaer Hartford Graduate Center Inc.	12/31/1996	3774/177
Hartford Graduate Center	5/2/1991	3158/190
Rensselaer Polytechnic Institute of Connecticut	4/11/1968	1201/140
City of Hartford	Prior to 4/11/1968	Unknown

6.8 Adjacent Properties

Based on the reviewed information, it appears that the Site vicinity has been developed with commercial buildings, including RPI, and parking lots since the late 1960s. Prior to this time, the Site vicinity consisted of numerous small multi-story buildings with various commercial and residential uses. Online historical resources indicate that Hartford underwent an extensive "urban renewal" process in the 1960s that included the construction of Interstate 84. The Site vicinity appears to have been part of the urban renewal area that included the construction of numerous parking lots.

6.9 Historical Summary

According to the historical resources reviewed for this Phase I ESA, the Site has been either undeveloped or used for parking since the late 1960s. Prior to this time, the Site was occupied by numerous buildings with various commercial and residential uses. The 1922 Sanborn map identified an auto repair facility in the southwestern portion of the Site. The 1950 Sanborn map identified a filling station in the southwestern corner of the Site and the auto body repair facility just north of the filling station. The 1950 Sanborn map identified other businesses at the Site to include an awning manufacturer, a woodworking shop, furniture repair, upholstery shop, doctor's offices, a shirt shop, and several storage buildings. The 1934, 1957, and 1962 aerial photographs depict buildings at these two locations with similar footprints as depicted on the 1950 Sanborn map.

7. Site Reconnaissance

7.1 Nature of Operations & Current Tenants

At the time of our inspection, the Site consisted of a deteriorated parking lots and foundation remnants in the western portion of 273 Windsor Street.

7.2 Oil and Hazardous Materials (OHM) Storage and Usage

BETA did not observe OHM storage or usage at the Site.

7.3 Petroleum and Chemical Storage Tanks

BETA did not observe evidence of storage tanks, such as vent or fill pipes, at the Site.

7.4 Environmental Permits

BETA did not encounter environmental permits during the research for this Phase I ESA.

7.5 Hazardous Waste

BETA did not observe the generation or storage of hazardous waste at the Site.

7.6 Solid Waste and Wastewater

Solid Waste

Solid waste is not currently generated at the Site.

Sanitary Sewage

Sanitary sewage is not currently generated at the Site; however, municipal sewer service is available in the City streets adjacent to the Site.

Liquid Discharges

BETA did not observe liquid discharges at the Site.

7.7 Site Housekeeping

The Site is currently undeveloped.

7.8 Stained Soil, Stained Pavement or Stressed Vegetation

BETA did not observe stained soil, stained pavement or stressed vegetation at the Site. Vegetation appeared to be seasonally healthy. Please note the Site was covered with snow at the time of our inspection.

7.9 Interior and Exterior Drainage Structures

BETA did not observe man-made drainage structures at the Site.

7.10 Pools, Ponds, Pits or Lagoons

BETA did not observe any man-made pools, ponds, pits or lagoons at the Site.

7.11 On-Site Water Supply and Observation Wells

Hartford municipal water serves the Site vicinity. BETA did not observe observation wells at the Site.

7.12 Fill Material

BETA did not observe evidence of urban fill at the Site. Please note; however, that the Site was covered with snow and our inspection was from the adjacent sidewalks. Based on the history of the Site, the potential exists for urban fill to be present at the Site.

7.13 Air Emissions

BETA did not observe indications of significant air emissions at the Site.

7.14 Odors

BETA did not notice chemical or other odors during the Site reconnaissance.

7.15 Polychlorinated Biphenyls (PCBs)

BETA did not observe transformers at the Site.

7.17 Lead Based Paint (LBP)

No buildings currently exist at the Site.

7.18 Lead in Drinking Water

Testing for lead in drinking water was beyond the scope of this ESA.

