

REPORT ON

ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT 115 FEDERAL STREET WINTHROP SQUARE TOWER PROJECT BOSTON, MASSACHUSETTS



by Haley & Aldrich, Inc. Boston, Massachusetts

for MCAF Winthrop LLC Boston, Massachusetts File No. 128435-005

January 2018



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4 January 2018 File No. 128435-005

MCAF Winthrop LLC 7 Water Street, 2nd Floor Boston, Massachusetts 02109

Attention: Kathleen MacNeil

Subject: ASTM Phase I Environmental Site Assessment

Winthrop Square Tower Project

115 Federal Street Boston, Massachusetts

Ladies and Gentlemen:

The enclosed report presents the results of a Phase I Environmental Site Assessment (Phase I) conducted at the above-referenced property, located at Winthrop Square Tower Project, in Boston, Massachusetts (herein referred to as the "subject site"). This work was performed by Haley & Aldrich, Inc. (Haley & Aldrich), in accordance with our proposal to MCAF Winthrop LLC dated 24 October 2017 ("Agreement") as authorized on 26 October 2017. This Phase I was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule).

The objective of a Phase I is to assess whether known and suspect "recognized environmental conditions" (REC), historical RECs (HREC), or controlled RECs (CREC) are associated with the subject site, as defined in the ASTM E 1527-13 Standard.

This Phase I has revealed no evidence of RECs associated with the subject site.

MCAF Winthrop LLC 4 January 2018 Page 2

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact us if you have any questions or comments.

Sincerely yours, HALEY & ALDRICH, INC.

Taylor S. LaBrecque
Taylor S. LaBrecque

Geologist

Cole E. Worthy III, LSP Senior Associate

Enclosures



Executive Summary

Haley & Aldrich, Inc. (Haley & Aldrich) has performed a Phase I Environmental Site Assessment (Phase I) of the Winthrop Square Tower Project property in Boston, Massachusetts (herein referred to as the "subject site"). The scope of work is described and conditioned by our proposal dated 24 October 2017. This Phase I was performed for MCAF Winthrop LLC for the proposed transaction of the site. This Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and All Appropriate Inquiries (AAI) Rule¹.

Deviations from this Standard are described in Section 1.4 of this report.

SUBJECT SITE DESCRIPTION

The subject site consists of a 5-story parking garage built in 1952 located on an approximately 1.1-acre parcel, known as 115 Federal Street. The building has been operated as a garage since construction. The garage is currently closed for parking and undergoing selective demolition.

OBJECTIVE

The objective of a Phase I is to assess whether "recognized environmental conditions" (REC), historical RECs (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site. Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of planned redevelopment of the site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an REC in part as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a <u>material threat</u> of a future release to the environment."

RECs were not identified in connection with the subject site.

CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction

¹ American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) ("ASTM E 1527-13 Standard"). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.



of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

HRECs were not identified in connection with the subject site.

DE MINIMIS CONDITIONS

The ASTM E 1527-13 Standard defines *de minimis* conditions as those conditions which "do not present a threat to human 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." The ASTM E 1527-13 Standard notes that "conditions determined to be *de minimis* are not recognized environmental conditions."

The following *de minimis* conditions listed below were identified in connection with the subject site.

De Minimis #1: Oil-water separator

At the time of the site visit, an oil-water separator was present on the lowest level of the garage associated with the sump. MCAF Winthrop Square enlisted Clean Harbors to pump out the oil/water separator on 7 December 2017. Refer to Appendix D for more information on the waste removal.

NON-SCOPE CONSIDERATIONS

Haley & Aldrich performed a limited subsurface exploration program involving the collection of 1 (one) groundwater sample from a monitoring well and 39 (thirty-nine) environmental samples from 8 (eight) test borings. Analytical results indicated that the naturally deposited material present beneath the building and groundwater at the site are below applicable Massachusetts Contingency Plan (MCP), 310 CMR 40.000 RCS-1 and RCGW-2 criteria, respectively.

Millennium Partners retained Mill City Environmental Corporation to conduct an investigative survey to identify and sample suspected asbestos containing material (ACM) and potentially Polychlorinated Biphenyls (PCB) containing material within the interior and exterior portions of the subject site building (115 Federal Street garage) that are expected to be encountered during planned demolition. Mill City Environmental Corporation retained TRC Environmental to test for the presence of lead in paint within the interior and exterior portions of the garage. Mill City Environmental and TRC Environmental performed the investigations on 10 March 2017. These investigations identified the presence of asbestos in 16 of the materials tested, PCBs in 4 of the materials tested, and the presence of lead in paint throughout the building.



SUMMARY AND RECOMMENDATIONS

We did not identify RECs, HRECs, or CRECs during this Phase I. Further assessment is not recommended at this time.

The remainder of this report contains additional information regarding the Phase I, the resulting findings summarized above, and limitations affecting this report.



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1 Project Locus

2 Site and Subsurface Exploration Location Plan



1. Introduction

This report presents the results of an ASTM Phase I (Phase I) conducted at Winthrop Square Tower Project in Boston, Massachusetts (herein referred to as the "subject site"). The approximately 47,962 sq feet subject site is a vacant public garage that is located at Winthrop Square Tower Project, as shown on the Project Locus, Figure 1. This Phase I was conducted in consideration of MCAF Winthrop LLC's intention to redevelop the property.

1.1 OBJECTIVE

The objective of a Phase I is to assess whether "recognized environmental conditions" (REC), historical RECs (HREC), and controlled RECs (CREC) are associated with the subject site by evaluating site history, interviews, existing observable conditions, current site use, and current and former uses of adjoining properties as well as potential releases at surrounding properties that may impact the subject site. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site.

RECs are defined in the ASTM E 1527-13 Standard as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or under conditions that pose a <u>material</u> threat of a future release to the environment." The definitions of RECs, HRECs, and CRECs are included in the Glossary section of this report.

