Appendix E
Hazardous Materials

PHASE I ENVIRONMENTAL SITE ASSESSMENT

MBTA Draw 1 Bridge
Causeway Street
Boston, MA 02114
February 2020

Project Number: 342282.0000

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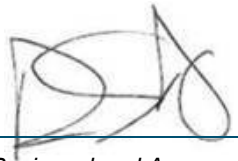

Reviewed and Approved by:
Ryan Niles

This Phase I ESA (February 2020) has been assumed valid for the purposes of the National Environmental Policy Act Environmental Assessment (December 2024) prepared to evaluate the Draw One Bridge Replacement Project. MBTA will conduct additional soil and groundwater sampling, as well as additional hazardous and contaminated materials investigations, as appropriate, including survey and testing of the Signal Tower A building and Draw One Bridge structures, prior to construction.

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EXECUTIVE SUMMARY

TRC Environmental Corporation, Inc. (TRC) was retained by Massachusetts Bay Transit Authority (also known as "Client" or "User") to perform a Phase I Environmental Site Assessment (ESA) of the MBTA Draw 1 Bridge Property which includes the two spans of the railroad bridge over the Charles River, and portions of land in Cambridge and Boston at Causeway Street, Boston, MA 02114 (herein referred to as the "Site"). TRC conducted the ESA in connection with the Client's planned replacement of the Bridge. The Phase I ESA described in this report was performed in accordance with the scope and limitations of the American Society for Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13). Limiting conditions and/or deviations from the ASTM E 1527-13 standard are described in Sections 1.3 and 7.6 of this report.

The approximately 4-acre Site includes the two spans of the railroad bridge over the Charles River and portions of land in Cambridge and Boston and is located at Causeway Street in Boston, MA 02114, in an urban area. The Site is described as MBTA North Station and MBTA Tower A, and is located in industrially zoned area. A Site location map is included as **Figure 1**. The Site is currently owned by the MBTA and operated by Keolis Commuter Services (Keolis) for commuter train service.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 of Causeway Street, Boston, MA 02114, the Site. Any exceptions to or deletions from this practice are described in Sections 1.3 and 7.6 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Site.

This Executive Summary is part of this complete report; any findings, opinions, or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for supporting information related to findings, opinions, and conclusions.

Legal Notice

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1.0 INTRODUCTION

TRC Environmental Corporation (TRC) has prepared this Phase I Environmental Site Assessment (ESA) for STV Incorporated (hereinafter "Client") and Massachusetts Bay Transit Authority (hereinafter "User").

This report was prepared for and may be relied upon by Client and User for the purposes set forth herein; it may not be relied on by any party other than the Client and User. TRC will consider authorization for third-party reliance on this report if requested by the Client. TRC reserves the right to deny reliance on this report by third parties.

1.1 Purpose and Scope of Services

The following Phase I ESA was performed for the MBTA Draw 1 Bridge Property which includes the two spans of the railroad bridge over the Charles River and portions of land in Cambridge and Boston: Causeway Street, Boston, MA 02114 (hereinafter "Site"). A Site location map is included as **Figure 1**. This Phase I ESA has been prepared by TRC in accordance with the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I ESA Process* (ASTM E 1527-13) and is intended for the sole use of STV Incorporated and Massachusetts Bay Transit Authority (MTBA) per MBTA Contract Number H32PS01 dated November 12, 2019.

The purpose of this assessment is to identify *Recognized Environmental Conditions* (RECs) at the Site, as defined by the ASTM E 1527-13 standard. The completion of this Phase I ESA report may be used to satisfy one of the requirements for the User to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* liability protections pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting *all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice* as defined by 42 U.S.C. §9601(35)(B) of CERCLA.

The Scope of Services for this Phase I ESA included the following tasks:

- Site and vicinity reconnaissance;
- Site and vicinity description and physical setting;
- Historical source review and description of historic Site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to obtain by the User; and
- Preparation of a report summarizing findings, opinions, and conclusions.

1.2 Additional Services

Items outside the scope of the ASTM E 1527-13 standard include but are not limited to the following:

- Asbestos-containing building materials
- Radon
- Lead-based paint
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historic resources
- Industrial hygiene
- Emerging contaminants
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality unrelated to *releases* of *hazardous substances* or *petroleum products* into the environment
- Biological agents
- Mold

Non-scope services including potential locations for staging and storage of contaminated soil and groundwater and a hazardous materials evaluation are further described in Section 9.0.

1.3 Deviations to ASTM E 1527-13 Standard

The following significant deviations or deletions to the ASTM standard were made during this Phase I ESA:

- No access to two rooms within Tower A were granted due to health hazards.
- No access to the east bridge machine room was granted.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The approximately 4-acre Site includes the two spans of the railroad bridge over the Charles River and portions of land in Cambridge and Boston, is located at Causeway Street in Boston, MA 02114 in an urban area. The Site is described by the Essex and Middlesex tax assessor as MBTA North Station and MBTA Tower A, is zoned as industrial and is currently owned by the Client. A Site location map is included as **Figure 1**.

2.2 Site Improvements

Current on-Site improvements are listed in the following table. A Site layout plan is included as **Figure 2**.

Table 2.1 – Site Improvements

Site Feature	Description
Buildings (stories)	One two-story historic control tower.
Construction date(s)	1931
Exterior areas	Paved
On-Site roads/rail lines	Active Commuter Rail Lines
Other large equipment	Electrical Equipment
Potable water supply	Unknown
Sewage disposal system(s)	Unknown
Heating/cooling system fuel source(s)	Heating oil
Back-up fuel source(s)	N/A
Electricity supplier(s)	Unknown
Stormwater system	Unknown

2.3 Current and Historic Site Use

2.3.1 Current Site Use(s)

The Site is currently owned by the MBTA and operated by Keolis Commuter Services (Keolis) as a commuter rail line.

2.3.2 Previous Owner and Operator Information

Based on information provided by the User (Section 3.0), the historical record review (Section 4.0), and/or interviews conducted during this Phase I ESA (Section 6.0), the Sites have been owned and operated as a railroad since before the 1890s.

2.4 Physical Setting

According to the United States Geological Survey, 2012, *7.5-Minute Topographic Map for Boston South and Boston North* (refer to **Figure 1**), the Site is located adjacent to and spanning the Charles River, the Site topographic elevation is approximately 8 feet above mean sea level at the track level, and local topography slopes to the river, though the Site is generally flat. Based on local topography, the assumed direction of shallow groundwater flow is toward the Charles River. However, a subsurface investigation would be required to determine actual groundwater flow direction.

Please refer to the Geocheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in the Site vicinity. According to EDR, the Site is located in a Federal Emergency Management Agency flood zone. According to EDR and Priority Resource Map (**Figure 3**), the Site is located in a Federal Emergency Management Agency (FEMA) 100-year flood zone. The Site is located within 500 feet of protected open space areas located to the east-northeast and to the southwest.

3.0 USER PROVIDED INFORMATION

According to the ASTM E 1527-13 standard, certain tasks that may help identify the presence of RECs associated with the Site are generally conducted by the Phase I ESA User. These tasks include providing or authorizing the *environmental professional* to obtain recorded land title records for environmental liens or activity and use limitations (AULs); providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); providing commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to RECs in connection with the *property*; and informing the *environmental professional* if, as believed by the User, the purchase price of the *property* is lower than the fair market value due to contamination. A list of requested information was included in TRC's signed proposal (see Section 1.1). Information provided by the User pursuant to that request is listed in Section 3.0. A copy of the User questionnaire is included in **Appendix B**.

3.1 Title and Judicial Records for Environmental Liens or AULs

In addition to reviewing the EDR report (discussed in Section 4.2), local municipal records (Section 4.4), and the Massachusetts Land Records online database (Section 4.4), TRC obtained supplemental information regarding AUL-listed properties within Boston and Cambridge from the Mass Land Records. No evidence of AULs associated with the Site was identified.

3.2 Specialized Knowledge

The User was not aware of specialized knowledge related to RECs at the Site.

3.3 Property Value Reduction Issues

The User was not aware of property valuation reduction issues regarding the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

No commonly known or reasonably ascertainable information was provided to TRC by the User.

3.5 Reason for Conducting Phase I ESA

TRC understands the User requires a Phase I for their planned redevelopment of the Site.

4.0 RECORDS REVIEW

4.1 Historic Use Information

Information regarding Site and vicinity historic uses was obtained from various publicly available and practically reviewable sources including:

- Aerial photographs (scale: 1" = 500') dated 1938, 1946, 1952, 1955, 1960, 1969, 1970, 1978, 1980, 1985, 1995, 2008, 2012, and 2016;
- Historical Sanborn® Fire Insurance Maps (Sanborn Maps) dated 1867, 1885, 1888, 1895, 1900, 1909, 1922,1927, 1929, 1934, 1950, 1951, 1964, 1986, 1988, 1989, 1990, 1992, 1993, 1994, 1995, 1996, 1998, 2002, 2003, 2004, 2005, and 2006;
- Topographic maps dated 1893, 1903, 1943, 1944, 1946, 1947, 1949, 1950, 1954, 1956, 1970, 1971, 1979, 1985, 1987, and 2012;
- City Directories dated 1930, 1935, 1945, 1950, 1960, 1965, 1969, 1975, 1984, 1989, 1992, 1995, 2000, 2005, 2010, and 2014;
- Local municipal records;
- An environmental database report; and
- Interviews with Debra Darby and Clary Coutu.*

Historical research documentation is included in **Appendix C**.

4.1.1 Site History

Operational History

Table 4.1 - Site History

Year	Site History
1890 to 1938	The Site property appears to be used as Boston and Maine railroad tracks. There are no existing buildings present on the site.
1938-1952	On the Cambridge side of the Site, a signal tower (Tower A) was constructed in 1938 for the Boston and Maine railroad tracks. This structure is the only structure on the site.
1952 to 1969	An elevated road was constructed over the southernmost portion of the Boston site of the Site. The highway runs above the tracks. In 1965, the last Boston and Maine railroad intercity service ended and MBTA began operating the tracks.
1969-1985	A road was constructed behind Signal Tower A, connecting two pieces of land on either side of the Millers River. The existing structure does not appear to change throughout this time. In 1980 limited MBTA Commuter Rail service to Concord was run as part of a federally funded experiment.
1985 to 2008	Canopies have been added over tracks extending out from North Station. Many elevated highways were constructed above the railroad track. Route 1 was built running horizontally across the site. In 2001, Amtrak began service at North Station.

*Note (as of November 22, 2024): Debra Darby is the Site Remediation Specialist at MBTA – Key Site Manager (as defined by the ASTM standard and identified by the property owner); Clary Coutu is the Director of Environmental Services, Compliance, and Sustainability with Keolis Commuter Services, LLC, current property User.

Table 4.1 - Site History

Year	Site History
2008 to 2012	The elevated road above the site has been reconstructed, being pushed further away from North Station. An additional elevated highway was constructed behind Signal Tower A running parallel to the railroad tracks.
2012 to Present	A pedestrian bridge named “N Bank Bridge” was constructed above the railroad tracks and behind Signal Tower A.

It does not appear that topographic contours in the Site area have significantly changed during the time period reviewed. If significant changes had been noted, it could indicate significant filling or excavation activity.

4.1.2 Adjoining Property History

Table 4.2 – Site Adjoining Property History

Year	Adjoining Property History
North	This area has been used at railroad tracks since the early 1900s. Prior to 1965 Boston and Maine railroad occupied the area. Since 1965 MBTA has owned and operated the tracks. In the 1990s elevated highways were constructed over the tracks.
East	Southeast: Prior to the 1950s, the area contains multiple structures and parking areas. In the 1950s, an overhead road was constructed. In the late 1970s it appears that the structures in the area were demolished and the area was used as a parking lot. In the early 2000s the road was relocated and one building was constructed in the area and Interstate 93 was constructed running parallel to the railroad tracks. Northeast: Prior to the late 19th century, the Millers River occupied the area. Since the late 1970s the Millers River has mostly been turned into a landfill and there is only a small part of the river still existing. In the 1990s, highways were constructed over the area.
South	North Station and the Boston Garden have been present since the late 1920s. The Boston Garden arena is located directly above North Station. In 1984, the MBTA was awarded a contract to rebuild North Station and its tracks. In 1998 the Boston Garden building was demolished, and the TD Garden took its place.
West	Southwest: Prior to the 1960s, this area was used as additional tracks coming from North Station. In the late 1960s it appears these tracks were removed, and this area became a parking lot. The area is still currently being used as a parking lot. Northwest: Prior to 1955, this area was undeveloped. In the late 1950s, the area became more developed and occupied by large buildings. In the early 1990s, elevated highways were constructed over the area. In the early 2000s, the buildings were demolished, and the land was made into North Point Park.

4.1.3 Surrounding Property History

Table 4.3 - Surrounding Property History

Year	Surrounding Property History
North	Between the early 1900s to present this area has been developed for industrial use and as railroad tracks,
East	From at least 1900 to the present, the Charles River has occupied this area.
South	North Station and the Boston/TD Garden have been present in this area since before the 1930s.
West	From at least 1900 to the present, the Charles River has occupied this area.

4.2 Database Report and Environmental Record Review

A database search report that identifies properties listed on state and federal databases within the ASTM-required radii of the Site was obtained from EDR and is included in **Appendix A**.

The environmental database report identified 536 records/listings surrounding the Site and 167 other records/listings within the search radii of the Site. These properties included those that could be mapped and those that could not (i.e., orphan properties).

4.2.1 Adjoining and Surrounding Property Record Review

TRC evaluated the following factors to determine whether additional environmental records should be reviewed with respect to the potential for contaminant migration from the adjoining and surrounding properties:

(1) Whether the property is upgradient or downgradient of the Site related to potential groundwater migration based on the local topography, and the assumed (or known) groundwater depth and east south east shallow groundwater flow direction;
(2) Whether the property is upgradient or downgradient of the Site related to potential vapor migration based on readily available information pursuant to the ASTM E 1527-13 standard including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, storm sewers, and significant natural conduits such as Karst terrain (vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);
(3) Property case status (i.e., whether the Massachusetts Department of Environmental Protection has issued a No Further Action letter);
(4) Type of database and whether the presence of contamination is known; and
(5) The distance between the listed property and the Site.