7.19 Radon

Measurement of potential radon contamination was beyond the scope of this ESA. The U.S. EPA publishes a map of the United States on which each of the 3,141 counties in the U.S. is assigned to one of three zones based on radon potential. Each zone designation reflects the average short-term radon measurement that can be expected to be measured in a building without the implementation of radon control methods. According to the EPA map, the Radon Zone for Hartford County is 3. Zone 3 is defined as having indoor average radon levels of less than 2 pCi/L. EPA recommends action at concentrations of 4 pCi/L or higher in indoor air. Additional information on radon in indoor air can be found on the US EPA website at <http://www.epa.gov/iaq/radon/>.

7.20 Areas Not Inspected

BETA inspected all accessible interior and exterior portions of the Site building.

8.0 Regulatory Review

The EDR report gives a listing of sites identified on select federal and state standard source environmental databases within the approximate search distance specified by ASTM Standard Practice for Environmental Site Assessments E1527-05. BETA reviewed each environmental database on a record-by-record basis to determine if certain sites identified in the EDR report represent environmental liability to the Site. A copy of EDR regulatory database report is included in Appendix D. The following table lists the number of sites identified by the EDR report.

FEDERAL, STATE, AND TRIBAL AGENCY DATABASE FINDINGS			
REGULATORY DATABASE	SEARCH DISTANCE	TARGET SITE	OFF-SITE LISTINGS
Federal National Priorities List (NPL) Facilities	1 Mile	No	0
Federal Delisted NPL Facilities	½-Mile	No	0
Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Facilities	½-Mile	No	0
Federal CERCLIS No Further Remedial Action Planned (NFRAP) Facilities	½-Mile	No	0
Federal Resource Conservation and Recovery Act (RCRA) Corrective Action (CORRACTS) Facilities	1 Mile	No	1
Federal RCRA Treatment, Storage, and Disposal (TSD) Facilities	½-Mile	No	0
Federal RCRA Generator Facilities	Site and Adjoining	No	0
Federal Institutional Controls/Engineering Controls (IC/EC) Registries	½-Mile	No	0
Federal Brownfield Facilities	½-Mile	No	1
Federal Emergency Response Notification System (ERNS) Facility	Site Only	No	-
Federal Facility Index System (FINDS) Facility	Site Only	No	-
State Hazardous Waste Sites (SHWS)/Tribal Equivalent CERCLIS Facilities	1 Mile	No	1
State Site Discovery and Assessment Database (SDADB) Facilities	½-Mile	No	17
State and Tribal Solid Waste Landfill (SWL) Facilities	½-Mile	No	0
State and Tribal Registered Underground Storage Tank (UST) Facilities	Site and Adjoining	No	1
State and Tribal Leaking UST (LUST) Facilities	½-Mile	No	18
State and Tribal Registered Aboveground Storage Tank (AST) Facilities	Site and Adjoining	No	0
State and Tribal EC Registries	½-Mile	No	0
State and Tribal Environmental Land Use Restrictions (ELUR) Facilities	½-Mile	No	0
State and Tribal Voluntary Cleanup Program (VCP) Facilities	½-Mile	No	0
State and Tribal Brownfield Facilities	½-Mile	No	2
State Spill Facilities	Site Only	No	-

The EDR report also identified 20 non-geocoded sites. These are sites which could not be mapped or “geocoded” due to inadequate address information. Refer to the EDR report for a list of these sites. BETA attempted to locate these sites via vehicular reconnaissance and interviews with personnel familiar with the area. Based on this research, BETA did not identify any sites within the specified radii.

A description of the databases reviewed by BETA and an analysis of sites identified within the prescribed search area are presented in the following sections.

8.1 United States Environmental Protection Agency (USEPA) Databases

NPL Facilities

This is a list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or “Superfund”). A site must be on the NPL to receive money from the Trust Fund for Remedial Action. The database search did not identify NPL facilities within one mile of the Site.

Delisted NPL Facilities

Delisted NPL facilities are those that the EPA determined may be deleted from the NPL because no further response is appropriate. The database search did not identify Delisted NPL facilities within ½-mile of the Site.