1.2 LIMITED SUBSURFACE INVESTIGATION SCOPE AND OBJECTIVE

Haley & Aldrich conducted a limited subsurface investigation between 10 July and 24 August 2017 to assess the subsurface conditions to facilitate excavation and off-site transport of the soil to be excavated during the planned development at the site. The investigation included the advancement of 8 (eight) test borings at various locations throughout the subject site. Findings of the limited subsurface investigation are further discussed in Section 7.

1.3 SCOPE OF SERVICES

Phase I ESA

This work was performed by (Haley & Aldrich) and this Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and All <u>Appropriate Inquiries (AAI)</u> Rule² and in accordance with our proposal to MCAF Winthrop LLC dated 24 October 2017 ("Agreement") as authorized on 26 October 2017. The Phase I limitations and Agreement are attached hereto as Appendix A.

² American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) ("ASTM E 1527-13 Standard"). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.



As part of this Phase I, Haley & Aldrich conducted visual observations of site conditions and of abutting property use and interviewed a <u>key site manager</u> (site reconnaissance); reviewed federal, state, tribal, and local environmental database information, federal and state environmental files, previous reports (if identified and provided), and site historical use records; and formulated conclusions regarding the potential presence and impact of RECs.

<u>Limited Subsurface Exploration Program</u>

Haley & Aldrich performed the following detailed scope of services to complete our limited subsurface exploration program:

- Advanced 8 (eight) test boring explorations to depths ranging from approximately 93 to 121.5 feet below ground surface (bgs). As part of this program, 39 (Thirty-nine) environmental soil samples were collected from the naturally deposited soil present immediately below the existing garage footings, to the top of weathered bedrock (approximately 50 feet bgs). Soil samples were screened in the field with a photoionization detector (PID) to evaluate the presence of VOCs. The samples were submitted to an analytical laboratory for analysis of the following: Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), MCP 14 Metals, PCBs, Total Petroleum Hydrocarbons (TPH), Conductivity, and Waste Characteristics.
- A groundwater sample was collected from a nearby monitoring well designated HA-02(OW)
 located within Federal Court, immediately east of the subject site. The groundwater sample was
 analyzed for the Massachusetts Water Resources Authority (MWRA) 8(m) Temporary
 Construction Dewatering Discharge Permit criteria.

1.4 NON-SCOPE CONSIDERATIONS

The ASTM E 1527-13 Standard includes the following list of "additional issues" that are non-scope considerations outside of the scope of the ASTM Phase I practice: asbestos-containing materials, biological agents, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, and mold. These items were not included in this Phase I of the subject site.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, our assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-13 Standard as "electrical or hydraulic equipment known or likely to contain PCBs...to the extent visually and or physically observed or identified from the interview or records review."

Note that PCBs may be present in miscellaneous building materials such as caulking, sealants, insulation and sound dampening materials, paint, gaskets, roofing and siding materials, waterproofing compounds, enamel coatings, and other chemical products manufactured prior to 1979. Evaluating the subject site building for potential PCB-containing building materials and possible PCB-containing materials other than "electrical or hydraulic equipment known or likely to contain PCBs" was outside the scope of this Phase I. Note that a separate investigative survey was conducted by others to identify and sample suspected asbestos containing material (ACM) and potentially Polychlorinated Biphenyls (PCB) containing material within the interior and exterior portions of the subject site building (115 Federal



Street garage). Refer to Section 8 – Pre-Demolition Hazardous Building Material Survey of this ASTM Phase I Report for additional information.

1.5 LIMITING CONDITIONS/DEVIATIONS

With the exception of the deviations listed below, we did not make additions to or deviate from the ASTM E 1527-13 Standard to complete this Phase I.

• A Limited Subsurface Exploration Program was added to the program.

1.6 USER RESPONSIBILITIES

The completion of this Phase I is only one component of the process required to satisfy the AAI Rule. In addition, the user must adhere to a set of user responsibilities as defined by the ASTM E 1527-13 Standard and the AAI Rule. User responsibilities are discussed in section 6.6 of this report. A user seeking protection from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability as an innocent landowner, bona fide prospective purchaser, or contiguous property owner must complete all components of the AAI process in addition to meeting ongoing obligations. AAI components, CERCLA liability relief, and ongoing obligations are discussed in the AAI Rule and in Appendix XI of the ASTM E 1527-13 Standard.



2. Site Description

A description of the subject site is detailed in the sections below. Refer to Figure 1 for a project locus and Figure 2 for a site plan showing relevant site features and adjacent properties.

2.1 SITE OWNERSHIP, LOCATION, AND VICINITY DESCRIPTION

Site Description	Site Description				
Owner		MCAF Winthro 7 Water Street, Boston, MA			
Occupant		Vacant			
Current Site Use		Former garage	Former garage		
Size		1.1 acres			
Building Square Foot	age	47,962 sq feet			
USGS 7.5 Minute Top Map	oographic	Boston South, I	MA, 2015		
Site County		Suffolk	Suffolk		
Zoning		B-10 (Retail Business & Offices)			
Parcel Information		0304255000			
		Water:	Massachusetts Water Resources Association (MWRA)		
Utilities		Sewerage:	Boston Water and Sewer		
		Electricity:	EverSource		
		Gas/Oil/LPG:	NA		
Heating/Cooling Syst	em	Heating is prov	ided by electric baseboard; no cooling system		
Site Vicinity Description					
General Area Description Urban					
	North:	Mixed Use	(office/retail)		
Adjoining Property	East:	Federal Street followed by office building			
Description	South:	Mixed Use (office and retail) and Federal Center to southeast			
	West:	Devonshire	Street followed by mixed use (office and retail)		



2.2 PHYSICAL SETTING

Subsurface explorations and/or hydrogeologic investigations were not performed for this Phase I. Haley & Aldrich conducted a limited subsurface investigation between 10 July and 24 August 2017 to assess the subsurface conditions to facilitate excavation and off-site transport of the soil to be excavated during the planned development at the site. Subject site geology and hydrology were evaluated on the basis of readily available public information or references, and/or based upon our experience and understanding of subsurface conditions in the vicinity of the subject site. It is unknown to what extent localized variations in groundwater depth and flow occur on the subject site.