Based on this evaluation, TRC limited the review of additional environmental records to the properties listed below because the potential for contamination to be migrating to the Site from the other properties identified by the database search is considered low.

4.2.1.1 Adjoining Properties

Information regarding adjoining properties (those which share a common property boundary with the Site) included in the database search report is summarized in the following table(s):

Facility Name(s) and/or Listed Address(es)	ADJ TO BOSTON GARDEN & MBTA STATION; NORTH STA TRACK 7 MOTOR OIL RELEASE; BOSTON & MAINE CORP DEBTOR 150 CAUSEWAY ST, BOSTON, MA 02114
EDR Map No(s).	A1, A2, & A3
Database(s)	MA SHWS, MA RELEASE, & RCRA NonGen/NRL
Description/ID No(s)	RTNs: 3-10179 & 3-26308; EPA ID: MAD006951610
Database Review Summary	According to the EDR, on October 12, 1993, there was a report of a two-hour release of oil from a pipe reported to Massachusetts Department of Environmental Protection (MassDEP) and release tracking number (RTN) 3-10179 was assigned to the release. On June 30, 2000 an A2 Release Action Outcome (RAO) was filed for the release meaning a permanent solution has been achieved but the contamination was not reduced to background. According to the EDR, on October 18, 2006, there was a report of a two-hour release of motor oil submitted to MassDEP and RTN 3-26308 was assigned to the release. On February 16, 2017 an A2 RAO was filed for the release meaning a permanent solution has been achieved but the contamination was not reduced to background. According to the EDR, this facility is listed as a Non-Generator of Hazardous Waste but does use D007 – Chromium on site with no violations to date. Based on proximity to the Site, these releases may impact subsurface conditions at the Site and should be considered during subsequent subsurface investigations.

Facility Name(s) and/or Listed Address(es)	NO LOCATION AID MILLERS RIV, CAMBRIDGE, MA
EDR Map No(s).	10
Database(s)	MA SHWS & MA RELEASE
Description/ID No(s)	RTN: 3-16014

Database Review Summary	According to the EDR, on November 16, 1999 there was a release of oil to the surface water at Millers River and RTN 3-16014 was assigned to the release. An Immediate Release Action (IRA) was implemented and release was contained. A Memorandum of Understanding was submitted to MassDEP and no further action was taken. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Listed Address(es)	ACROSS FROM MUSEUM OF SCIENCE 61 INDUSTRIAL PARK RD, BOSTON, MA 02114
EDR Map No(s).	24
Database(s)	MA SHWS & MA RELEASE
Description/ID No(s)	RTNs: 3-15995 & 3-14856
Database Review Summary	According to the EDR, on February 10, 1998, there was a 120-day release notification filed for the presence of total petroleum hydrocarbons (TPH), benz(e)acephenanthrylene, and lead and RTN 3-15995 was assigned to the release. A RAO Not Required was submitted on February 22, 2000 and the release was linked to RTN 3-14856. According to the EDR, on October 26, 1996, there was a 120-day release notification filed for the presence of polynuclear aromatic hydrocarbons (PAHs) and heavy metals in soil and the RTN 3-14856 was assigned to the release. This release is the primary RTN which includes RTNs 3-15995 and 3-17455. The Site is currently classified as Tier II. Based on proximity to the Site and regulatory status, these releases may impact subsurface conditions at the Site and should be considered during subsequent subsurface investigations.

4.2.1.2 Surrounding Properties

Information regarding surrounding properties (those within the general vicinity of the Site) included in the database search report is summarized in the following table(s):

Facility Name(s) and/or Address(es)	@ TD BANK NORTH GARDEN CAUSEWAY ST, BOSTON, MA
Approximate Location Relative to Site	302 ft
EDR Map No(s).	B11
Database(s)	MA SHWS & MA RELEASE

Description/ID No(s).	RTN: 3-26309
Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	According to the EDR, on October 18, 2006, there was a two-hour release of 20 gallons of hydraulic oil from a vehicle on Causeway Street was reported to MassDEP and the RTN 3-26309 was assigned to the release. After an IRA was conducted, an A1 RAO was submitted on December 22, 2019 meaning that a permanent solution has been achieved and contamination has been reduced to background or a threat of release has been eliminated. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Address(es)	BOSTON DPW 50 NASHUA ST, BOSTON, MA 02100
Approximate Location Relative to Site	320 ft
EDR Map No(s).	D12
Database(s)	MA SHWS & MA RELEASE
Description/ID No(s).	RTN: 3-4359
	Upgradient
Database Review Summary	According to the EDR, on July 15, 1993, there was a release of oil discovered during the removal of a 5,000-gallon underground storage tank (UST) reported to MassDEP and the RTN 3-4359 was assigned to the release. An A2 RAO was submitted on December 19, 2001 meaning a permanent solution has been achieved but the contamination was not reduced to background. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Address(es)	TRIGEN-BOSTON ENGERY CORP S-1 MINOT STREET STEAM STATION BOSTON THERMAL ENERGY CORP 80 NASHUA ST, BOSTON, MA 02111
Approximate Location Relative to Site	332 feet
EDR Map No(s).	D13, D14, D15
Database(s)	MA LUST, MA SPILLS, MA RELEASE, MA UST, RCRA NonGen/NLR

Description/ID No(s).	RTNs 3-16005 & 3-11824
Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	According to the EDR, on March 6, 1998, there was a two-hour release of 20 gallons of #6 fuel oil from a UST. The release was reported to MassDEP and the RTN 3-16005 was assigned to the release. After an IRA was conducted, a RAO Not Required was submitted on May 26, 2005 meaning that a permanent solution has been achieved and contamination has been reduced to background or a threat of release has been eliminated. Based on regulatory status, this release is not anticipated to impact conditions at the Site. According to the EDR, on November 7, 1994, there was a two-hour release of an unknown amount of #6 and #2 fuel oil from a UST. The release was reported to MassDEP and the RTN 3-11824 was assigned to the release. After an IRA was conducted, an A1 RAO was submitted on July 12, 1995 meaning that a permanent solution has been achieved and contamination has been reduced to background or a threat of release has been eliminated. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Address(es)	PARK BTWN NASHUA ST AND CHARLES RIVER NASHUA ST BOSTON, MA 02115
Approximate Location Relative to Site	466 ft
EDR Map No(s).	G21
Database(s)	MA SHWS, MA INST CONTROL, MA SPILLS, MA RELEASE, MA ENF
Description/ID No(s).	RTN 3-19466
Presumed Hydrogeologic Setting	Upgradient

Database Review Summary	According to the EDR, on April 18, 2000, there was a 120-day release of lead and polynuclear aromatic hydrocarbons (PAHs) in soil reported to MassDEP and the RTN 3-19466 was assigned to the release. After completion of Phase II remediation, contamination still remains at a depth of >15 feet and an evaluation has determined that it is not feasible to reduce the concentrations any more. Therefore, an A4 RAO was submitted on January 30, 2001 meaning that a permanent solution has been achieved. Contamination has not been reduced to background and an Activity and Use Limitation (AUL) has been implemented. Based on distance from the site, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Address(es)	GARAGE NORTH STA BOSTON, MA 02109
Approximate Location Relative to Site	466 ft
EDR Map No(s).	G22
Database(s)	3-2660
Description/ID No(s).	MA SHWS & MA RELEASE
Presumed Hydrogeologic Setting	Upgradient
Database Review Summary	According to the EDR, there was a two-hour release of petroleum hydrocarbons into a trench during excavations on June 21, 1990. The release was reported to MassDEP and the RTN 3-2660 was assigned to the Site. An A2 RAO was submitted on April 2, 1996 meaning a permanent solution has been achieved but the contamination was not reduced to background. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

Facility Name(s) and/or Address(es)	NO LOCATION AID 100 NASHUA ST, BOSTON, MA 02110
Approximate Location Relative to Site	476 ft
EDR Map No(s).	23
Database(s)	MA SHWS, MA RELEASE, & MA ASBESTOS
Description/ID No(s).	3-20003
Presumed Hydrogeologic Setting	Upgradient

Database Review Summary	According to the EDR, on October 2, 2000, there was a two-hour release of 20 gallons of hydraulic oil from an excavator and was reported to MassDEP and the RTN 3-20003 was assigned to the release. After an IRA was conducted, an A1 RAO was submitted on December 12, 2000 meaning that a permanent solution has been achieved and contamination has been reduced to background or a threat of release has been eliminated. Based on regulatory status, this release is not anticipated to impact conditions at the Site.

4.3 Previous Reports

The following environmental reports regarding the Site were reviewed:

- August 2010, *Limited Environmental Site Assessment: Drawbridge 1 East, Drawbridge 1 West, and Signal Tower A*, Prepared by TRC Environmental Corporation.

Information provided in these reports is summarized throughout this report.

4.4 Other Environmental Record Sources

Per the ASTM standard, local or additional state records were reviewed to enhance and supplement the ASTM-required federal and state records reviewed and discussed earlier in this report. These additional records include state agency lists of waste disposal facilities; Brownfield properties; hazardous waste/contaminated facilities; registered storage tanks; records of emergency release reports; and records of contaminated public wells. Local sources that were contacted to obtain this information include Department of Health/Environmental Division; Fire Department; Planning Department; Building Permit/Inspection Department; and land records (for AULs). Information from these sources is discussed below:

Table 4.4 - Other Environmental Record Sources

Regulatory Agency/ Department	Available Information
Department of Health/ Environmental Division	TRC contacted the City of Boston and City of Cambridge Health Departments on December 9, 2019 and did not find any relevant information.
Fire Department	TRC contacted the City of Boston and City of Cambridge Fire Departments on December 9, 2019 and did not find any relevant information.
Planning Department	TRC visited the City of Boston and City of Cambridge Planning Departments on December 11, 2019 and did not find any relevant information.

Table 4.4 - Other Environmental Record Sources

Regulatory Agency/ Department	Available Information
Building Permit/Inspection/ Construction/Engineering Department	TRC visited the City of Boston and City of Cambridge Building Departments on December 11, 2019 and did not find any relevant information.
Land Records	TRC visited Massachusetts Land Records online database and found no deeds or land records associated with the Site.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Ms. Annie Cornell, Engineer, conducted a Site reconnaissance of accessible areas on and around the Site on December 12, 2020 for the purpose of identifying potential RECs, and was accompanied by a Keolis Engineer In Charge (EIC) who provided access to the property and answered questions during the reconnaissance. Photographs taken during the Site reconnaissance are provided in **Appendix D**. A Site layout plan is included as **Figure 2**.

During the Site reconnaissance, light snowfall covered the tracks and some of the surround areas. This limiting condition is not expected to impact the results of this Phase I ESA because access to the Site is restricted and Site conditions were still visible.

5.2 Interior and Exterior Site Observations

Unless otherwise noted, the items listed in the table below appeared in good condition with no visual evidence of staining, deterioration, or a discharge of hazardous materials; and there are no records of a release in these areas. Items where further description is warranted are discussed in the section(s) following the table.

Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/ Historic/ Not Observed)	Description
Hazardous material storage or handling areas	Not Observed	(see Section 5.2.1)
Solid and liquid wastes including municipal wastes	Not Observed	(see Section 5.2.2)
USTs and associated piping	Not Observed	
ASTs and associated piping	Not Observed	
Drums and containers (≥5 gallons)	Not Observed	
Odors	Not Observed	
Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)	Not Observed	
PCBs/transformers	Not Observed	
Stains or corrosion	Not Observed	
Drains and sumps	Not Observed	
Pits, ponds, and lagoons	Not Observed	
Stressed vegetation	Not Observed	
Historic fill or other fill material	Not Observed	
Wastewater (including stormwater or discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)	Not Observed	

Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/ Historic/ Not Observed)	Description
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)	Not Observed	
Septic systems or cesspools	Not Observed	

5.2.1 Hazardous Substances

Hazardous substances including raw materials; finished products and formulations; hazardous wastes; hazardous constituents and pollutants including intermediates and byproducts that are currently present at the Site; and unidentified substance containers (when open or damaged, and containing unidentified substances suspected of being hazardous or petroleum products) were not discovered at the site.

5.2.2 Solid and Liquid Wastes

Solid and liquid wastes are not generated and stored on the Site.

5.2.3 USTs

No USTs were identified by the Key Site Manager or observed during the Site visit.

5.2.4 ASTs

No ASTs were identified by the Key Site Manager or observed during the Site visit.

5.3 Adjoining and Surrounding Properties Reconnaissance

5.3.1 Adjoining Properties

During the Site reconnaissance, TRC viewed the adjoining properties from the Site and publicly accessible areas (e.g., public roadways, etc.).

Table 5.6 - Adjoining Properties Reconnaissance

Direction from Site	Current Land Use Description
North	Boston Sand and Gravel
East	Highway Bridges and the Millers River
South	North Station
West	Mass General Hospital and North Point Park

5.3.2 Surrounding Properties

Surrounding properties generally include the industrial to the north, commercial and residential to the south, and the Charles River to the east and west.

6.0 INTERVIEWS

The following persons were interviewed to obtain historically and/or environmentally pertinent information regarding RECs associated with the Site. Interview documentation is included in **Appendix B.**

- Debra Darby, Site Remediation Specialist at MBTA – *Key Site Manager* (as defined by the ASTM standard and identified by the property owner);
- Clary Coutu, Director of Environmental Services, Compliance, and Sustainability with Keolis Commuter Services, LLC, current property User.

The information provided by each is discussed and referenced in the text or provided below. Other references and sources of information are included in **Appendix E**.

7.0 FINDINGS, OPINIONS, AND CONCLUSIONS

Potential findings can include RECs, including CREC), HRECs, and *de minimis* conditions, pursuant to the ASTM E 1527-13 standard.

RECs are defined 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 *material threat* of a future *release* to the *environment*.

CRECs are defined as RECs resulting from past *releases* of *hazardous substances* or *petroleum products* that have been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (e.g., *property* use restrictions, *AULs, institutional controls*, or *engineering controls*).

HRECs are defined as past *releases* of any *hazardous substances* or *petroleum products* that have occurred in connection with the *property* and have 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, *AULs, institutional controls*, or *engineering controls*).