CERCLIS Facilities

CERCLIS is the USEPA system for tracking potential hazardous waste sites within the Superfund program. A site's presence in CERCLIS does not imply a level of federal activity or progress at a site, nor does it indicate that hazardous conditions necessarily exist at the location. Within one year of being entered into CERCLIS, the USEPA performs a preliminary assessment of a site. Based upon the results of the preliminary assessment, the USEPA may conduct additional investigations which could lead to a site being listed on the NPL. The database search did not identify CERCLIS facilities within ½-mile of the Site.

CERCLIS NFRAP Facilities

CERCLIS sites identified as NFRAP facilities have been removed from the CERCLIS because no contamination was found, contamination was removed without the need for the site to be placed on the NPL, or the contamination was not considered significant enough to be placed on the NPL. The database search did not identify CERCLIS NFRAP facilities within ½-mile of the Site.

RCRA CORRACTS Facilities

RCRA CORRACTS is a list of facilities that are found to have had hazardous waste releases and require RCRA corrective action activity, which can range from site investigations to remediation. The database search identified one RCRA CORRACTS facilities within one mile of the Site. The database search identified Westinghouse Electric Corporation (Westinghouse) at 360 Market Street, as a RCRA CORRACTS facility. Based on its inferred hydraulically downgradient location, this property does not pose a threat of release of OHM to the Site.

RCRA TSD Facilities

The RCRA TSD Facilities List contains information pertaining to those facilities that either treat, store, or dispose of hazardous waste. While these facilities represent some form of hazardous waste activity, they are most significant if determined to be out of compliance or to have violations. The database search did not identify RCRA TSD facilities within ½-mile of the Site.

RCRA Generator Facilities

BETA reviewed the list of sites that have filed notification with the USEPA in accordance with RCRA requirements. These sites include generators of hazardous waste regulated under RCRA. Under RCRA, hazardous waste generators are classified by the mass of hazardous waste generated in a calendar month into the following categories: Large Quantity Generator, greater than 1,000 kilograms/month (Kg/month); Small Quantity Generator, 100 to 1,000 Kg/month; and Conditionally-Exempt Small Quantity Generator, less than 100 Kg/month. RCRA Generators, while they represent some form of hazardous waste activity, are most significant if they are determined to have Class I Violations or to be non-compliant.

The database search did not identify the Site or any adjoining properties as RCRA Generators.

IC/EC Registries

The database search did not identify the Site on the ERNS database.

Brownfield Facilities

The database search did not identify the Site on the Brownfields database. However, the search identified one Brownfield facility within ½-mile of the Site. According to the search, a property identified as S-1, 17-73 Albany Avenue and Hartford Lumber Yard is identified as a Brownfields. This facility is located approximately 0.282 miles west-northwest of the Site. The search did not include additional information pertaining to this facility. Based on its distance, this facility does not likely pose a threat of release of OHM to the Site.

ERNS Facility

ERNS is a database of notifications of oil discharges and hazardous substance releases. The primary purpose of ERNS is to standardize and collect notifications made to the Federal government of releases of oil and hazardous substances. These notifications are used by “On-Scene Coordinators” to determine an emergency response and release prevention. When a call is made to the National Response Center or one (1) of the ten USEPA Regions, a report is created containing all of the release information that the caller provided. This report is transferred to an appropriate agency to evaluate the need for a response and the records are electronically transferred to the ERNS database. As such, if a reported release of oil or a hazardous substance is deemed to require a response, it should also be listed in the appropriate federal or state level environmental database such as CERCLIS, state equivalent CERCLIS, or state leaking underground storage tank or spills. The database search did not identify the Site on the ERNS database.

FINDS Facility

The database search did not identify the Site as a FINDS.

8.2 Connecticut Department of Energy and Environmental Protection (CTDEEP) Databases

State SHWS Facilities

The SHWS list is an inventory of hazardous waste release sites maintained by the CTDEEP. The database search identified one SHWS facility within one mile of the Site. General Elevator Co. at 181-191 Walnut Street is located approximately 0.596 miles west-northwest of the Site. Based on its distance, this facility does not likely pose a threat of release of OHM to the Site.