Physical Setting	Source	
Topography Summary	The subject is generally flat.	1
Site Elevation	Approximately El. 10.3 - 16 (Boston City Base)	1
Overburden Soils	During the subsurface investigation performed between 10 July and 24 August 2017, urban fill was not encountered beneath the building. Native material was observed to consists of the following thickness: 9.5 to 43.5 feet of marine deposit, 0 to 29.5 feet of glaciomarine deposits, and 0 to 16.6 feet of glacial till deposits (sand and clay).	2
Bedrock Formation	The project site is located in the Boston Basin. The Boston Bay Group consists of a complex sequence of mostly sedimentary rocks dominated by fine-grained argillites (most notably the Cambridge Argillite), but including coarser conglomerates, sandstones, and both intrusive and sedimentary volcanic rocks, including volcanic ash beds (tuffs).	2
Depth to Bedrock	The depth to top of geologic bedrock encountered at the site varied from approximately 45.1 feet to 54.1 feet below ground surface (feet bgs)	2
Depth to Groundwater	Water levels in an observation well located in Federal Court ranged from El 12.0 to 8.1 between November 2007 and October 2017. Groundwater levels are expected to fluctuate due to seasonal variations in precipitation and temperature, and other factors such as nearby construction activities, surface runoff, and leakage into and out of utilities and other below-grade structures, and local fill and soil conditions.	2
Surface Water Flow Direction	Surface water appears to flow towards the catch basins located in the paved areas of the surrounding streets.	1



Physical Setting	Source	
Regional Groundwater Flow Direction	Regional groundwater flow appears to flow to the southeast based on the proximity to the Fort Point Channel.	3
Nearest Surface Water Body	The Fort Point Channel, which leads to Boston Harbor is located approximately 1500 feet southeast of the subject site.	3

Sources:

- 1. Topographic Map, Boston South, United States Geological Survey 7.5 Minute Series, 2015.
- 2. Geotechnical Investigation and Interim Foundation Design Recommendations, Winthrop Square Tower, prepared by Haley & Aldrich, Inc., prepared for MCAF Winthrop LLC c/o Millennium Partners-Boston, dated 15 November 2017.
- 3. Google Earth, accessed 9 November 2017.

Environmentally Sensi	Environmentally Sensitive Areas Source		
Floodplain	No	1	
Mapped Wetlands	No	2	
Aquifer Protection Area/District	No	2	
Watershed Protection District	No	2	
Established Rare Wetland Wildlife Habitat and Certified or Potential Vernal Pool Areas	No	2	
Groundwater Classification	RCGW-2	3	

Sources:

- 1. FEMA National Flood Hazard, ARCGIS, accessed 9 November 2017.
- 2. MassDEP Priority Resources Map, accessed 9 November 2017.
- 3. MCP (310 CMR 40.0362)



3. Previous Reports

The following reports previously prepared for the subject site were reviewed for this Phase I. Information contained in these reports is included herein. Relevant excerpts from these reports are included in Appendix B.

The previously prepared reports and documents listed below were reviewed as part of this Phase I. Pertinent issues identified in those reports are summarized below.

 Geotechnical Investigation and Interim Foundation Design Recommendations, Winthrop Square, prepared by Haley & Aldrich, prepared for MCAF Winthrop LLC c/o Millennium Partners – Boston, dated 15 November 2017.

The geotechnical report presents the results of our recent geotechnical design investigation and provides interim building foundation design and construction recommendations, based on currently-available information, for the proposed Winthrop Square Tower development at 115 Federal Street in Boston, Massachusetts. Eight test borings were completed at the site in July and August 2017. The borings were advanced through the overburden soils and weathered bedrock. Rock coring was performed at each test boring location. The borings were drilled to depths ranging from approximately 93 feet to 121.5 feet below the existing parking garage spread footings.

 Preliminary Precharacterization Report, Winthrop Square Tower Project, 10 November 2017, prepared by Haley & Aldrich, Inc., prepared for MCAF Winthrop LLC c/o Millennium Partners – Boston.

The precharacterization report summarized the precharacterization program that was conducted in July and August 2017 to characterize soil proposed for off-site removal at the areas where test boring explorations were completed for geotechnical design purposes (summarized above). Soil chemical data indicated that none of the chemical constituents analyzed were detected at levels above applicable MCP 2014 RCS-1 Reportable Concentrations for soil. The Phase 2 exploration program is tentatively scheduled for early 2018, following demolition of the existing 115 Federal Street building.



4. Site History

Haley & Aldrich assessed past usage of the subject site and adjoining properties through a review of:

- Sanborn Fire Insurance Maps dated: 1867, 1885, 1895, 1904, 1909, 1922, 1929, 1951, 1964, 1988, 1990, 1992, 1993, 1994, 1995, 1998, 2002
- Topographic Maps dated 2015
- Aerial Photographs dated: 1938, 1946, 1952, 1955, 1960, 1969, 1970, 1978, 1980, 1985, 1996, 2008, 2010, 2012
- Municipal records
- Interviews with subject site personnel

Copies of information obtained from historical references reviewed are included in Appendix C. Unless otherwise noted below, per the ASTM standard, sources were reviewed dating back to 1940 or first developed use, whichever is earlier, and at 5-year intervals if the use of the property has changed within the time period.

4.1 SUBJECT SITE

According to the first Sanborn Map, dated 1867, the subject site was developed with dwellings and commercial buildings. Between 1885 and 1904, the subject site was utilized as wool warehouses, store fronts, paper, hardware, hats warehouse, and a hosiery manufacturer. Between 1885 and 1929 several areas of the site were used as the paper/ printing industry, including printing, storage, and warehouse. In 1929 this paper company was identified as Carter Rice & Company, Inc.

The 1951 Sanborn Map indicates significant changes to the subject property: the subject property had been cleared of storefronts and redeveloped as a 5-story parking garage. The site has remained a parking garage through present day.