De minimis conditions are defined as conditions that generally 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. Conditions determined to be *de minimis conditions* are not RECs nor CRECs.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 at the property located at Causeway Street, Boston, MA (Site), see **Appendices F** and **G**. Deviations from this standard are described in Sections 1.3 and 7.6 of this report.

7.1 RECs and CRECs

This assessment has revealed no evidence of RECs (including CRECs) in connection with the Site.

7.2 HRECs

This assessment has revealed no evidence of HRECs in connection with the Site.

7.3 *De Minimis* Conditions

This assessment has revealed no evidence of *de minimis* conditions in connection with the Site except for light snow cover during the Site visit.

7.4 Data Gaps

TRC has made an appropriate inquiry into the commonly known and reasonably ascertainable resources concerning the historic ownership and use of the Site back to the first development per 40 CFR Part 312.24 (*Reviews of Historical Sources of Information*). Data gaps identified during this assessment include the following:

1. The Site is located in a complex, urban setting that has a complex history of adjacent and surrounding properties that have listed potentially environmentally impactful uses. Given the complex setting, number of potentially impactful uses, the presence of potential preferential pathways including utility corridors, and unknown groundwater flow, TRC cannot rule out the possibility of potential subsurface impacts to the Site from its presence in a complex, urban setting. Additional information provided to TRC regarding the complex, urban setting may affect the conclusions of this assessment.

Based on other historical sources reviewed, the Data Gap is not considered *significant*.

7.5 Other Noteworthy Issues

This assessment has revealed no evidence of other noteworthy issues that warrant further discussion in this section.

7.6 Limiting Conditions and Deviations

7.6.1 Accuracy and Completeness

The ASTM E 1527-13 standard recognizes inherent limitations for Phase I ESAs that apply to this report, including:

- Uncertainty Not Eliminated – No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Data gaps identified during this Phase I ESA are listed in Section 7.4.

- Not Exhaustive – A Phase I ESA is not an exhaustive investigation.

- Past Uses of the Property – A review of standard historical sources at intervals less than 5 years is not required.

The Client is advised that the Phase I ESA conducted at the Site is a limited inquiry into a property's environmental status, cannot wholly eliminate uncertainty, and is not an exhaustive assessment to discover every potential source of environmental liability at the Site. Therefore, TRC does not make a statement i) of warranty or guarantee, express or implied for any specific use; ii) that the Site is free of RECs or environmental impairment; iii) that the Site is "clean;" or iv) that impairments, if any, are limited to those that were discovered while TRC was performing the Phase I ESA. This limiting statement is not meant to compromise the findings of this report; rather, it is meant as a statement of limitations within the ASTM standard and intended scope of this assessment. Specific limiting conditions identified during the Site reconnaissance are described in Section 5.1. Subsurface conditions may differ from the conditions implied by surface

observations and can be evaluated more thoroughly through intrusive techniques that are beyond the scope of this assessment. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes.

This report presents TRC's Site reconnaissance observations, findings, and conclusions as they existed at the time of the Site reconnaissance. TRC makes no representation or warranty that the past or current operations at the property are or have been in compliance with applicable federal, state, and local laws, regulations, and codes. TRC makes no guarantees as to the accuracy or completeness of information obtained from others during the course of this Phase I ESA report. It is possible that information exists beyond the scope of this assessment, or that information was not provided to TRC. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. TRC is under no obligation to update this report to reflect such subsequent information. The findings presented in this report are based upon reasonably ascertainable information and observed Site conditions at the time of the assessment.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not assessed. Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were not fully disclosed to TRC during the assessment.

An independent data research company provided the government agency database referenced in this report. Information regarding surrounding area properties was requested for approximate minimum search distances and was assumed to be correct and complete unless obviously contradicted by TRC's observations or other credible referenced sources reviewed during the assessment.

TRC is not a professional title insurance or land surveyor firm and makes no guarantee, explicit or implied, that any land title records acquired or reviewed, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

7.6.2 Warranties and Representations

This report does not warrant against: (1) operations or conditions which were not evident from visual observations or historical information provided; (2) conditions which could only be determined by physical sampling or other intrusive investigation techniques; (3) locations other than the client-provided addresses and/or legal parcel description; or (4) information regarding off-Site location(s) (with possible impact to the Site) not published in publicly available records.

7.6.3 Continued Validity/User Reliance

This report is presumed to be valid, in accordance with, and subject to, the limitations specified in the ASTM E 1527-13 standard, for a period of 180 days from completion, or until the Client obtains specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Client is notified by TRC that it has obtained specific information that may materially alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is presumed valid if completed less than 180 days prior to the date of

acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction.

7.6.4 Significant Assumptions

During this Phase I ESA, TRC relied on database information; interviews with Site representatives, regulatory officials, and other individuals having knowledge of Site operations; and information provided by the User as requested in our authorized Scope of Work. TRC has assumed that the information provided is true and accurate. Reliance on electronic database search reports is subject to the limitations set forth in those reports. TRC did not independently verify the information provided. TRC found no reason to question the validity of the information received unless explicitly noted elsewhere in this report. If other information is discovered and/or if previous reports exist that were not provided to TRC, our conclusions may not be valid.

8.0 REFERENCES

Table 8.1 - Reference Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Information Updated	Reference Source
Regulatory database search and historical sources discussed herein	December 4, 2019	N/A	EDR Inquiry Number: 5893380.2s
Provided prior environmental reports as discussed in Section 4.4	December 4, 2019	N/A	TRC Environmental Corporation

9.0 NON-SCOPE ITEMS

As part of this Phase I ESA, TRC identified potential locations for the staging and storage of contaminated soil and groundwater during construction which include:

- The Keolis Parking Lot – on the west side of the tracks on the Cambridge side of the Site.
- ~~Boston Sand and Gravel – located north of Tower A.~~**
- Bunker Hill Community College Parking Lot – located northeast of the Cambridge side of the Site.
- DIVCO – a northern portion of the DIVCO parcel currently being used for soil stockpiling for the MBTA Green Line Extension Project.

See the attached **Figure 4** to see these locations.

As part of this Phase I ESA, TRC also conducted a Hazardous Materials Inspection of the Site.

Hazardous Materials Summary:

TRC Environmental Corporation (TRC) conducted a site visit at Tower A and the drawbridge structure on December 12, 2019 and a site visit at North Station (Platforms 11 and 12) on January 7, 2020. The purpose of the site visits was to conduct visual observations of potential hazardous materials that may be impacted in the proposed project.

The information outlined below includes recommendations based on information collected during the site visits as well as historical information included in a report titled Pre-Demolition/Renovation Investigative Survey for Hazardous Materials for Tower A and Draw 2 issued by TRC in February 2010.

Asbestos-Containing Materials (ACM):

Tower A: ACM has been previously identified as various types of floor, glue daubs, window caulking/glazing, and flashing material associated with the electrical room roof system. TRC also previously assumed ACM to be present in the form of pipe insulation, electrical/boards and clips within the 1st floor electrical room. TRC recommends that assessment/sampling be conducted on the main roof system as well as exterior sealant associated with the façade observed during the site visit. TRC also recommends additional investigation of the exterior foundation and the below the rail system stone ballast for waterproofing materials as well as any materials not previously assessed for ACM.

Drawbridge: ACM has been previously identified as transite was material and mechanical brake pads. TRC recommends additional assessment/sampling for any materials not previously investigated for ACM.

North Station (Platforms): TRC recommends assessment/sampling of caulking associated with the platforms and rail system as well as the membrane associated with the rail system near the entrance of the main building observed during the site visit. TRC also recommends assessment/sampling for materials located within the proposed project constraints.

Lead-Containing Paint (LCP):

Subsequent to the preparation of this Phase I ESA, this potential location on Boston Sand & Gravel property has been removed from consideration.

Tower A: LCP has been previously identified associated with plaster walls, metal handrails, I-beams and metal window frames.

Drawbridge: LCP has been previously identified associated structural I-beams.

North Station (Platforms): TRC observed various components with potential LCP (i.e. platform panels and structural I-beams) during the site visit. TRC recommends assessment for LCP within the proposed project constraints.

Polychlorinated Biphenyls (PCBs):

Tower A: Low concentrations of PCB-1254 (9.7 ppm) was previously identified associated with window glazing. TRC recommends additional assessment/sampling of the exterior sealant associated with the façade observed during the site visit as well as any materials not previously investigated for PCBs.

Drawbridge: TRC recommends assessment/sampling of any materials not previously investigated for PCBs.

North Station (Platforms): TRC recommends assessment for PCBs within the proposed project constraints.

Other Hazardous/Regulated Materials (OHM):

Tower A and Drawbridge: Various types of universal waste (i.e. batteries, thermostat ampoules, fluorescent lamps/ballasts, used electronics etc.) and chemicals/storage containers were previously inventoried. TRC recommends updating the previous OHM inventory.

North Station (Platforms): TRC observed various types of OHM (i.e. fluorescent lamps/ballasts) during the site visit. TRC recommends assessment/compiling an inventory for OHM within the proposed project constraints.

Base map: USGS 7.5 Minute Quadrangle Boston South (1983)

TRC
Wannalancit Mills
650 Suffolk Street
Lowell, MA 01854
978-970-5600

SITE LOCATION MAP

MBTA DRAW 1 BRIDGE
CAUSEWAY STREET
BOSTON, MA 02114

FIGURE 1	FEBRUARY 2020

Project Location

Town Boundary

Assumed Groundwater Flow Direction

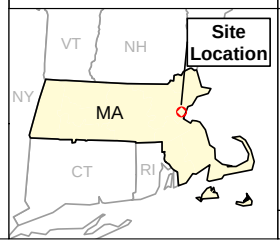
Project Components:
Drawbridge West
Drawbridge East
Tower A

Notes:
Project Area to be defined by STV Design Team as design advances.
Please refer to Appendix B for MassDEP disposal site details.

Data Sources: TRC, MassGIS, Esri
Bae Map: USGS Color Ortho Imagery, MassGIS 2019

N

0 150 300
Feet



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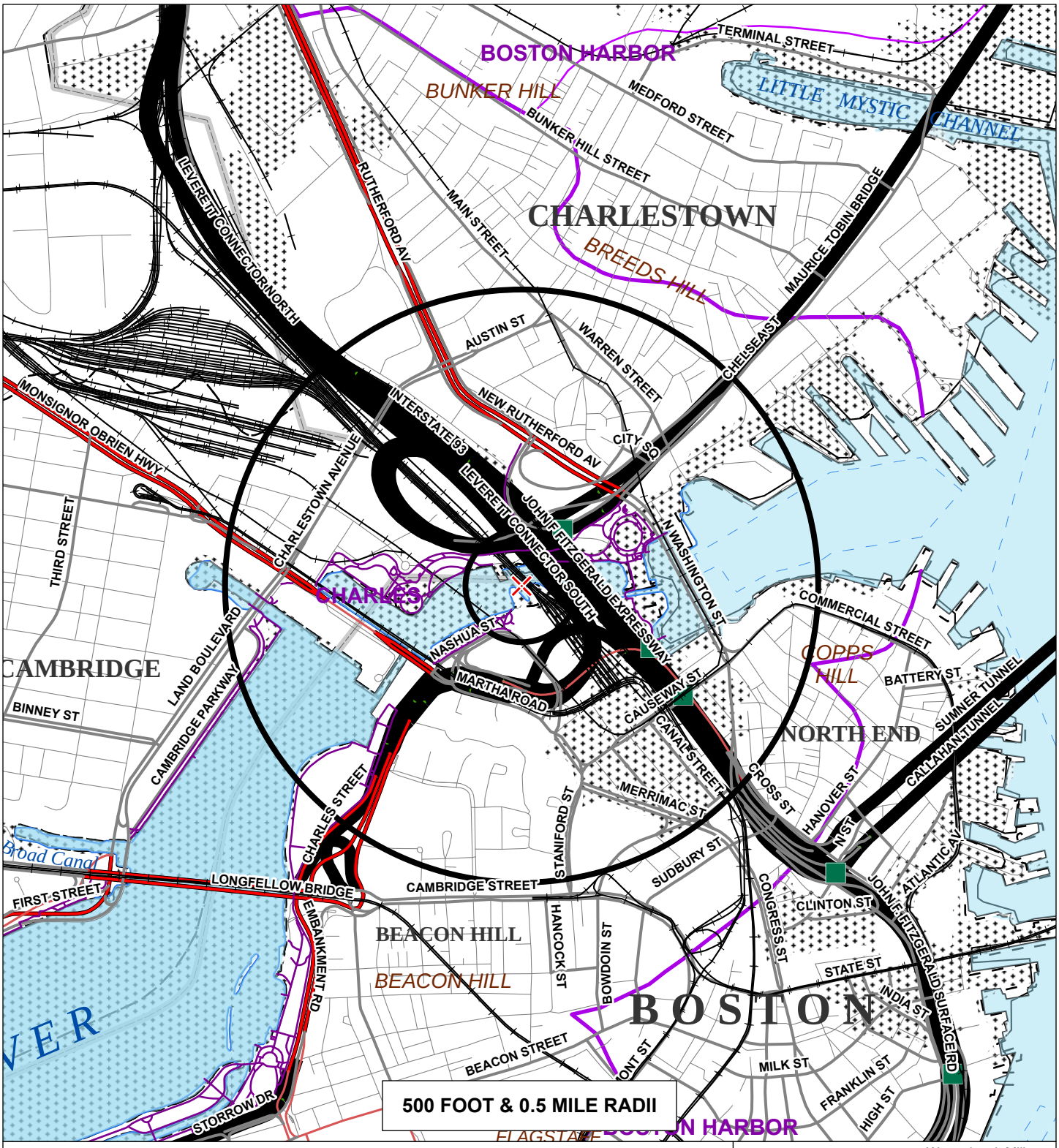
SITE PLAN

NORTH STATION
DRAW 1 BRIDGE REPLACEMENT

CAUSEWAY STREET
BOSTON, MA

FIGURE 2 | FEBRUARY 2020

S:\1-PROJECTS\MBTA\Draw 1 North Station\5-MXD\Figures20200228\Fig 2 NorthStation_SitePlan_ASTM_8x11_20200228.mxd