SDADB Facilities

The database search identified seventeen SDADB facilities within ½-mile of the Site. The following is a list of the two closest facilities within 0.25 of the Site. The remaining fifteen SDADB facilities do not likely pose a threat of release of OHM to the Site.

Travelers Insurance Company at 300 Windsor Street is located approximately 0.036 miles north-northeast and inferred hydraulically downgradient of the Site. According to the search, the facility is identified as “Remediation Complete Approved DEP/Verified by LEP” on January 13, 1994. Based on its regulatory status and inferred downgradient location, this facility does not likely pose a threat of release of OHM to the Site.

Goodyear Auto Service at 306 Windsor Street is located approximately 0.109 miles east and inferred hydraulically downgradient of the Site. According to the search, a release of water and oil occurred at this property from a UST in 1994. The regulatory status of this release is not listed. However, based on its inferred downgradient location, this facility does not likely pose a threat of release of OHM to the Site.

SWL Facilities

The database search did not identify SWL facilities within ½-mile of the Site.

Registered UST Facilities

The database search did not identify the Site as a registered UST facility. The database search identified one adjoining property as a registered UST facility. This facility is the Bank of America building at 150 Windsor Street which has two active 20,000-gallon diesel USTs and one former 10,000-gallon gasoline UST that was removed in 2000. The database search did not list this property as leaking underground storage tank (LUST) site. This property is inferred to be downgradient of the Site.

LUST Facilities

The database search identified eighteen LUST sites within ½-mile of the Site. The closest of these is the Syed Gas & Convenience Store at 410 Windsor Street, approximately 0.166 miles northeast of the Site. The search indicates that a release of an unknown chemical occurred at this facility in 2009. This facility has a case closed status. The remaining LUST facilities are located over 0.22 miles of the Site. Based on their hydraulic location relative to the Site, their distance from the Site, and/or their regulatory status, none of the LUST facilities likely pose a threat of release of OHM to the Site.

Registered AST Facilities

The database search did not identify the Site or adjoining properties as registered AST facilities.

EC Facilities

The database search did not identify EC facilities within ½-mile of the Site.

ELUR Facilities

The database search did not identify ELUR facilities within ½-mile of the Site.

VCP Facilities

The database search did not identify VCP facilities within ½-mile of the Site.

Spills Site

The CTDEEP maintains a database of emergency response actions and spill releases that occurred prior to 1993. The database search did not identify the Site as a Spill site.

8.3 Local Regulatory Agency Interviews

Fire Department - Fire Prevention Office

BETA visited the Hartford Fire Department to inquire about current and historical Site conditions, including current or former intact or leaking USTs, ASTs, hazardous materials spills or hazardous materials or wastes used or stored on a property. However, the fire department did not have any records for the Site addresses.

Licensing and Inspection Office

BETA visited the Hartford Licensing and Inspection office to inquire about permits or licenses for the Site. The Hartford Licensing and Inspection office did not have any records for the Site.

Tax Assessor Office

BETA visited the Hartford Tax Assessor's office to obtain basic Site information, such as is found on the Assessor's field card and on town maps. A review of the field card did not identify any environmental liens with respect to the Site.

City Clerk Office

The Hartford City Clerk's office did not have any environmental records for the Site.

9. Environmental Professional Certification

The following provides the certifications required by the ASTM 1527-13 standard. "I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312". "I have the specific qualifications based on educations, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312".

A handwritten signature in blue ink, appearing to read 'JRM', with a horizontal line extending to the right from the end of the signature.