4.2 ADJOINING PROPERTIES

The table below provides a summary of pertinent information from the historical sources reviewed regarding adjacent properties:

In the earliest Sanborn Map, dated 1867, the areas north of the subject property, beyond a street identified as Sullivan Place, are structures anticipated to be dwellings and clothing factories. South of the subject site is Federal Court Milton Court, and numerous structures identified as dwellings. To the east of the site is Federal Street, followed by dwellings and storefronts, and to the west of the site is Devonshire Street, followed by dwellings. The building located west of the subject site, across Devonshire Street, has remained in place through present day.

By 1885 many of the former dwellings surrounding the subject site were transformed into warehouse and storefronts. Between 1885 and 1951 the buildings north of the subject site remained the same and were used as wool and paper warehouses, office space, mill construction, book bindings, and printing. One building directly northwest of the site was demolished sometime between 1929 and 1951. Between 1885 and 1951, the buildings south of the subject site are depicted as miscellaneous stores, wool warehouse, shoe factory, bindery, and printing, paints and varnish. A boiler room was located



immediately south of the subject site building from 1885 through sometime prior to 1988. Between 1885 and 1951, the area east of the site was occupied by Federal Street, followed by miscellaneous stores, including Walworth MF's Co. (flooring), wool, and mill construction. The building west of the subject site, across Devonshire Street, was utilized as a toy store, dry goods store, clothing manufacturer, press room, and curtain factory.

The present-day building north of the subject site was constructed in 1986 and has been utilized as a garage/office building since construction. Sanborn maps indicate that the present-day building located southeast of the subject site was constructed between 1951 and 1964 and has been utilized as an office building through present day. Also, the present-day building southwest of the site was constructed in 1973 and was utilized as a parking garage, office building, and bank. In 1968 the bank located to the northeast of the subject site, across Federal Street, was constructed. The structures across Federal Street the southeast have remained miscellaneous storefronts through present day. The building across Devonshire Street to the west has continued to be used as mixed use (office and retail) through present day.



5. Environmental Records Review

5.1 ENVIRONMENTAL DATABASE RECORDS SEARCH

Haley & Aldrich used the electronic database service, Environmental Data Resources (EDR) to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced agency records, located within the ASTM-specified approximate minimum search distances as shown in the table below. A description of each database searched is in Section 13.2 of this report. The complete environmental database report is provided in Appendix D. Pertinent information obtained from the database is summarized in Section 5.3 below.

Database Searched	Approximate Minimum Search Distance	Subject Site Listed?	Number of Sites within Search Distance ¹
1. NPL Sites	1 mile	No	0
2. Delisted NPL Sites	0.5 mile	No	0
3. CERCLIS ² Sites	0.5 mile	No	1
4. CERCLIS-NFRAP ² Sites	0.5 mile	No	2
5. Federal ERNS	Site only	No	Not Applicable
6. RCRA non-CORRACTS TSD Facilities	0.5 mile	No	0
7. RCRA CORRACTS TSD Facilities	1 mile	No	0
8. RCRA Generators	Site & Adjoining	No	0
Federal Institutional/Engineering Controls	Site Only	No	Not Applicable
10. State/Tribal Equivalent NPL Sites	1 mile	No	0
11. State/Tribal Equivalent CERCLIS ² Sites	0.5 mile	No	134
12. State/Tribal Registered Storage Tanks	Site & Adjoining	No	0
13. State/Tribal Landfills and Solid Waste Disposal Sites	0.5 mile	No	0
14. State/Tribal Leaking Storage Tanks	0.5 mile	No	2
15. State/Tribal Institutional Controls/Engineering Controls	Site Only	No	Not Applicable
16. State/Tribal Voluntary Cleanup Sites	0.5 mile	No	0
17. State/Tribal Brownfield Sites	0.5 mile	No	0
18. Orphan Site List ³	Site & Adjoining	No	0



Database Searched	Approximate Minimum Search Distance	Subject Site Listed?	Number of Sites within Search Distance ¹
19. EDR Hist Cleaner ⁴	0.125 mile	Yes	7
20. EDR Hist Auto ⁴	0.125 mile	Yes	9

Notes:

- 1. Some sites may be included on multiple databases.
- 2. The US EPA retired the CERCLIS database in October 2013. In January 2016, the Superfund Enterprise Management System (SEMS), which replaces the CERCLIS database, became active. The CERCLIS database records search included as part of this assessment includes currently ascertainable data from the SEMS and SEMS-Archive databases as reported through the database vendor.
- 3. Haley & Aldrich also searched the <u>Orphan Site</u> List provided in the database report for the subject site and sites adjoining the subject site. Orphan sites are those that, due to incorrect or incomplete addresses, could not be mapped.
- 4. If applicable, other relevant databases, not specifically required by ASTM were included in the database review.

5.2 ADDITIONAL ENVIRONMENTAL RECORDS OR FILE REVIEW

To supplement the environmental record search, we contacted the following state and local government agencies and searched applicable online databases. If copies of the documents reviewed were obtained, pertinent material is included in Appendix D. Relevant information obtained is included in the appropriate sections of the report and/or discussed in Section 5.3 below. Adjacent properties were also included in requests for additional information if a significant incident or release was identified. Those adjacent properties reviewed for this assessment include:

Agoncy	Request Sent or Files Searched		Files Exist and are Available	Files
Agency	Subject Site	Adjoining Properties	for Review	Reviewed
MassDEP's Waste Site/ Reportable Release Look Up website (http://db.state.ma.us/dep/clean up/site/search.asp ²	Yes	Yes	Yes	Yes
Boston Assessor Office ³	Yes	No	Yes	Yes
Boston Department of Inspectional Services ⁴	Yes	No	Yes	Yes
Boston Health Department ⁵	Yes	No	Yes	Yes
Boston Fire Department ^{1,6}	Yes	No	NA	NA

Notes:

1. To date, no responses have been received from the Freedom of Information Act (FOIA) requests noted above. Based on the information obtained through our interviews with key site personnel, and our review of other records, it does not appear that responses to the FOIA requests should affect our conclusions regarding RECs on the site. However, when a response is received, it will



- be forwarded to MCAF Winthrop LLC and, if it affects our conclusions regarding the site, to MCAF Winthrop LLC will be informed.
- 2. The MassDEP maintains information regarding reported releases.
- 3. The Boston Assessor Office maintains information regarding ownership and property information.
- 4. The Boston Department of Inspection Services maintains information regarding Minor repairs, renovation, structural evaluation, building permit for brick repair.
- 5. The Boston Health Department maintains information regarding asbestos abatement permits.
- 6. The Boston Fire Department maintains information regarding underground storage tanks.