Roads: Limited Access, Multi-Lane, Major/Minor, Track, Trail
Railroad, Pipline, Powerline
Major Basin, Sub Basin, Perennial Stream, Intermittent Stream, Shoreline, Man made Shore, Dam, Aqueduct
Wetland, Salt Wetland, Submerged Wetland, Open Water, Reservoir, Tidal Flat/Shoal
Potentially Productive Aquifers: Medium, High Yield
Non-Potential Drinking Water Source Area: Medium, High Yield
EPA Sole Source Aquifer, FEMA 100 Yr. Floodplain, DEP Solid Waste Facility
Approved Zone II, IWPA, Surface Water Supply Zone A
Protected Open Space, ACEC
Priority Habitat, Certified Vernal Pool
Boundaries: County and Town
Public Water Supplies: Ground, Surface, Non-Community (NTNC, TNC)
Source: MassGIS/EOEA

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Lowell, MA 01854
978-970-5600

FIGURE 3

MASSDEP PRIORITY RESOURCE MAP
MBTA DRAW 1 BRIDGE
CAUSEWAY STREET
CAMBRIDGE, MA

N

0 1,500
Feet

FEB. 2020

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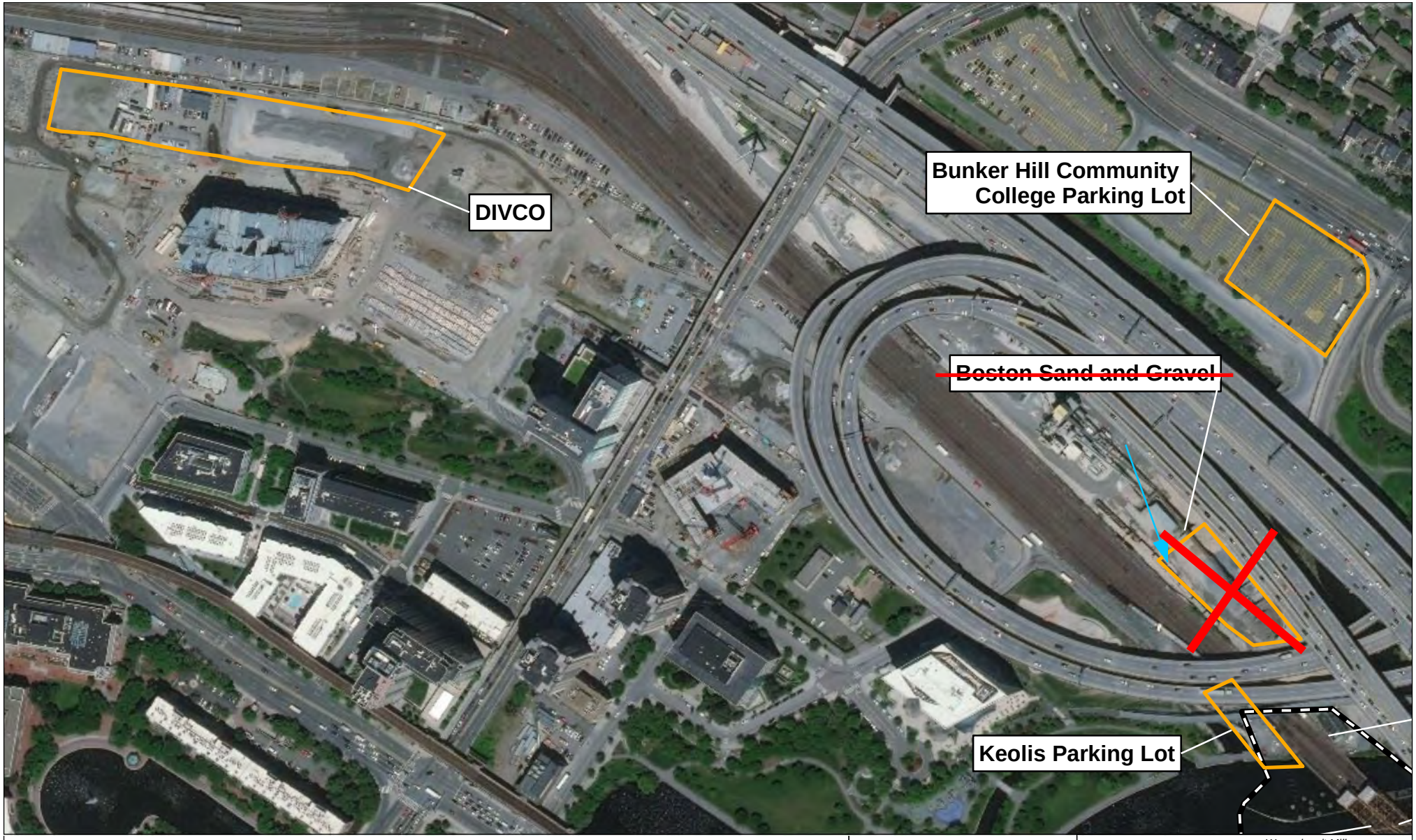


North Station Train Bridge

Assumed Groundwater Flow Direction

Note: Please refer to Appendix B for MassDEP disposal site details.

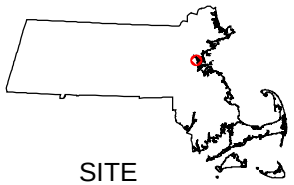
Subsequent to the preparation of this Phase I ESA, this potential location on Boston Sand & Gravel property has been removed from consideration.

Base map: 2008 Aerial

N

0 100 200 Feet

MASSACHUSETTS



SITE LOCATION

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978-970-5600

POTENTIAL STAGING AREAS

MBTA DRAW 1 BRIDGE
CAUSEWAY STREET
BOSTON, MA 02114

FIGURE 4 | **FEBRUARY 2020**

Document Path: R:\Projects\GIS_2010\156318_MA_Bridges\MXD\Drawbridge_East\staging_Areas_Fig2_2020_01_10.mxd

North Station Draw 1 Bridge Replacement and Associated Track & Signal Upgrades
MBTA Contract No. H32PS01

Hazardous Materials Inspection Report

December 2020

Prepared by:
TRC
650 Suffolk St
Suite 200
Lowell, MA 01854

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Revision Index

Revision #:	Date:	Description:
0	12/14/20	Initial Submission
	Prepared by: Annie Cornell **Signature:** _____ **Date:** 12/14/20 **Reviewed by:** Diane Stallings Mrozek **Signature:** _____ **Date:** 12/14/20	

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APPENDICES

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EXECUTIVE SUMMARY

As directed by the MBTA, the STV Design Team conducted a limited hazardous materials inspection of Tower A and Draw 1 (Bridge Spans 1 & 2). The inspection activities were conducted on August 2, 2020, August 19th, 2020 and between October 12, 2020 and October 16, 2020, by Certified Massachusetts Asbestos Inspector(s) Cameron Cooke, Roland Holacsek, Jorge DaSilva and David J. Gavin of STV Design Team member TRC Environmental. The scope of work included a verification inspection of Tower A, Mechanical Rooms associated with Spans 1 & 2, beneath the stone track ballast as well as an initial inspection of the new control tower. The STV Design Team was unable to access the underside of Spans 1 & 2 due to the lack of boat rentals and/or alternatives at the time of the inspection.

Asbestos Containing Materials

Results of the bulk sampling identified the presence of asbestos-containing materials (ACM). The US EPA and MassDEP require all ACM be removed from a facility prior to the start of renovation or demolition activities if the materials may be disturbed by these activities. A licensed Asbestos Removal Contractor should remove identified ACM prior to the start of renovation or demolition activities in accordance with federal, state and local regulations.

Inaccessible Suspect Asbestos Containing Materials / Areas

Suspect ACM were identified during the survey which were not sampled. These materials must be sampled by an accredited asbestos inspector prior to any disturbance, or they must be treated as ACM. Suspect ACM were identified in the Tower A Electrical Room, the mechanical rooms associated with Spans 1 & 2

Lead Containing Paint Sampling Results

Results of the laboratory analysis indicated lead was detected in the samples that were collected as listed in the following sections. For any paint in which lead was detected, the STV Design Team recommends that any demolition or renovation activities that may disturb painted surfaces be conducted according to the OSHA requirements regarding lead in construction (29 CFR 1926.62).

Other Regulated and Hazardous Materials Inventory

Suspect PCB containing fluorescent light ballasts etc. were identified in the areas surveyed. Fluorescent ballasts manufactured prior to January 1, 1978 or ballasts that are not labeled "No PCBs" must be considered PCB containing unless testing proves otherwise.

Mercury containing light bulbs (high intensity discharge, fluorescent tubes, etc.) were identified in the areas surveyed. Mercury containing light bulbs, that are scheduled for

disposal should be managed according to applicable local, state and federal waste disposal regulations and requirements.

Polychlorinated Biphenyl (PCB) Containing Caulks

Results of laboratory analysis of representative building materials did not detect PCB concentrations above the Toxic Substances Control Act (TSCA) limits.

1. INTRODUCTION

As directed by the MBTA, the STV Design Team conducted a limited hazardous materials inspection at Tower A and Draw 1 (Bridge Spans 1 & 2). The inspection activities were initiated on October 12, 2020, by Certified Massachusetts Asbestos Inspector(s) Roland Holacsek, Jorge DaSilva and David J. Gavin of STV Design Team member TRC Environmental.

The scope of work included a verification inspection of Tower A, Mechanical Rooms associated with Bridge Spans 1 & 2, beneath the stone track ballast as well as an initial inspection of the new control tower.

The scope of services was conducted for the proposed demolition project.

2. BACKGROUND

2.1. Asbestos Containing Materials

Occupational Safety and Health Administration (OSHA), MassDEP and MADLS defines asbestos-containing material (ACM), as any material containing one percent asbestos or greater.

The Environmental Protection Agency (EPA) defines ACM as follows:

1. Friable asbestos-containing material (ACM), is defined by the Asbestos NESHAP, as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.
2. Nonfriable ACM is any material containing more than one percent (1%) asbestos as determined using the PLM method that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. The EPA further defines two categories of nonfriable ACM:

a. Category I (Cat I) - Category I nonfriable ACM is any asbestos-containing packing, gasket, resilient floor covering or asphalt roofing product which contains more than one percent (1%) asbestos as determined using PLM according to the method specified in Appendix A, Subpart F, 40 CFR Part 763, and
b. Category II (Cat II) - Category II nonfriable ACM is any material, excluding Category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using PLM according to the methods specified in Appendix A, Subpart F, 40 CFR Part 763 that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

3. Regulated Asbestos-Containing Material (RACM) is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

2.2. Asbestos Containing Waste Material (ACWM)

ACWM means any ACM removed during a demolition or renovation project and anything contaminated with asbestos in the course of a demolition or renovation project including, but not limited to, asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition or renovation operation, and demolition or renovation debris. ASBESTOS-CONTAINING WASTE MATERIAL (ACWM) shall also include ACM on and/or in facility components that are inoperable or have been taken out of service and any ACM that is damaged or deteriorated to the point where it is no longer attached as originally applied or is no longer serving the intended purpose for which it was originally installed.

2.3. Asbestos Sampling Procedures

The survey was conducted in accordance with the sample collection protocols established in 40 CFR 763 (AHERA), 40 CFR 61 Subpart M (NESHAP). A summary of survey activities is provided below.

Survey activities began with visual observation of the project area to identify homogeneous areas of suspect ACM. A homogeneous area consists of building materials that appear similar throughout in terms of color and texture that does not extend to other buildings. Visual assessments were conducted in accessible areas of the building. Building materials identified as glass, wood or metal were not considered suspect ACM.

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. Friability was assessed by physically touching suspect materials.

Based on results of the visual observation, bulk samples of suspect ACM were collected in accordance with EPA AHERA sampling protocols. Samples of suspect materials were collected in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

Bulk samples were submitted under proper COC documentation to the laboratory. Bulk samples were analyzed by PLM utilizing the EPA's, Method for the Determination of Asbestos in Bulk Building Materials, EPA 600/M4-82-020. Analysis by PLM was performed by visual observation of the bulk sample and slides prepared of the bulk sample for microscopic examination and identification. The samples were analyzed for asbestos (Chrysotile, Amosite, Crocidolite, Anthophyllite, and Actinolite/Tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimated the relative amounts of each constituent by determining the estimated area of the asbestos compared with the area estimate of the total sample.

2.4. Paint Chip Sampling

The STV Design Team conducted an inspection to identify lead-containing paint (LCP) at the Site. The inspection/sampling was performed to identify representative testing of suspect LCP on paint coated surfaces that made up most of the coatings in each area assessed.

The general purpose of this investigation was to confirm the general presence and locations of painted coatings and components that will be disturbed in association with the renovation or demolition of the Site.

According to the OSHA Program Directive, Lead: Exposure in Construction, "For all occupational exposure to lead occurring in the course of construction work, the standard (1926.62) does not specify a minimum amount or concentration of lead that triggers a determination that lead is present and the potential for occupational exposure exists."

Paint chip samples were collected from painted surfaces to determine total lead content and assist in determining Occupational Safety and Health Administration (OSHA) requirements with respect to construction activities which may disturb lead-containing paints. Contractors involved with demolition and debris handling should comply with the requirements cited in OSHA's Lead in Construction Standard 29 CFR 1926.62. In addition, contractors should comply with applicable federal and state requirements for demolition and disposal of lead containing paint coated building materials.

All paint chip samples were submitted under proper COC documentation to the laboratory. Samples were analyzed by Flame AAS utilizing the Environmental Protection Agency's (EPA) Test Method for Evaluating Solid Waste, Physical / Chemical Methods, EPA SW-846 Method 7420.

2.5. Other Regulated and Hazardous Materials Inventory

The STV Design Team conducted a survey for other regulated materials, hazardous materials, and hazardous materials contained in equipment. The hazardous materials survey was directed at collecting information on the type, location, and quantities of hazardous materials contained in building equipment or hazardous materials stored at the site that would have to be disposed of according to applicable federal and state regulations prior to the demolition of the site buildings and structures.

These materials fall into various categories such as Hazardous Waste, Universal Waste, Toxic Substances Control Act (TSCA) Wastes and other Regulated Wastes, depending on the component and concentration of contaminants of concern.