Joseph R. McLoughlin II, LEP, LSP

10. List of Acronyms

ACM	Asbestos Containing Materials
AST	Aboveground Storage Tank
ASTM	American Society of Testing and Materials
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	Corrective Action Tracking System
CTDEEP	Connecticut Department of Energy and Environmental Protection
DPW	Department of Public Works
EDR	Environmental First Search Report
ETPH	Extractable Total Petroleum Hydrocarbons
ERNS	Emergency Response Notification System
ESA	Phase I Environmental Site Assessment
FINDS	Facility Index System
GEN	Generators
HWS	Hazardous Waste Sites
IRA	Immediate Response Action
Kg	Kilogram
LBP	Lead Based Paint
Lbs	Pounds
LPG	Liquid Petroleum Gas
LTBI	Locations To Be Investigated
LUST	Leaking Underground Storage Tank
MSL	Mean Sea Level
NLR	No Longer Regulated
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OHM	Oil and/or Hazardous Material
PBS	Petroleum Bulk Storage
PCB	Polychlorinated Biphenyls
pCi/L	PicoCuries per liter
ppb	Parts per billion

RAATS	RCRA Administrative Action Tracking System
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
REC	Recognized Environmental Conditions
SF	Square feet
SQG	Small Quantity Generator
SPILLS	State Spills List
STATE	State Sites
SVOC	Semi-volatile Organic Compound
SWL	Solid Waste Landfills
TPH	Total Petroleum Hydrocarbons
TPH-DRO	Total Petroleum Hydrocarbons – Diesel Range Organics
TRIS	Toxic Release Inventory System
TSD	Transportation, Storage, Disposal Facility
USEPA/EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

**The Site: 271-273 Windsor Street, Hartford, Connecticut
(Hartford Assessor's Parcel IDs 267-290-014 and 267-290-015)**

- This report has been prepared for the sole and exclusive use of the Client and is subject to and issued in connection with the Agreement and the provisions thereof. Any use or reliance upon information provided in this report, without the specific written authorization of Client and BETA, shall be at the User's sole risk.
- In conducting this assessment and investigation, BETA has obtained and relied upon information from multiple sources to form certain conclusions regarding potential environmental issues at and in the vicinity of the subject property. Except as otherwise noted, no attempt has been made to verify the accuracy or completeness of such information.
- The objectives of the assessment and investigation described in this report were to assess the physical characteristics of the subject property with respect to overt evidence of past or present use, storage, and/or disposal of oil or hazardous materials, as defined in applicable state and federal environmental laws and regulations, and to gather information regarding current and past operations and environmental conditions at and in the vicinity of the subject property.
- The scope of this report does not include an assessment of the suitability of Site soil for development/construction. Please note that certain soils, particularly in urban areas, may include low levels of contaminants such as lead, metals, or ash constituents. The presence of such contaminants in soil, while not representing a "release," may result in the need for special handling at increased costs to allow for off Site soil reuse during Site development.
- No attempt has been made to assess the compliance status of any past or present Owner or Operator of the Site with any federal, state, or local laws or regulations.
- The findings, observations, and conclusions presented in this report are limited by the scope of services outlined in our Agreement, which reflects schedule and budgetary constraints imposed by Client for the current phase of environmental assessment. Furthermore, the assessment has been performed in accordance with generally accepted engineering practices and standards set forth in ASTM E 1527-13. No other warranty, expressed or implied, is made.
- The assessment presented in this report is based solely upon: readily-available data, visible portions of the Site, and information gathered to date. Should further environmental or other relevant information be developed at a later date, Client should bring the information to the attention of BETA as soon as possible. Based upon an evaluation, BETA may modify the report and its conclusions.
- It should be noted that the Executive Summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information. This report documents the recognized environmental conditions as defined in ASTM and where appropriate other suspect environmental conditions noted on the Site and associated risks to the environment. Although the survey may not disclose all potential liabilities, a reasonable attempt has been made to do so within the scope of work.
- BETA cannot and does not warrant or guarantee that the information provided by these sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide the client with information regarding overt evidence of past use storage, and/or release or threat of release of OHM the Site.
- The environmental database search was conducted under the Notice of Disclaimer/Waiver of Liability included in the EDR report.