5.3 DETAILED DESCRIPTION OF RELEVANT INFORMATION

5.3.1 Subject Site

The subject site is not listed in the databases searched.

5.3.2 Nearby Sites

Several sites were listed in the database report within the applicable search radii or identified in regulatory records reviews. Due to their location with respect to the subject site (on the opposite side of a hydrogeologic barrier, distance from the site, location of the site relative to inferred groundwater flow, subsurface utilities and building levels, etc.), or their status (closed out release, etc.), several of the sites are not likely to adversely affect the subject site and are not discussed herein. Only those sites adjacent to the subject site and sites with a potential to have impacted the subject site are discussed below. The complete database report and relevant records review information is included in Appendix D.



Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
77 Franklin Street	SHWS, LAST, RELEASE	On 29 January 1998, a release of approximately 200-500 gallons of No. 4 fuel oil from a commercial tanker was reported to MassDEP, which assigned RTN 3-15955. MassDEP provided oral approval of an Immediate Response Action on 9 February 1998 and a Class A-2 RAO was submitted on 24 February 1998, indicating that a permanent solution had been achieved and contamination had not been reduced to background. 77 Franklin Street is located northwest of the subject property, across Winthrop Square. On 10 January 2001, a spill of approximately 300 gallons of No. 4 fuel oil from a commercial tanker was reported to MassDEP, which assigned RTN 3-20297. An Immediate Response Action Completion Statement was received by MassDEP on 9 November 2001. On 15 November 2001, a Class A-2 RAO was submitted, indicating that a Permanent Solution had been achieved and contamination had not been reduced to background.	Due to the nature and closure status of these releases, these listings are not anticipated to negatively impact the site.
101 Federal Street (Jacks Cleaners) (Bush Cleaners) (MCI-BSCJMA)	EDR HIST CLEANERS, HW GEN, Tier 2	The building adjacent to the north of the subject site was utilized as a historic cleaner from 1986 (Jacks Cleaners) and again from 1991 through 2014 (Bush Cleaners or Bush & Company Inc). It is unclear whether drycleaning activities occurred on site. This structure (listed under MCI-BSCJMA) has also been identified as a hazardous waste generator (EPA ID: MV6177370237) and Tier 2 information listing for the presence of batteries on site. No violations or releases are listed in associated with the hazardous waste generator.	If drycleaning occurred on site, there is a potential that chlorinated VOCs could have impacted the subsurface. However, recent soil and groundwater testing results did not identify any related chemicals on the subject site.



Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
75 Federal Street (U.S. Smelting Refining & Mining Co.)	SMES- ARCHIVE LEAD SMELTERS	The site adjacent to the north of the subject site was reportedly used for mining and mineral processes/smelting. The site ID: 0106093 and it has not been on the National Priority List. No additional information is available.	Due to the lack of information related to this smelting refining and mining, we do not anticipate that this would impact the site.
1 Winthrop Square (RREEF America REIT 11 Corp 21)	HW GEN	The site adjacent to the west, across Devonshire Street, is listed as a hazardous waste generator (EPA ID: MV6174513300). No additional information is listed.	Due to the nature of the listing, this hazardous waste generator is not anticipated to negatively impact the site.
100 Federal Street (Northeast Petroleum Industries) (Bank of America Boston)	EDR HIST AUTO, HW GEN, TIER 2	100 Federal Street, located adjacent to the east, across Federal Street, is listed as a Historic Auto Shop known as Northeast Petroleum Industries from 1972 to 1982. The location was described as petroleum bulk stations and terminals. No releases were reported at the site. The Bank of America Boston at 100 Federal Street is also included in the hazardous waste generator (EPA ID: MV6178967323) and Tier 2 information listings for being a small quantity generator of an unknown hazardous waste. No violations are listed in association with this listing.	Due to the nature of these listing and lack of reported releases, these listings are not anticipated to negatively impact the subject site.
100 Summer St (Sarni Dry Cleaners) (Equity Office Properties)	EDR HIST CLEANERS, HW GEN	The building adjacent to the south of the subject site was utilized as a drycleaner from 2004 through 2012, known as Sarni Dry Cleaner. Equity Office Properties at 100 Summer Street is identified as a hazardous waste generator (EPA ID: MV6174393131). No additional information is listed.	If drycleaning occurred on site, there is a potential that chlorinated VOCs could have impacted the subsurface.



5.4 VAPOR MIGRATION

The ASTM 1527-13 standard states that "for the purposes of this practice, "migrate" and "migration" refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface". Thus, this section specifies whether or not we perceive a risk of vapor migration to the subject site.

To assess a vapor migration risk we conducted a detailed review and analysis of the site-specific environmental database report and/or other reasonably ascertainable records to assess whether:

- 1. Off-site properties have documented chlorinated volatile organic compound (VOC) contamination located within 100 ft of the subject property, or
- 2. Off-site properties have documented volatile petroleum hydrocarbon (VPH) contamination within 30 feet of the subject property.

Based on our records review and lack of nearby sites with document chlorinated VOC or VPH contamination, it is presumed unlikely that a potential source of vapor migration currently exists beneath the site.



6. Site Reconnaissance and Key Personnel Interview(s)

A site visit to observe subject site conditions was conducted by Taylor S. LaBrecque of Haley & Aldrich, on 6 and 16 November 2017. Access to the subject site was provided by Jessica Greene and Jay Greenhalgh.