Any material classified as unknown will require sample collection and analysis for hazardous waste characteristics (e.g., Ignitability, Corrosivity, Reactivity, Toxicity, PCBs, and Metals analyses) in accordance with federal regulations. Based on the results of analyses, if the material is classified as a hazardous waste, it will be managed and disposed in accordance applicable regulations. Additional profile sampling and analysis

may be necessary to meet the specific waste acceptance requirements of the selected disposal facility.

2.6. PCB Sampling Procedures

Select interior and exterior water proofing sealants including interior window caulk, exterior skylight caulk and exterior building caulk were sampled to determine if they contained PCBs. The material samples were shipped to the laboratory for analysis under the chain of custody protocol and submitted to be analyzed by EPA Method 8082.

2.7. Laboratory Analysis

Laboratory services were provided by EMSL Analytical, Inc., a National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory.

3. FINDINGS

3.1. Asbestos Containing Materials

The table below provides a summary of suspect ACM that were observed within the survey area(s) and approximate quantities.

Tower A, Bridge Spans 1 & 2		
ACM	**Location**	**Approximate Quantity**
Black Tar Flooring Under 12x12 Pink Floor Tile (Carpeted Area)	Tower A, 2nd Floor, Storage Area (Half of Carpeted Area)	150 SF
Electrical Conduit Sealant	Tower A, 1st Floor Electrical Closet, Near Electrical Room	5 SF
Roof Parapet Flashing	Tower A Roof Parapet	210 SF
Gray Patching Material	Tower A Exterior Brick Facade	60 SF
9”x9” Floor Tile	Tower A, 2nd Floor Locker Room	155 SF
Glue Daub	Tower A Throughout 2nd Floor	1980 SF

Tower A, Bridge Spans 1 & 2		
ACM	**Location**	**Approximate Quantity**
Perimeter Flashing	Tower A – Electrical Room Roof	600 SF
Parapet Flashing	Tower A – Electrical Room Roof	120 SF
Interior Window Glazing	Tower A – 1st Floor Utility Room, Bathroom 1, Shops 2, 3 & 4	7 EA
Exterior Window Caulking	Tower A – Throughout 1st and 2nd	33 EA
Exterior Window Caulking	Tower A Exterior	8 EA
Transite	Span 1 & 2 – Exterior	1400 SF
Mechanical Brake Pad	Span 1 & 2 – Interior	416 EA
Pipe Insulation	Tower A – 1st Floor Electrical Room	20 LF
Electrical Board with 80 Electrical Clips	Tower A – 1st Floor Electrical Room	80 Clips

Notes:
NAD = No Asbestos Detected
LF = Linear Feet
SF = Square Feet

Asbestos Suspect Materials (Inaccessible)

The following materials must be sampled by an accredited asbestos inspector prior to any disturbance, or they must be treated as asbestos containing material (ACM):

Tower A, Bridge Spans 1 & 2 and New Control Tower		
Suspect ACM	**Material Location**	**Reason Inaccessible**
Asbestos Cement Switch Panels	Tower A Electrical Room (300 SF)	No Access

Tower A, Bridge Spans 1 & 2 and New Control Tower		
Suspect ACM	**Material Location**	**Reason Inaccessible**
Asbestos Cement Break Pads	Mechanical Rooms, Span 1 And 2 (16 Each)	No Access
Glue Behind Wooden Panels	New Control Tower (150 SP)	No Access

Any additional materials uncovered during renovation or demolition activities that are not addressed in this inspection report, or presumed asbestos containing materials (PACM), must be sampled by an accredited asbestos inspector prior to any disturbance, or they must be treated as ACM.

Laboratory results and a photographic log of suspect asbestos-containing materials is provided as Appendix A.

3.2. Paint Chip Sampling Results

Results of laboratory analysis identified lead to be present in some of the paint chip samples that were collected and analyzed.

Tower A, Bridge Spans 1 & 2		
Sample Number	**Sample Description**	**Lead Concentration % wt.**
1	Gray Paint on Concrete Floor	0.25
2	Gray Paint on Plaster Wall	3.2
3	White Paint on Plaster Wall	7.2
4	Blue Paint on Metal Handrail	14
5	White Paint on Drywall	11
6	Off-White Paint on Drywall	<0.0080
7	Black Paint on Metal Handrail	17

8	Brown Paint on Window Sill	7.9
9	White Paint on Window Sill	7.0
10	Green Paint on Plaster Wall	0.021
11	Beige Paint on Mechanical Room Steel Structures	1.1
12	Beige Paint on Mechanical Room Concrete Wall	0.26
13	Gray Paint on Exterior of Mechanical Room Concrete Wall (Span 2)	0.018

<RL = Less Than the Analytical Reporting Limit

Laboratory results and a photographic log of suspect lead containing paint is provided as Appendix B.

3.3. Other Regulated and Hazardous Materials Inventory

An inventory of other regulated and hazardous materials and/or universal wastes as well a photographic log of is provided as Appendix D.

Materials contained in the inventory fall into various categories such as Hazardous Waste, Universal Waste, Toxic Substances Control Act (TSCA) Wastes and other Regulated Wastes, depending on the component and concentration of contaminants of concern.

3.4. PCB Sample Source Results

Sample Number	Location	Description	Quantity	Result (mg/kg)
01	Interior	Interior Window Glaze compound	NA	ND
02	Interior	Interior Window Glaze compound	NA	ND
03	Exterior	Exterior Window Caulk	NA	ND
04	Exterior	Exterior Window Caulk	NA	ND

Sample Number	Location	Description	Quantity	Result (mg/kg)
05	Exterior (Roof)	Parapet Flashing Material	NA	ND
06	Exterior (Roof)	Parapet Flashing Material	NA	ND

No PCB concentrations above the Toxic Substances Control Act (TSCA) regulated limits were found in the samples analyzed.

Laboratory results and a photographic log of PCB samples collected for this project are provided as Appendix C.

4. RECOMMENDATIONS

The STV Design Team recommends that any materials uncovered during renovation/demolition activities that are not addressed in this inspection report suspected to be ACM must be sampled by an accredited asbestos inspector prior to any disturbance, or they must be treated as asbestos containing.

The STV Design Team conducted an inspection in conjunction with the drilling operation to verify the presence of waterproofing/damp proofing material associated with the stone track ballast located on the railway and bridge. No material was encountered.

The STV Design Team recommends that a boat be secured in order to investigate the potential hazardous materials present under the drawbridge (i.e. waterproofing associated with the wooden pilings and lead containing paint associated with the steel structure, etc.)

5. DISCLAIMER

The content presented in this report is based on data collected during the site inspection and survey, review of pertinent regulations, requirements, guidelines and commonly followed industry standards, and information provided by Client, their clients, agents, and representatives.

The work has been conducted in an objective and unbiased manner and in accordance with generally accepted professional practice for this type of work. STV Design Team member TRC believes the data and analysis to be accurate and relevant but cannot accept responsibility for the accuracy or completeness of available documentation or possible withholding of information of other parties.

This limited hazardous materials inspection report is designed to aid the property owner, architect, construction manager, general contractor, and asbestos abatement contractor in locating ACM, lead containing paints, suspect PCB containing equipment and suspect mercury containing equipment. This report is not intended for, and may not be utilized as, a bidding document or as an abatement project specification document.

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Appendix A
ACM LABORATORY DATA/REPRESENTATIVE PHOTO LOG

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132007292
Customer ID:	COVI50
Customer PO:	342282
Project ID:	

Attention:	David Gavin	**Phone:**	(781) 933-2555
	TRC	**Fax:**	
	300 Wildwood Avenue	**Received Date:**	10/14/2020 11:00 AM
	Woburn, MA 01801	**Analysis Date:**	10/15/2020
		Collected Date:	10/12/2020

Project: 342282/Tower A Verification Survey; US-1 N; Cambridge, MA 02141

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
01A *132007292-0001*	2nd Floor, Storage Area - Black Tar Flooring Under 12x12 Pink Floor Tile (Carpeted Area)	Black Non-Fibrous Homogeneous	35% Cellulose	63% Non-fibrous (Other)	2% Chrysotile
01B *132007292-0002*	2nd Floor, Storage Area - Black Tar Flooring Under 12x12 Pink Floor Tile (Carpeted Area)	Black Non-Fibrous Homogeneous	35% Cellulose	63% Non-fibrous (Other)	2% Chrysotile
02A *132007292-0003*	2nd Floor, Office 2 - Brown Floor Tile Under 12x12 Pink Floor Tile (Carpeted Area)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B *132007292-0004*	2nd Floor, Office 2 - Brown Floor Tile Under 12x12 Pink Floor Tile (Carpeted Area)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A *132007292-0005*	2nd Floor, Office 1 - Black Mastic Assoc. w/ Brown Floor Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B *132007292-0006*	2nd Floor, Office 2 - Black Mastic Assoc. w/ Brown Floor Tile	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A *132007292-0007*	1st Floor, Electrical Closet - Electrical Conduit Sealant	Black Non-Fibrous Homogeneous	25% Cellulose	45% Non-fibrous (Other)	30% Chrysotile
04B *132007292-0008*	1st Floor, Electrical Closet - Electrical Conduit Sealant	Black Non-Fibrous Homogeneous	20% Cellulose	45% Non-fibrous (Other)	35% Chrysotile
05A *132007292-0009*	1st Floor, Boiler Room - Pipe Thread Sealant	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05B *132007292-0010*	1st Floor, Boiler Room - Pipe Thread Sealant	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
06A *132007292-0011*	2nd Floor, Electrical Room Roof - Roll-on Asphalt Roofing Material	Black Non-Fibrous Homogeneous	15% Synthetic	85% Non-fibrous (Other)	None Detected
06B *132007292-0012*	2nd Floor, Electrical Room Roof - Roll-on Asphalt Roofing Material	Black Non-Fibrous Homogeneous	15% Synthetic	85% Non-fibrous (Other)	None Detected
07A *132007292-0013*	Tower A, Exterior, North Side - Exterior Hose Valve Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 10/15/2020 17:38:24

EMSL Analytical, Inc.
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Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132007292
Customer ID: COVI50
Customer PO: 342282
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
07B *132007292-0014*	Tower A, Exterior, North Side - Exterior Hose Valve Putty	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A *132007292-0015*	2nd Floor, 1 Pane Windows - Exterior White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08B *132007292-0016*	2nd Floor, 1 Pane Windows - Exterior White Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09A *132007292-0017*	Exterior Brick Wall - Exterior Red Fire Stop	Red Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
09B *132007292-0018*	Exterior Brick Wall - Exterior Red Fire Stop	Red Non-Fibrous Homogeneous	5% Glass	95% Non-fibrous (Other)	None Detected
10A *132007292-0019*	Tower A Roof Parapet - Roof Parapet Flashing	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
10B *132007292-0020*	Tower A Roof Parapet - Roof Parapet Flashing	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
10C *132007292-0021*	Roof Parapet - Roof Parapet Flashing	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
11A *132007292-0022*	Exterior Brick Wall - Gray Patching Material	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
11B *132007292-0023*	Exterior Brick Wall - Gray Patching Material	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
12A *132007292-0024*	SW Side of Roof - Asphalt Roofing Material	Black Non-Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
12B *132007292-0025*	SW Side of Roof - Asphalt Roofing Material	Black Non-Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
12C *132007292-0026*	SE Side of Roof - Asphalt Roofing Material	Black Non-Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
12D *132007292-0027*	SE Side of Roof - Asphalt Roofing Material	Black Non-Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
13A *132007292-0028*	1st Floor Stair Landing - Cloth Wire Cover	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
13B *132007292-0029*	1st Floor Closet Next to Electrical Room - Cloth Wire Cover	Black Fibrous Homogeneous	90% Cellulose	10% Non-fibrous (Other)	None Detected
14A *132007292-0030*	Electrical Room - White Cable Wrap	White Non-Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
14B *132007292-0031*	Electrical Room - White Cable Wrap	White Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected

Initial report from: 10/15/2020 17:38:24

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Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132007292
Customer ID:	COVI50
Customer PO:	342282
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
15A *132007292-0032*	Span 1 Mech Room Window - Interior Window Glaze Mechanical Rooms Spans 1 and 2	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B *132007292-0033*	Span 1 Mech Room Window - Interior Window Glaze Mechanical Rooms Spans 1 and 2	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A *132007292-0034*	Span 1 Mech Room - Soft Glaze Assoc. w/ Door	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B *132007292-0035*	Span 1 Mech Room - Soft Glaze Assoc. w/ Door	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A *132007292-0036*	Base of No Access Restroom (Next to New Control Tower) - Gray Building Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17B *132007292-0037*	No Access Restroom - Gray Building Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18A *132007292-0038*	Inaccessible Restroom Roof - White Rubber Roof Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
18B *132007292-0039*	Inaccessible Restroom Roof - White Rubber Roof Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19A *132007292-0040*	New Control Tower Roof - White Rubber Roof Sealant	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19B *132007292-0041*	New Control Tower Roof - White Rubber Roof Sealant	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Valerica Stanca (41)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 10/15/2020 17:38:24

TRC

300 Wildwood Avenue, Suite 230, Woburn, MA 01801

132007292

ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM

Client: STV	Project Number: 342282	Inspector(s): David Gavin, Jorge DaSilva, Roland Holacsek
Project Name: Tower A verification survey US-1 N Cambridge, MA 02141	Tracking Number:	Requested TAT: 24 HR
Email Results to: dgavin@trccompanies.com	Analytical Method: PLM EPA 600/R-93/116	Lab Comments:

ASBESTOS BULK SAMPLE INFORMATION

Date Collected	Sample Identification	Material Description	Homogeneous Area	Sample Location	Lab Identification (Lab Use Only)
2020-10-12	01A	Black tar flooring under 12z12 pink floor tile (carpeted area)	Tower A, 2nd floor, storage area	2nd floor, storage area	
2020-10-12	01B	Black tar flooring under 12z12 pink floor tile (carpeted area)	Tower A, 2nd floor, storage area	2nd floor storage area	
2020-10-12	02A	Brown floor tile under 12x12 pink floor tile (carpeted area)	Tower A, 2nd floor, carpeted area (offices 1 and 2)	2nd floor, office 2	
2020-10-12	02B	Brown floor tile under 12x12 pink floor tile (carpeted area)	Tower A, 2nd floor, carpeted area (offices 1 and 2)	2nd floor office 2	
2020-10-12	03A	Black mastic assoc. with brown floor tile	Tower A, 2nd floor, offices 1 and 2	2nd floor, office 1	
2020-10-12	03B	Black mastic assoc. with brown floor tile	Tower A, 2nd floor, offices 1 and 2	2nd floor office 2	
2020-10-12	04A	Electrical conduit sealant	Tower A, 1st floor electrical closet , near electrical room	1st floor, electrical closet	

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OrderID: 132007292

Date Collected	Sample Identification	Material Description	Homogeneous Area	Sample Location	Lab Identification (Lab Use Only)
2020-10-12	04B	Electrical conduit sealant	Tower A, 1st floor electrical closet , near electrical room	1st floor electrical closet	
2020-10-12	05A	Pipe thread sealant	Tower A, 1st floor, boiler room	1st floor, boiler room	
2020-10-12	05B	Pipe thread sealant	Tower A, 1st floor, boiler room	1st floor, boiler room	
2020-10-12	06A	Roll on asphalt roofing material	Tower A, electrical room roof	2nd floor, electrical room roof	
2020-10-12	06B	Roll on asphalt roofing material	Tower A, electrical room roof	2nd floor, electrical room roof	
2020-10-12	07A	Exterior hose valve putty	Tower A, hose valve	Tower A, exterior, north side	
2020-10-12	07B	Exterior hose valve putty	Tower A, hose valve	Tower A, exterior, north side	
2020-10-12	08A	Exterior white window caulk	Tower A, second floor 1 pane windows	2nd floor, 1 pane windows	
2020-10-12	08B	Exterior white window caulk	Tower A, second floor 1 pane windows	2nd floor 1 pane windows	
2020-10-12	09A	Exterior red fire stop	Tower A, exterior brick wall	Exterior brick wall	
2020-10-12	09B	Exterior red fire stop	Tower A, exterior brick wall	Exterior brick wall	
2020-10-13	10A	Roof parapet flashing	Tower A roof parapet	Tower A roof parapet	
2020-10-13	10B	Roof parapet flashing	Tower A roof parapet	Tower A roof parapet	
2020-10-13	10C	Roof parapet flashing	Tower A roof parapet	Roof parapet	
2020-10-13	11A	Gray patching material	Tower A exterior brick wall	Exterior brick wall	
2020-10-13	11B	Gray patching material	Tower A exterior brick wall	Exterior brick wall	
2020-10-13	12A	Asphalt roofing material	Tower A, main roof	SW side of the roof	
2020-10-13	12B	Asphalt roofing material	Tower A, main roof	SW side of the roof	
2020-10-13	12C	Asphalt roofing material	Tower A, main roof	SE side of the roof	
2020-10-13	12D	Asphalt roofing material	Tower A, main roof	SE side of the roof	
2020-10-13	13A	Cloth wire cover	Tower A 1st floor	1st floor stair landing	

EMSL-BOSTON OCT 14 2020

OrderID: 132007292

Date Collected	Sample Identification	Material Description	Homogeneous Area	Sample Location	Lab Identification (Lab Use Only)
2020-10-13	13B	Cloth wire cover	Tower A 1st floor	1st floor closet next to electrical room	
2020-10-14	14A	White cable wrap	Tower A electrical room	Electrical room	
2020-10-14	14B	White cable wrap	Tower A electrical room	Electrical room	
2020-10-14	15A	Interior window glaze mechanical rooms spans 1 and 2	Mechanical rooms, spans 1 and 2	Span 1 mech room window	
2020-10-14	15B	Interior window glaze mechanical rooms spans 1 and 2	Mechanical rooms, spans 1 and 2	Span 1, mech room window	
2020-10-14	16A	Soft glaze assoc. with door	Mechanical rooms, spans 1 and 2 doors	Span 1, mech room	
2020-10-14	16B	Soft glaze assoc. with door	Mechanical rooms, spans 1 and 2 doors	Span 1, mech room	
2020-10-14	17A	Gray building caulk	Between concrete base and aluminum structure for f no access restroom	Base of no access restroom (next to new control tower)	
2020-10-14	17B	Gray building caulk	Between concrete base and aluminum structure for f no access restroom	No access restroom	
2020-10-14	18A	White rubber roof sealant	Inaccessible restroom roof	Inaccessible restroom roof	
2020-10-14	18B	White rubber roof sealant	Inaccessible restroom roof	Inaccessible restroom roof	
2020-10-14	19A	White rubber roof sealant	New control tower roof	New control tower roof	
2020-10-14	19B	White rubber roof sealant	New control tower roof	New control tower roof	

Special Instruction to Laboratory:

N/A

RECD EMSL-BOSTON OCT 14 2020

OrderID: 132007292

CHAIN OF CUSTODY INFORMATION					
Relinquished By:	**Date**	**Time**	**Received By:**	**Date**	**Time**
I. (Print): Roland Holacsek	2020-10-14	10:12:29 EDT	I. (Print):		
(Sign): Holacsek			(Sign):		
II. (Print):			II. (Print):		
(Sign):			(Sign):		

OrderID: 132007292

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	01A, 01B
Material Description	Black Tar Flooring Under 12z12 Pink Floor Tile (Carpeted Area)
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Positive
Asbestos Type	Chrysotile
Homogeneous Area	Tower A, 2nd Floor, Storage Area (Half Of Carpeted Area)
Total Approximate Quantity	150 SF
Condition	Good
Material Type	Misc.
NESHAP Category	RACM
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	02A, 02B
Material Description	Brown Floor Tile Under 12x12 Pink Floor Tile (Carpeted Area)
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, 2nd Floor, Carpeted Area (Offices 1 And 2)
Total Approximate Quantity	200 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	03A, 03B
Material Description	Black Mastic Assoc. With Brown Floor Tile
Accessible Material	Accessible

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, 2nd Floor, Offices 1 And 2
Total Approximate Quantity	200 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	04A, 04B
Material Description	Electrical Conduit Sealant
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Positive
Asbestos Type	Chrysotile
Homogeneous Area	Tower A, 1st Floor Electrical Closet , Near Electrical Room
Total Approximate Quantity	5 SF
Condition	Good
Material Type	Misc.
NESHAP Category	RACM
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	05A, 05B
Material Description	Pipe Thread Sealant
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

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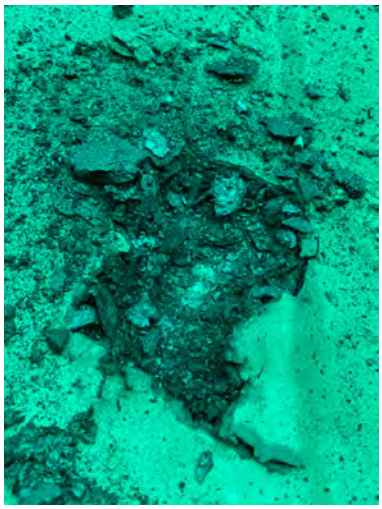
DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, 1st Floor, Boiler Room
Total Approximate Quantity	TBD
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	06A, 06B
Material Description	Roll On Asphalt Roofing Material
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, Electrical Room Roof
Total Approximate Quantity	1000 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable



SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	07A, 07B
Material Description	Exterior Hose Valve Putty
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

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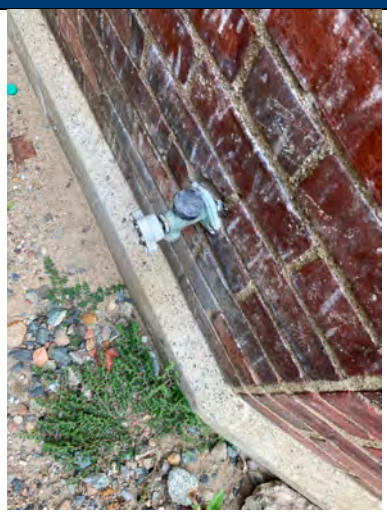
October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, Hose Valve
Total Approximate Quantity	2 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable



SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	08A, 08B
Material Description	Exterior White Window Caulk
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, Second Floor 1 Pane Windows
Total Approximate Quantity	20 Each
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	09A, 09B
Material Description	Exterior Red Fire Stop
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, Exterior Brick Wall
Total Approximate Quantity	20 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	10A, 10B, 10C
Material Description	Roof Parapet Flashing
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Positive
Asbestos Type	Chrysotile
Homogeneous Area	Tower A Roof Parapet
Total Approximate Quantity	210 SF
Condition	Damaged
Material Type	Misc.
NESHAP Category	RACM
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	11A, 11B
Material Description	Gray Patching Material
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Positive

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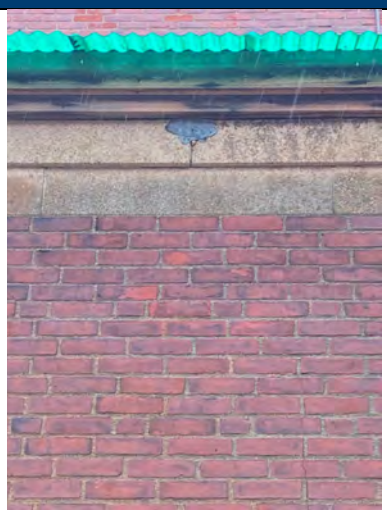
October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	Chrysotile
Homogeneous Area	Tower A Exterior Brick Facade
Total Approximate Quantity	60 SF
Condition	Good
Material Type	Misc.
NESHAP Category	RACM
Notes	Not Applicable



SUSPECT ASBESTOS CONTAINING MATERIAL

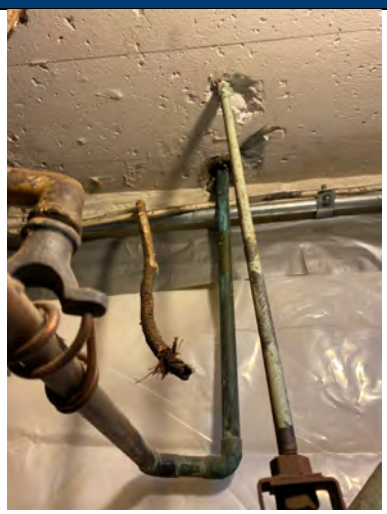
Sample Numbers	12A, 12B, 12C, 12D
Material Description	Asphalt Roofing Material
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A, Main Roof
Total Approximate Quantity	2000 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	13A, 13B
Material Description	Cloth Wire Cover
Accessible Material	Accessible
Reason Inaccessible	No Access
Asbestos Detected	Negative

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A 1st Floor
Total Approximate Quantity	10 LF
Condition	Good
Material Type	Surfacing
NESHAP Category	N/A
Notes	Not Applicable



SUSPECT ASBESTOS CONTAINING MATERIAL

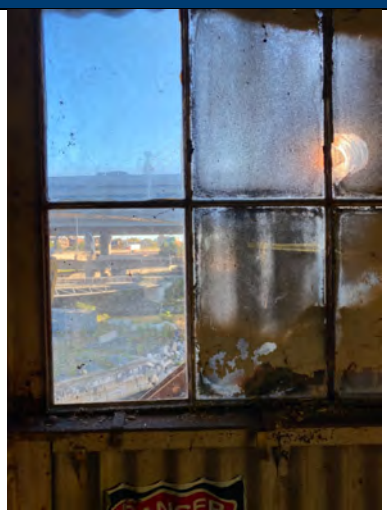
Sample Numbers	14A, 14B
Material Description	White Cable Wrap
Accessible Material	Accessible
Reason Inaccessible	No Access
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Tower A Electrical Room
Total Approximate Quantity	300 LF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	15A, 15B
Material Description	Interior Window Glaze Mechanical Rooms Spans 1 And 2
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Mechanical Rooms, Spans 1 And 2
Total Approximate Quantity	8 Each
Condition	Damaged
Material Type	Misc.
NESHAP Category	N/A
Notes	4 windows in each mech room



SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	16A, 16B
Material Description	Soft Glaze Assoc. With Door
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Mechanical Rooms, Spans 1 And 2 Doors
Total Approximate Quantity	4 Each
Condition	Damaged
Material Type	Misc.
NESHAP Category	N/A
Notes	2 door in each room

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	17A, 17B
Material Description	Gray Building Caulk
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	Between Concrete Base And Aluminum Structure For F No Access Restroom
Total Approximate Quantity	40 LF
Condition	Damaged
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	18A, 18B
Material Description	White Rubber Roof Sealant
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative
Asbestos Type	No Asbestos Detected
Homogeneous Area	Inaccessible Restroom Roof
Total Approximate Quantity	65 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	19A, 19B
Material Description	White Rubber Roof Sealant
Accessible Material	Accessible
Reason Inaccessible	N/A
Asbestos Detected	Negative

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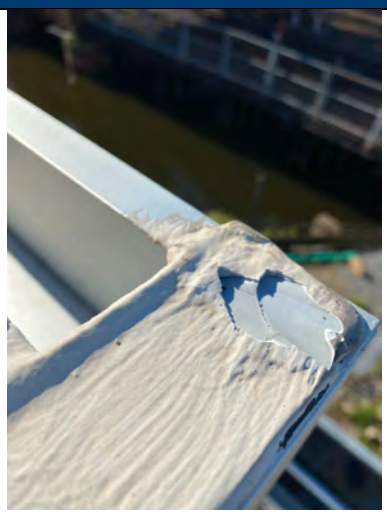
October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	No Asbestos Detected
Homogeneous Area	New Control Tower Roof
Total Approximate Quantity	250 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	The new control tower roof has not been sampled



SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	N/A
Material Description	Asbestos Cement Switch Panels
Accessible Material	Inaccessible
Reason Inaccessible	No Access
Asbestos Detected	N/A
Asbestos Type	N/A
Homogeneous Area	Tower A Electrical Room
Total Approximate Quantity	300 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Not Applicable

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	N/A
Material Description	Asbestos Cement Break Pads
Accessible Material	Inaccessible
Reason Inaccessible	N/A
Asbestos Detected	N/A

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PHOTOGRAPHIC LOG

Asbestos Type	N/A
Homogeneous Area	Mechanical Rooms, Span 1 And 2
Total Approximate Quantity	16 Each
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	8 pads in each mech room

SUSPECT ASBESTOS CONTAINING MATERIAL

Sample Numbers	N/A
Material Description	Glue Behind Wooden Panels
Accessible Material	Inaccessible
Reason Inaccessible	No Access
Asbestos Detected	N/A
Asbestos Type	N/A
Homogeneous Area	New Control Tower
Total Approximate Quantity	120 SF
Condition	Good
Material Type	Misc.
NESHAP Category	N/A
Notes	Assumed glue behind wooden panels in new control tower

MBTA Draw 1

Created	2020-08-20 03:29:24 UTC by Cameron Cooke
Updated	2020-12-03 15:57:02 UTC by David Gavin
Location	42.3679912090696, -71.0631763749486
Status	Survey Pending

PROJECT INFORMATION

Project Name	MBTA Draw 1
TRC Project Number	342282.2.18
TRC Project Manager	Gavin, David
Inspection Start Date	2020-08-19
Inspection End Date	2020-08-19
Inspector(s)	Cooke, Cameron
Client	Keolis
Background	Survey of potential ACM material under ballast at location AB-08. No suspect materials were found, 2ft of ballast on top of solid wood planks.