Haley & Aldrich personnel observed accessible interior areas of the subject site building(s), including common areas and mechanical spaces. Haley & Aldrich also observed the exterior portions of the subject site, including the property boundaries, and observed adjoining property conditions from the subject site boundaries and/or public thoroughfares. No weather-related conditions or other conditions that would limit our ability to observe the subject site or adjoining properties occurred during our site visit.

An interview with Jessica Greene of Suffolk Construction, the key site manager, was performed in conjunction with the site visit. Per the ASTM Standard, past owners, operators, and occupants of the subject site who are likely to have material information regarding the potential for contamination at the subject property shall be contacted to the extent that they can be identified and that the information likely to be obtained is not duplicative of information already obtained from other sources. Haley & Aldrich was not provided with contact information in order interview past owners and/or operators at the subject site. Based upon historical data collected from other sources, this potential data gap is not expected to adversely impact the results of this assessment.

The findings of the site visit and interviews are discussed below. Site photographs are included in Appendix E.

ASTM E 1527-13 Standard Section 10.8 requires that, prior to the site visit, the current subject site owner or key site manager and user, if different from the current owner or key site manager, be asked if there are any helpful documents that can be made available for review. Documents were not provided.

6.1 CURRENT USE OF THE PROPERTY

The subject site is currently a 5-story parking garage that is currently vacant and undergoing abatement of hazardous building materials. Storage of construction equipment and supplies was observed on the first floor near the Devonshire entrance to the garage. Numerous construction machines were observed inside the subject site building at the time of the site visit.

6.2 GENERAL DESCRIPTION OF STRUCTURES

The approximately 1.1-acre parcel is occupied by a 5-story parking garage constructed in 1952. The garage is not structurally stable. In addition to parking and drive lanes, two small office spaces with restroom, larger public restroom, and stairwells were observed throughout the garage. One office space on the ground floor of the garage was observed to have heating and electricity. Two portable restrooms were observed near the Devonshire entrance to the garage. An exhaust duct system was observed throughout the garage that provides ventilation to the garage.

Structural braces and debris piles were observed throughout the garage. Asphalt that previously covered the top level of the garage has been scraped off and is located in scattered piles across the roof.



Large cardboard boxes containing wrapped asbestos containing material that was previously removed from the garage structure were stored on the top level of the garage on top of wood pallets. A large (approximately 5 x 5 feet) hole was observed in the eastern edge of the garage that cuts through ever level of the garage. Construction workers have reportedly been dumping material from the roof down to the bottom floor.

6.3 USE, STORAGE, AND DISPOSAL OF PETROLEUM PRODUCTS AND HAZARDOUS MATERIALS

The use, storage and/or disposal of petroleum products or hazardous materials was not observed or reported at the subject site.

Other petroleum/hazardous materials observed at the subject site included:

Typical construction supplies and tools were observed throughout the building. Chemicals observed in the garage included paint thinner, paint, compressed gas (propane), several partially-empty gas containers ranging from 1 to 5 gallons, and 15W-40 Engine Oil. Fuel was likely stored inside the two emergency generators and other construction machines (5 bobcats, 3 diesel light towers, chipper) observed onsite. One large unlabeled tank, reportedly of compressed air, was observed on the lowest level of the garage. The site also contained several janitorial cleaning chemicals, including bathroom cleaner. There was no visual or olfactory evidence of a release from any of this construction equipment. They will continue to be used on site during the ongoing redevelopment of the site.

Large cardboard boxes containing wrapped asbestos containing material (ACM) that was previously removed from the garage structure were stored on the roof on top of wood pallets. The ACM will reportedly be removed be a licensed professional.

6.4 OTHER SUBJECT SITE OBSERVATIONS

The table below summarizes items that were observed and/or reported at the subject site during the site visit other than those items related to use, storage, and disposal of petroleum or hazardous materials (described in Section 6.3 above). If items were observed or reported, they are further described either in the table or below.

Description	Observed or Reported at Time of Site Visit	Observations/Comments
Potable Water Supply	Yes	Potable water is provided by the City of Boston
Nearest Drinking Water Source	No	
Sewage Disposal System	Yes	Sewage is reportedly discharged to the City of Boston Sewer System.
Septic System	No	
Unidentified Storage Containers	Yes	Several unidentified drums and storage containers with unknown contents were observed in the garage. Evidence of a release from these containers was not observed.
Wastewater Discharge	Yes	Wastewater is reportedly discharged to the City of Boston Sewer System.



	Observed or	
Description	Reported at	Observations/Comments
	Time of Site Visit	
Stormwater Discharge	Yes	Stormwater is reportedly discharged to the City of
	163	Boston Sewer System.
Odors	No	
PCBs Associated with		The construction machines contain small amounts
Electrical or Hydraulic	Yes	of hydraulic fluid. No visible or olfactory evidence
Equipment		of release associated with this equipment was observed.
Elevators (Traction or		observed.
Hydraulic)	No	
Vehicle Maintenance		
Lifts	No	
		Two mobile emergency generators were observed
Emergency Generators	Yes	in the garage. The emergency generators
		reportedly run on gasoline. Gasoline for these
		generators is not stored on site.
Sprinkler System	No	
Pumps		
	Yes	The heating system is electric baseboard heating
Heating System		and provides heat to the two office spaces near the
		garage entrances along Devonshire and Federal Streets.
Cooling System	No	Streets.
Stains or Corrosion on	110	Staining was observed across the floors on each
Floors, Walls, or	Yes	floor of the garage. Some small potential oil stains
Ceilings		were observed on the garage floor.
Floor Drains	Voc	Floor drains were observed on the floors of the
Floor Drains	Yes	garage and in the former restrooms
		Two sumps were observed on the lowest floor of the
		garage. An electric ejector pump discharges sump
Sumps	Yes	contents to the storm drains outside the garage. The
		sumps were reportedly disconnected in mid-
		November. The key site managers suspected that an
		oil-water separator was connected to the sumps. MCAF Winthrop Square enlisted Clean Harbors to
		pump out the oil/water separator on 7 December
		2017.
		Catch basins were observed in Devonshire Street,
Catch Basins	Yes	Federal Court, and Federal Street, surrounding the
-		subject site.
Pits, Ponds, Lagoons, and Pools of Liquid	Yes	The first floor of the structure is flooded because
		the sump is no longer in use. Pooling also observed
•		on the roof because of recent rain.
Stained Soil or	No	
Pavement		