SURVEY INFORMATION

Surveys Performed	Asbestos
Asbestos Survey Type	NESHAP
NESHAP Survey Type	Full Demolition
Results Audited	No

ASBESTOS SECTION

Asbestos Present	No
Suspect Inaccessible Materials Present	No

GENERAL INFORMATION

Sample Location Diagrams

Samples Submitted	No
timezone	America/New_York
Generate COC	No

COC SECTION

1) Fill in information in this section and sign in the signature field; 2) Use the built-in generate report icon bottom left corner (iOS) in order to generate a COC.

REPORTING SECTION

Report generation is always under development. If you have questions please contact Heath Howard at hhoward@trcsolutions.com.

Survey Complete	No
Proposal Reviewed	No
Report Written	No
Report Reviewed	No
Email for Report Delivery	dgavin@trccompanies.com
Compile Generic Report	N/A
Compile Asbestos Report	N/A
Compile Boston Environmental Report	N/A

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Appendix B
LCP LABORATORY DATA/REPRESENTATIVE PHOTO LOG

EMSL Analytical, Inc.
5 Constitution Way, Unit A, Woburn, MA 01801
Phone/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com bostonlab@emsl.com

EMSL Order:	132007269
CustomerID:	COVI50
CustomerPO:	342282
ProjectID:	

Attn: **David Gavin**
TRC
300 Wildwood Avenue
Woburn, MA 01801

Phone:	(781) 933-2555
Fax:	
Received:	10/14/2020 11:00 AM
Collected:	10/12/2020

Project: **342282/Tower A Verification Survey**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Weight*	*Lead Concentration*
01	*132007269-0001*	10/12/2020	10/15/2020	0.251 g	0.25 % wt
	Site: Gray Paint on Concrete Floor				
02	*132007269-0002*	10/12/2020	10/15/2020	0.2497 g	3.2 % wt
	Site: Gray Paint on Wall (Plaster)				
03	*132007269-0003*	10/12/2020	10/15/2020	0.2485 g	7.2 % wt
	Site: White Paint on Wall (Plaster)				
04	*132007269-0004*	10/12/2020	10/15/2020	0.2525 g	14 % wt
	Site: Blue Paint on Handrail (Metal)				
05	*132007269-0005*	10/12/2020	10/15/2020	0.2513 g	11 % wt
	Site: White Paint on Wall (Plaster)				
06	*132007269-0006*	10/12/2020	10/15/2020	0.2485 g	<0.0080 % wt
	Site: Off-White Paint on Drywall				
07	*132007269-0007*	10/12/2020	10/15/2020	0.2497 g	17 % wt
	Site: Black Paint on Handrail (Metal)				
08	*132007269-0008*	10/12/2020	10/15/2020	0.2493 g	7.9 % wt
	Site: Brown Paint on Window Sill (Wood)				
09	*132007269-0009*	10/12/2020	10/15/2020	0.2511 g	7.0 % wt
	Site: White Paint on Window Sill (Wood)				
10	*132007269-0010*	10/12/2020	10/15/2020	0.2498 g	0.021 % wt
	Site: Green Paint on Plaster Wall				
11	*132007269-0011*	10/12/2020	10/15/2020	0.2485 g	1.1 % wt
	Site: Beige Paint on Mechanical Room Steel Structures				
12	*132007269-0012*	10/12/2020	10/15/2020	0.2508 g	0.26 % wt
	Site: Beige Paint on Mechanical Room Wall (Concrete)				
13	*132007269-0013*	10/12/2020	10/15/2020	0.25 g	0.018 % wt
	Site: Gray Paint on Span 2 Mechanical Room Exterior Wall (Concrete)				

Eric Steele, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.
Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.
Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA-LAP, LLC - ELLAP Accredited #180179

Initial report from 10/15/2020 16:02:02

132007269

TRC

300 Wildwood Avenue, Suite 230, Woburn, MA 01801

LEAD CONTAINING PAINT BULK SAMPLE CHAIN OF CUSTODY FORM

Client:	Project Number:	Inspector(s):
STV	342282	David Gavin, Jorge DaSilva, Roland Holacsek
Project Name: Tower A verification survey	Tracking Number:	Requested TAT: 24 HR
Email Results to: dgavin@trccompanies.com	Analytical Method: Lead Chips SW846-7000B	Lab Comments:

LCP BULK SAMPLE INFORMATION

Date Collected	Sample Identification	Sample Description	Substrate	Lab Identification (Lab Use Only)
2020-10-12	01	Gray paint on concrete floor	Concrete	
2020-10-12	02	Gray paint on wall	Plaster	
2020-10-12	03	White paint on wall	Plaster	
2020-10-12	04	Blue paint on handrail	Metal	
2020-10-12	05	White paint on wall	Plaster	
2020-10-12	06	Off white paint on dry wall	Drywall	
2020-10-12	07	Black paint on handrail	Metal	
2020-10-12	08	Brown paint on window sill	Wood	
2020-10-13	09	White paint on window sill	Wood	
2020-10-12	10	Green paint on plaster wall	Plaster	
2020-10-14	11	Beige paint on mechanical room steel structures	Metal	
2020-10-14	12	Beige paint on mechanical room wall	Concrete	
2020-10-14	13	Gray paint on span 2 mechanical room exterior wall	Concrete	

Special Instruction to Laboratory:

N/A

RECD EMSL-BOSTON OCT 14 2020

OrderID: 132007269

CHAIN OF CUSTODY INFORMATION					
Relinquished By:	**Date**	**Time**	**Received By:**	**Date**	**Time**
I. (Print): Roland Holacsek	2020-10-14	10:12:29 EDT	I. (Print):		
(Sign): Holacsek			(Sign):		
II. (Print):			II. (Print):		
(Sign):			(Sign):		

OrderID: 132007269

RECD ELECTRONICALLY OCT 14 2020

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – LEAD CONTAINING PAINT PHOTOGRAPHIC LOG

SUSPECT PAINT

Sample Numbers	01
Sample Location	1st Floor
Description	Gray Paint On Concrete Floor
Laboratory Result (%)	0.25
Substrate	Concrete
Paint Locations	
Quantity of Deteriorated Paint (SF)	1000

SUSPECT PAINT

Sample Numbers	02
Sample Location	1st Floor Wall
Description	Gray Paint On Wall
Laboratory Result (%)	3.2
Substrate	Plaster
Paint Locations	1st Floor
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

Sample Numbers	03
Sample Location	1st Floor Wall
Description	White Paint On Wall
Laboratory Result (%)	7.2
Substrate	Plaster
Paint Locations	1st Floor
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

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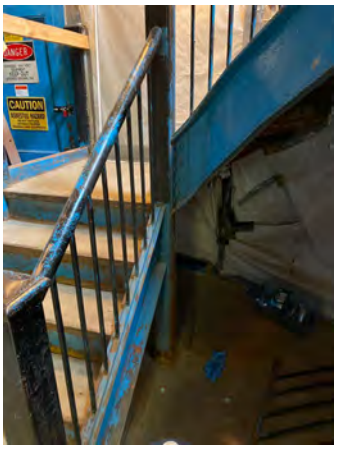
DRAW 1 - HAZARDOUS MATERIALS INSPECTION – LEAD CONTAINING PAINT PHOTOGRAPHIC LOG

Sample Numbers	04
Sample Location	1st And 2nd Floor Stair Case
Description	Blue Paint On Handrail
Laboratory Result (%)	14
Substrate	Metal
Paint Locations	1st And 2nd Floor Staircase
Quantity of Deteriorated Paint (SF)	TBD

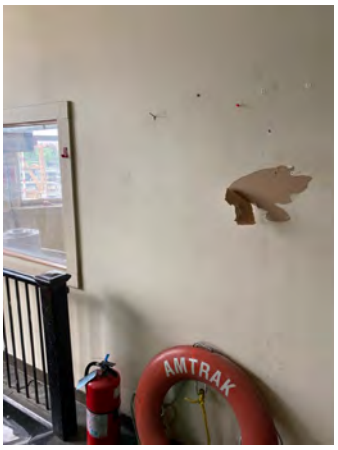


SUSPECT PAINT

Sample Numbers	05
Sample Location	2nd Floor Top Of The Stairs
Description	White Paint On Wall
Laboratory Result (%)	11
Substrate	Plaster
Paint Locations	2nd Floor Top Of The Stairs
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

Sample Numbers	06
Sample Location	2nd Floor, Control Room Wall
Description	Off White Paint On Dry Wall
Laboratory Result (%)	<0.0080
Substrate	Drywall
Paint Locations	2nd Floor, Control Room Wall
Quantity of Deteriorated Paint (SF)	TBD



SUSPECT PAINT

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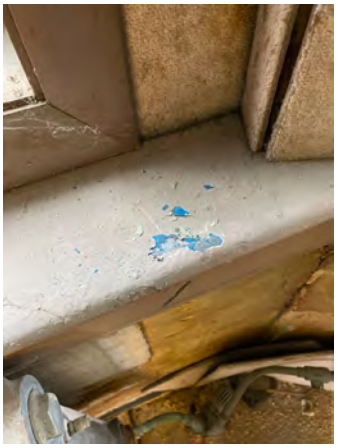
October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – LEAD CONTAINING PAINT PHOTOGRAPHIC LOG

Sample Numbers	07
Sample Location	2nd Floor Staircase Handrail
Description	Black Paint On Handrail
Laboratory Result (%)	17
Substrate	Metal
Paint Locations	2nd Floor Hand Rail
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

Sample Numbers	08
Sample Location	2nd Floor Window Sill
Description	Brown Paint On Window Sill
Laboratory Result (%)	7.9
Substrate	Wood
Paint Locations	2nd Floor Window Sill
Quantity of Deteriorated Paint (SF)	TBD



SUSPECT PAINT

Sample Numbers	09
Sample Location	2nd Floor, Locker Room Area
Description	White Paint On Window Sill
Laboratory Result (%)	7.0
Substrate	Wood
Paint Locations	2nd Floor, Locker Room Area
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – LEAD CONTAINING PAINT PHOTOGRAPHIC LOG

Sample Numbers	10
Sample Location	2nd Floor, Office 2
Description	Green Paint On Plaster Wall
Laboratory Result (%)	0.021
Substrate	Plaster
Paint Locations	2nd Floor Office 2
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

Sample Numbers	11
Sample Location	Mechanical Room, Span 2
Description	Beige Paint On Mechanical Room Steel Structures
Laboratory Result (%)	1.1
Substrate	Metal
Paint Locations	Span 2, Mechanical Room
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

Sample Numbers	12
Sample Location	Span 2, Mechanical Room
Description	Beige Paint On Mechanical Room Wall
Laboratory Result (%)	0.26
Substrate	Concrete
Paint Locations	Span 2, Mechanical Room
Quantity of Deteriorated Paint (SF)	TBD

SUSPECT PAINT

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – LEAD CONTAINING PAINT PHOTOGRAPHIC LOG		
Sample Numbers	13	
Sample Location	Mechanical Room Exterior Wall	
Description	Gray Paint On Span 2 Mechanical Room Exterior Wall	
Laboratory Result (%)	0.018	
Substrate	Concrete	
Paint Locations	Span 2, Mechanical Room Exterior Wall	
Quantity of Deteriorated Paint (SF)	TBD	

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Appendix C
PCB LABORATORY DATA/REPRESENTATIVE PHOTO LOG

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

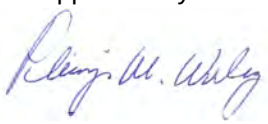
Attn: **David Gavin** 10/19/2020
TRC
300 Wildwood Avenue
Woburn, MA 01801
Phone: (781) 933-2555
Fax:

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 10/15/2020. The results are tabulated on the attached data pages for the following client designated project:

342282 Tower A verification survey

The reference number for these samples is EMSL Order #012011418. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:



Phillip Worby, Environmental Chemistry
Laboratory Director

The test results contained within this report meet the requirements of NELAP and/or the specific certification program that is applicable, unless otherwise noted.
NELAP Certifications: NJ 03036, NY 10872, PA 68-00367, CA ELAP 1877

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order: 012011418
CustomerID: COVI50
CustomerPO:
ProjectID:

Attn: **David Gavin**
TRC
300 Wildwood Avenue
Woburn, MA 01801

Phone: (781) 933-2555
Fax:
Received: 10/15/20 9:30 AM

Project: **342282 Tower A verification survey**

Analytical Results

Client Sample Description 01
2nd floor control room window
Collected: 10/13/2020 ***Lab ID:*** *012011418-0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1254	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

Client Sample Description 02
2nd floor locker room
Collected: 10/13/2020 ***Lab ID:*** *012011418-0002*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1254	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.93	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

Client Sample Description 03
2nd floor window
Collected: 10/13/2020 ***Lab ID:*** *012011418-0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order: 012011418
CustomerID: COVI50
CustomerPO:
ProjectID:

Attn: **David Gavin**
TRC
300 Wildwood Avenue
Woburn, MA 01801

Phone: (781) 933-2555
Fax:
Received: 10/15/20 9:30 AM

Project: **342282 Tower A verification survey**

Analytical Results

Client Sample Description 03
2nd floor window
Collected: 10/13/2020 ***Lab ID:*** *012011418-0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1254	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.81	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

Client Sample Description 04
1st floor window
Collected: 10/13/2020 ***Lab ID:*** *012011418-0004*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1254	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

Client Sample Description 05
Roof above the electrical room
Collected: 10/13/2020 ***Lab ID:*** *012011418-0005*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1254	1.4 D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.95	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order: 012011418
CustomerID: COVI50
CustomerPO:
ProjectID:

Attn: **David Gavin**
TRC
300 Wildwood Avenue
Woburn, MA 01801

Phone: (781) 933-2555
Fax:
Received: 10/15/20 9:30 AM

Project: **342282 Tower A verification survey**

Analytical Results

Client Sample Description 06
Roof above the electrical room

Collected: 10/13/2020 ***Lab ID:*** *012011418-0006*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*		*Analysis Date & Analyst*	
GC-SVOA								
3540C/8082A	Aroclor-1016	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1221	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1232	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1242	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1248	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1254	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1260	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1262	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH
3540C/8082A	Aroclor-1268	ND D	0.99	mg/Kg	10/15/2020	RS	10/16/20 0:00	EH

Definitions:

MDL - method detection limit
J - Result was below the reporting limit, but at or above the MDL
ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit (Analytical)
D - Dilution Sample required a dilution which was used to calculate final results

012011418

TRC

300 Wildwood Avenue, Suite 230, Woburn, MA 01801

PCB BULK SAMPLE CHAIN OF CUSTODY FORM

Client:	Project Number:	Inspector(s):
STV	342282	David Gavin, Jorge DaSilva, Roland Holacsek
Project Name:	**Tracking Number:**	**Requested TAT:**
Tower A verification survey		Rush
Email Results to:	**Analytical Method:**	**Lab Comments:**
dgavin@trccompanies.com	PCB	

PCB BULK SAMPLE INFORMATION

Date Collected	Sample Identification	Material Description	Sample Location	Lab Identification (Lab Use Only)
2020-10-13	01	Interior window glaze	2nd floor control room window	
2020-10-13	02	Interior window glaze	2nd floor locker room	
2020-10-13	03	Exterior window caulk	2nd floor window	
2020-10-13	04	Exterior window caulk	1st floor window	
2020-10-13	05	Parapet flashing material	Roof above the electrical room	
2020-10-13	06	Parapet flashing material	Roof above the electrical room	

6 5 4 3 2 1

Special Instruction to Laboratory:

N/A

email for TAT 10/15

REC'D EMSL-BOSTON OCT 14 2020

1100

Page 1 Of 2

OrderID: 012011418

012011418

CHAIN OF CUSTODY INFORMATION					
Relinquished By:	Date	Time	Received By:	Date	Time
I. (Print): Roland Holacsek	2020-10-14	10:12:29 EDT	I. (Print): Colleen Palladino	10/15/20	9:30AM
(Sign): Holacsek			(Sign): Colleen Palladino		
II. (Print):			II. (Print):		
(Sign):			(Sign):		

15.7°C

OrderID: 012011418

REC'D EMSL-BOSTON OCT 14 2020

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PCB PHOTOGRAPHIC LOG

PCB Samples		
Sample Number	01	No Image Available
Accessible Material	Yes	
Material Interior or Interior	Interior	
Material Description	Interior Window Glaze	
Substrate Adjacent to Material	Wood	
Ground Cover Below Material		

PCB Samples		
Sample Number	02	
Accessible Material	Yes	
Material Interior or Interior	Interior	
Material Description	Interior Window Glaze	
Substrate Adjacent to Material	Metal	
Ground Cover Below Material		

PCB Samples		
Sample Number	03	
Accessible Material	Yes	
Material Interior or Interior	N/A	
Material Description	Exterior Window Caulk	
Substrate Adjacent to Material	Brick	
Ground Cover Below Material		

PCB Samples

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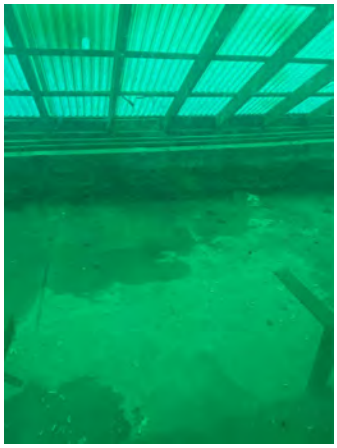
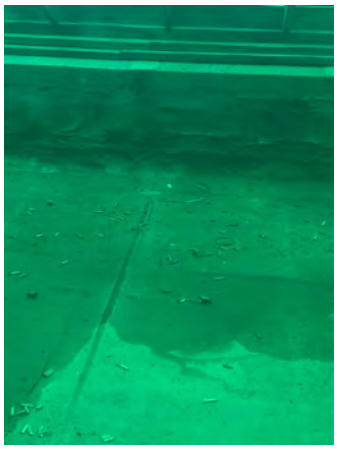
DRAW 1 - HAZARDOUS MATERIALS INSPECTION – PCB PHOTOGRAPHIC LOG		
Sample Number	04	
Accessible Material	Yes	
Material Interior or Interior	Exterior	
Material Description	Exterior Window Caulk	
Substrate Adjacent to Material	Brick	
Ground Cover Below Material	Soil	
PCB Samples		
Sample Number	05	
Accessible Material	Yes	
Material Interior or Interior	Exterior	
Material Description	Parapet Flashing Material	
Substrate Adjacent to Material	Brick	
Ground Cover Below Material		
PCB Samples		
Sample Number	06	
Accessible Material	Yes	
Material Interior or Interior	Exterior	
Material Description	Parapet Flashing Material	
Substrate Adjacent to Material	Brick	
Ground Cover Below Material		

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Appendix D
OTHER REGULATED AND HAZARDOUS MATERIALS INVENTORY/REPRESENTATIVE PHOTO LOG

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Fluorescent (Green Tip)	
Quantity	4	
Notes	4' (Stockpiled)	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Tank	
Quantity	1	
Notes	18 Gallon Pressurization Tank (Abandonded)	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Unknown Contents	
Quantity	2	
Notes	1 Gallon Metal Container	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Smoke Detector Batteries	
Quantity	1	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Emergency Lighting System Batteries	
Quantity	2	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices CFL	
Quantity	2	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Small Motor	
Quantity	2	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Overhead Heating Unit	
Quantity	2	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Emergency Lighting System Batteries	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Solvents	
Quantity	3	
Notes	2 Aerosol Solvent/2 Quart Plastic Containers (1 Degreaser/1 Lubricant)	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	30	
Notes	8' (Stockpiled)	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Thermostats	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Fluorescent (Green Tip)	
Quantity	5	
Notes	4'	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	32	
Notes	4'	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Paints	
Quantity	2	
Notes	Aerosol	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Tank	
Quantity	2	
Notes	Small Pressurized Expansion Tank Associated With Heating System	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Solvents	
Quantity	1	
Notes	Aerosol	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Other Electronic Recyclables	
Quantity	2	
Notes	1 Television/1 Stereo	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Oils	
Quantity	1	
Notes	15 LB Plastic Container	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Oils	
Quantity	1	
Notes	5 Liter Plastic Container	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Electrical Components	
Quantity	20	
Notes	Miscellaneous Panels	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Small Motor	
Quantity	2	
Notes	Associated with Heating System	

ITEM		
Area	Tower A - 1st Floor	
Description	Heating/Water System Components	
Quantity	2	
Notes	Appear to be Newer Components	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Fluorescent (Green Tip)	
Quantity	15	
Notes	8' - 5 Bulbs Stockpiled (1 Bulb Broken)	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	12	
Notes	8'	

ITEM		
Area	Tower A - 1st Floor	
Description	PCB Containing Devices PCB Ballast	
Quantity	32	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Battery Charger	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Desiccant	
Quantity	2	
Notes	1 Metal Container (160 Grams) / 1 Metal Container (650 Grams)	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Unknown Contents	
Quantity	1	
Notes	Metal Container ~ 1 Quart	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Battery	
Quantity	7	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Incandescent Bulb	
Quantity	5	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Refrigerants Air Conditioner	
Quantity	2	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Electrical Components	
Quantity	2	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 1st Floor	
Description	Miscellaneous Electrical Components	
Quantity	80	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	1	
Notes	N/A	

ITEM		
Area	Tower A - 1st Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	33	
Notes	4' (Stockpiled)	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Miscellaneous Cleaning Supplies	
Quantity	1	
Notes	5 Lb Cardboard Container	

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Thermostats	
Quantity	1	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	16	
Notes	4'	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	1	
Notes	2'	

ITEM		
Area	Tower A - 2nd Floor	
Description	Refrigerants Fire Extinguisher	
Quantity	1	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Miscellaneous Electrical Components	
Quantity	6	
Notes	Miscellaneous Components/Panels	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Fluorescent Bulb (U-Bulb)	
Quantity	16	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	PCB Containing Devices PCB Ballast	
Quantity	31	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	25	
Notes	4'	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	6 (5 Stockpiled)	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices Incandescent Bulb	
Quantity	2	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Heavy Metal Containing Devices CFL	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Refrigerants Water Cooler	
Quantity	1	
Notes	N/A	

ITEM		
Area	Tower A - 2nd Floor	
Description	Miscellaneous Other Electronic Recyclables	
Quantity	11	
Notes	3 Space Heaters/2 Toaster Oven/2 Coffee Maker/1 Keyboard/1 Phone/1 Monitor/1 Air Filtration Device1 Television	

ITEM		
Area	Tower A - 2nd Floor	
Description	Refrigerants Air Conditioner	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Tower A - 2nd Floor	
Description	Refrigerants Refrigerator	
Quantity	2	
Notes	N/A	

ITEM		
Area	Exterior-Tower A	
Description	Miscellaneous Electrical Components	
Quantity	4	
Notes	Miscellaneous Panels/Cabinets	

ITEM		
Area	Exterior-Tower A	
Description	PCB Containing Devices Transformer	
Quantity	1	
Notes	N/A	

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DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Exterior-Tower A	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	6	
Notes	N/A	

ITEM		
Area	Exterior-Tower A	
Description	Generator	
Quantity	2	
Notes	No Access.	

ITEM		
Area	New Control Tower	
Description	Heavy Metal Containing Devices Fluorescent (Green Tip)	
Quantity	4	
Notes	N/A	

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	New Control Tower	
Description	Heavy Metal Containing Devices Smoke Detector Batteries	
Quantity	TBD	
Notes	1	

ITEM		
Area	New Control Tower	
Description	Refrigerants Refrigerator	
Quantity	2	
Notes	N/A	

ITEM		
Area	New Control Tower	
Description	Miscellaneous Electrical Components	
Quantity	3	
Notes	Control Panel/Cabinets	

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	New Control Tower	
Description	Miscellaneous Other Electronic Recyclables	
Quantity	6	
Notes	1 Monitor/1 Printer/1 Computer/2 Space Heaters/1 Television	

ITEM		
Area	New Control Tower	
Description	Refrigerants Water Cooler	
Quantity	1	
Notes	N/A	

ITEM		
Area	New Control Tower	
Description	Refrigerants Fire Extinguisher	
Quantity	2	
Notes	N/A	

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	New Control Tower	
Description	Miscellaneous Electrical Components	
Quantity	5	
Notes	Miscellaneous Panels/Cabinets	

ITEM		
Area	New Control Tower	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	9	
Notes	N/A	

ITEM		
Area	New Control Tower	
Description	Refrigerants Air Conditioner	
Quantity	1	
Notes	N/A	

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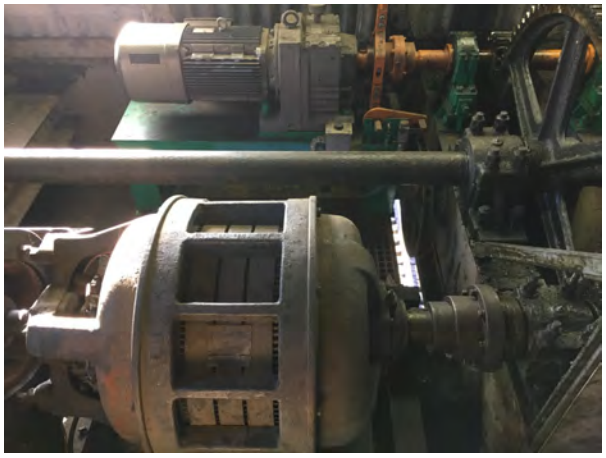
October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Span 1 & 2	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	6	
Notes	N/A	

ITEM		
Area	Span 1 & 2	
Description	Miscellaneous Large Motor	
Quantity	6	
Notes	3 Per Span	

ITEM		
Area	Span 1 & 2	
Description	Miscellaneous Oils	
Quantity	3 (Grease/Lubricant)	
Notes	2-5 Gallon Plastic Container /1-5Gallon Metal Container	

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Span 1 & 2	
Description	Miscellaneous Oils	
Quantity	17	
Notes	16 Aerosol Lubricant/1 Aersosol Pesticide	

ITEM		
Area	Span 1 & 2	
Description	Refrigerants Fire Extinguisher	
Quantity	1	
Notes	N/A	

ITEM		
Area	Span 1 & 2	
Description	Miscellaneous Electrical Components	
Quantity	2	
Notes	1 Panel Per Span/1 Exterior Panel/1 Cabinet	

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October 30, 2020

DRAW 1 - HAZARDOUS MATERIALS INSPECTION – HAZARDOUS MATERIALS INVENTORY PHOTOGRAPHIC LOG

ITEM		
Area	Span 1 & 2	
Description	Heavy Metal Containing Devices Flourescent (Silver Tip)	
Quantity	12	
Notes	8'	

ITEM		
Area	Span 1 & 2	
Description	PCB Containing Devices PCB Ballast	
Quantity	6	
Notes	N/A	

ITEM		
Area	Span 1 & 2	
Description	Heavy Metal Containing Devices HID Lamp	
Quantity	8	
Notes	N/A	

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