Description	Observed or Reported at Time of Site Visit	Observations/Comments
Stressed Vegetation	No	
Solid Waste and Evidence of Waste Filling	Yes	Construction debris was observed throughout the building
Dry Wells	No	
Monitoring Wells	Yes	One monitoring well was observed in the roadway identified as Federal Court
Water Supply Wells	No	
Irrigation Wells	No	
Injection Wells	No	
Abandoned Wells	No	

Notes:

1. N/A items are those that were not observed or reported and/or not anticipated to be present given the nature of the site (e.g. building features not present on an undeveloped property).

6.5 ADJOINING PROPERTY OBSERVATIONS

Properties adjoining the site were generally observed to be commercial and retail. No evidence of spills or releases of oil or hazardous material was observed on adjoining properties at the time of the site visit.

6.6 USER RESPONSIBILITIES

The AAI Rule requires that the User of the report consider the following:

- Whether the user has specialized knowledge about previous ownership or uses of the subject site that may be material to identifying RECs;
- whether the user has determined that the subject site's Title contains environmental liens or
 other information related to the environmental condition of the property, including engineering
 and institutional controls and Activity and Use Limitations (AULs), as defined by ASTM;
- whether the user is aware of commonly known or reasonably ascertainable information about the subject site including whether or not the presence of contamination is likely on the subject site and to what degree it can be detected; and
- whether the user has prior knowledge that the price of the subject site has been reduced for environmentally related reasons.



While such information is not required to be provided by the environmental professional(s), the information can assist the environmental professional in identifying recognized environmental conditions. The "All Appropriate Inquiries" Final Rule (40 CFR Part 312) requires that these tasks be performed by or on behalf of a party seeking to qualify for an LLP to CERCLA liability.

Haley & Aldrich was provided a completed user questionnaire, which is included in Appendix A.



7. Limited Subsurface Exploration Program

7.1 ACTIVITIES AND OBJECTIVES

One groundwater sample was collect in May 2017 from an existing well located within Federal Court in anticipation of the submission of a construction dewatering permit application for the future development of the subject site.

The first phase of the Winthrop Square soil precharacterization program was conducted in July and August 2017 to characterize soil proposed for off-site removal at the areas where test boring explorations were completed for geotechnical design purposes. Soil quality data presented herein is representative of the soil at the recent test boring locations, as shown on Figure 2. A second phase of test boring explorations is scheduled for early 2018, following the demolition of the existing parking garage, to characterize the remaining portions of the proposed below-grade building footprint. The first phase of the precharacterization program included the completion of 8 (eight) test borings and laboratory analysis of 39 (thirty-nine) soil samples.

7.2 SUBSURFACE EXPLORATIONS AND SAMPLING

On 26 May 2017, 1 (one) groundwater sample was collected from the observation well HA-02(OW) located within Federal Court, immediately east of the proposed development. The well was sampled using low-flow sampling techniques.

Between 10 July and 24 August 2017, 8 (eight) test borings (designated HA17-A1, HA17-B1, HA17-C1, HA17-C4, HA17-D3, HA17-D5, HA17-E1 and HA17-E4, respectively) were completed at the site. The borings were performed in order to collect soil quality data for soil precharacterization, and for geotechnical design purposes. The eight test borings were drilled from the roof of the existing Winthrop Square Parking Garage by Geologic-Earth Exploration, Inc., Norfolk, Massachusetts, under Haley & Aldrich observation. Details of the test boring procedures are provided on the test boring logs, included in Appendix F. Soil samples were screened in the field with a photoionization detector (PID) for the presence of VOCs. PID headspace readings were typically not detected, with results noted on the test boring logs.

As shown on the boring logs, the elevations at the top of the borings ranged from El. 7.1 (in boring HA17-C1) to El. 9.2, in boring HA17-E4. Except for boring HA17-E4, the depth of each exploration was referenced to the bottom of the concrete spread footing, such that the start of the boring (depth 0.0 feet) was established as the soil immediately below the spread footing. In HA17-E4, the start of the boring was referenced to the top of the concrete spread footing.

The borings were drilled to depths ranging from approximately 93 to 121.5 feet, corresponding to the borings designated HA17-C4 and HA17-E4, respectively. The terminal elevations at the bottom of the borings ranged from approximately El. -85.6 to El. -112.8, in borings designated HA17-C4 and HA17-D5, respectively.

The soil samples were collected from the naturally deposited material between the bottom of the existing garage footings and the top of weathered bedrock at approximately 10 feet intervals.



7.3 ANALYTICAL METHODS

Soil and groundwater samples were maintained by Haley & Aldrich personnel under standard chain-of-custody documentation. The soil samples were collected between 10 July and 24 August 2017 and the groundwater sample was collected on 26 May 2017. The soil and groundwater samples were delivered to Alpha Analytical Laboratories of Westborough, Massachusetts.

The samples were submitted for analysis of the following: VOCs, SVOCs, MCP 14 Metals, PCBs, TPH, Conductivity, and Waste Characteristics.

The groundwater sample was submitted for analysis of the MWRA 8(m) Temporary Construction Dewatering Discharge Permit criteria, which includes VOCs, SVOCs, Extractable Petroleum Hydrocarbons (EPH), Total Metals, PCBs, Pesticides, Oil & Grease, and pH.

7.4 ANALYTICAL RESULTS

Tables I and II summarize the soil and groundwater analytical results, respectively. Copies of the laboratory analytical results are included as Appendix G. The sample results have been compared to applicable MassDEP Reportable Concentrations for soil (RCS-1) and groundwater (RCGW-2).

7.4.1 Soil sample Results

During the exploration program, environmental soil samples were collected from the naturally deposited soil present immediately below the existing garage footings, to the top of weathered bedrock.

Soil chemical data indicated that none of the chemical constituents analyzed from the naturally deposited soil samples collected were detected at levels above applicable MCP 2014 RCS-1 Reportable Concentrations for soil. Furthermore, the majority of samples collected from the naturally deposited soils did not indicate detections of VOCs, SVOCs, TPH, and PCBs.

7.4.2 Groundwater Sample Results

On 26 May 2017, a groundwater sample was collected from the observation well HA-02(OW) located within Federal Court and analyzed for the MWRA 8(m) Temporary Construction Dewatering Discharge Permit criteria.

The recent groundwater analysis did not detect concentrations of tested chemical constituents above applicable MCP RCGW-2 reportable concentrations, nor above the MWRA criteria.



8. Pre-Demolition Hazardous Building Material Survey

Millennium Partners retained Mill City Environmental Corporation to conduct an investigative survey to identify and sample suspected asbestos containing material (ACM) and potentially Polychlorinated Biphenyls (PCB) containing material within the interior and exterior of the subject site building (115 Federal Street garage) that are expected to be impacted by planned demolition. Mill City Environmental Corporation retained TRC Environmental to test for the presence of lead in paint within the interior and exterior of the garage. Mill City Environmental and TRC Environmental performed the investigations on 10 March 2017.

8.1 ASBESTOS CONTAINING MATERIAL (ACM)

Mill City Environmental Corporation inspected the interior and exterior portions of the subject site building to satisfy the EPA's National Emissions Standards for Hazardous Air Pollutants (NESHAPS) regulations. Mill City collected 51 samples for ACM and submitted to Optimum Analytical in Salem NH for ACM analysis. Of the 51 samples submitted, 41 were analyzed, and 16 tested positive for asbestos. Asbestos was not detected in the remaining samples. Refer to the complete report included in Appendix H for more detail on sample locations and results.

8.2 POLYCHLORINATED BIPHENYLS (PCBS)

Mill City Environmental Corporation inspected the interior and exterior portions of the subject site building to screen for PCB content. In summary, 9 samples were collected and submitted to Phoenix Environmental Laboratory for PCB analysis. It was reported that 4 samples tested positive for PCBs and at concentration levels below 50 ppm. Refer to the complete report included in Appendix H for more detail on sample locations and results.

8.3 LEAD PAINT TESTING

Mill City Environmental Corporation inspected the interior and exterior portions of the subject site building to screen for lead content of coatings on various painted building substrates using a portable X-Ray Fluorescence (XRF) Spectrum Analyzer.

Results indicated that levels of lead on surfaces tested range from <0.05 mg/cm² (less than the limit of quantification of the XRF) to 4.8 mg/cm². The results indicate that detectable levels of lead are present on various surfaces throughout the building, including metal handrails, concrete stair treads, walls, columns, CMU block walls, metals windows, doors and door frames, parking lines on pavement, yellow concrete curbing, metal ducts, vent pipes, etc. Construction activities that impact surfaces where lead may be present require specific work practices and disposal procedures. Refer to the complete report included in Appendix H for more detail.



9. Findings and Opinions

9.1 DATA GAPS

Our ability to identify and evaluate RECs at the subject site is conditioned upon <u>data gaps</u> identified as part of this Phase I.

No significant data gaps were identified during the performance of this Phase I. Thus, it is our opinion that sufficient information was obtained to identify subject site conditions indicative of releases or threatened releases of hazardous substances and petroleum hydrocarbons. Our opinion is limited by the conditions prevailing at the time our work is performed and the applicable regulatory requirements in effect.

9.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an REC in part as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

Our opinion regarding an REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of the client's intended use for the subject site.

RECs were not identified in connection with the subject site.

9.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

9.4 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC as an environmental condition "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

HRECs were not identified in connection with the subject site.



9.5 DE MINIMIS CONDITIONS

The ASTM E 1527-13 Standard defines *de minimis* conditions as those conditions which "do not present a threat to human 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." The ASTM E 1527-13 Standard notes that "conditions determined to be *de minimis* are not recognized environmental conditions."

The following de minimis conditions listed below were identified in connection with the subject site.

De Minimis #1: Oil-water separator

At the time of the site visit, an oil-water separator was present on the lowest level of the garage associated with the sump. MCAF Winthrop Square enlisted Clean Harbors to pump out the oil/water separator on 7 December 2017. Refer to Appendix D for more information on the waste removal.

9.6 NON-SCOPE CONSIDERATIONS

Haley & Aldrich performed a limited subsurface exploration program involving the collection of 1 (one) groundwater sample from a monitoring well and 39 (thirty-nine) environmental samples from 8 (eight) borings. Analytical results indicated that the natural material present below the building and groundwater are below applicable RCS-1 and RCGW-2 criteria, respectively.

Millennium Partners retained Mill City Environmental Corporation to conduct an investigative survey to identify and sample suspected asbestos containing material (ACM) and potentially Polychlorinated Biphenyls (PCB) containing material within the interior and exterior of the subject site building (115 Federal Street garage) that are expected to be impacted by planned demolition. Mill City Environmental Corporation retained TRC Environmental to test for the presence of lead in paint within the interior and exterior of the garage. Mill City Environmental and TRC Environmental performed the investigations on 10 March 2017. The investigation identified the presence of asbestos in 16 of the materials tested, PCBs in 4 of the materials tested, and the presence of lead in paint throughout the building.



10. Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527 of Winthrop Square Tower Project, in Boston, Massachusetts, the property. Any exceptions to or deletions from, this practice are described in Section 1.4 of this report.

This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the property. We do not recommend additional assessment at this time.



11. Environmental Professional Certification

The undersigned declare the following:

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 Part 312 and

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Cole E. Worthy III, LSP

Senior Associate

