TITLE AND APPROVAL PAGE

Document Title:

Site-Specific Quality Assurance Project Plan – Hazardous Building Materials Inventory (HMBI)
32 Dunn Street, Auburn, Maine
RFA No. 19053, Addendum No. 40, Rev. 0 to Ransom's Generic Quality Assurance Project Plan for Brownfields Sites in the State of Maine
Prepared Using United States Environmental Protection Agency (U.S. EPA) Brownfields Funding under the Androscoggin Valley Council of Governments (AVCOG) Assessment Grant No. BF00A00665

Preparer's Name and Organizational Affiliation:

Patrick Brown, Lucas Hathaway, and Peter Sherr
Ransom Consulting, LLC (Ransom)
400 Commercial Street, Suite 404, Portland, Maine 04101
(207) 772-2891

Preparation Date: July 23, 2021

Ransom Project Manager: P. J. Sherr 7/26/2021
Signature/Date
Peter Sherr/Ransom
Printed Name/Organization

Ransom Project QA Officer: Brian R. Pettingill Digitally signed by Brian R. Pettingill Date: 2021.07.26 09:08:01 -04'00'
Signature/Date
Brian R. Pettingill/Ransom
Printed Name/Organization

MEDEP Brownfields Project Manager: _____
Signature/Date
Eric Sroka/MEDEP
Printed Name/Organization

U.S. EPA Project Officer: _____
Signature/Date
Karen Place/U.S.EPA
Printed Name/Organization

U.S. EPA QA Officer / Project Chemist: _____
Signature/Date
Robert Reinhart/U.S.EPA
Printed Name/Organization

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1.0 PROJECT ORGANIZATION AND RESPONSIBILITY FLOW CHART

This section of this Site-Specific Quality Assurance Project Plan (SSQAPP) provides a brief description of how the Hazardous Building Materials Inventory (HBMI) for the 32 Dunn Street (St. Louis Church) property in the City of Auburn (the "Site") will be organized, including identification of the key project personnel, their responsibilities, and a flow chart showing the project chain of command.

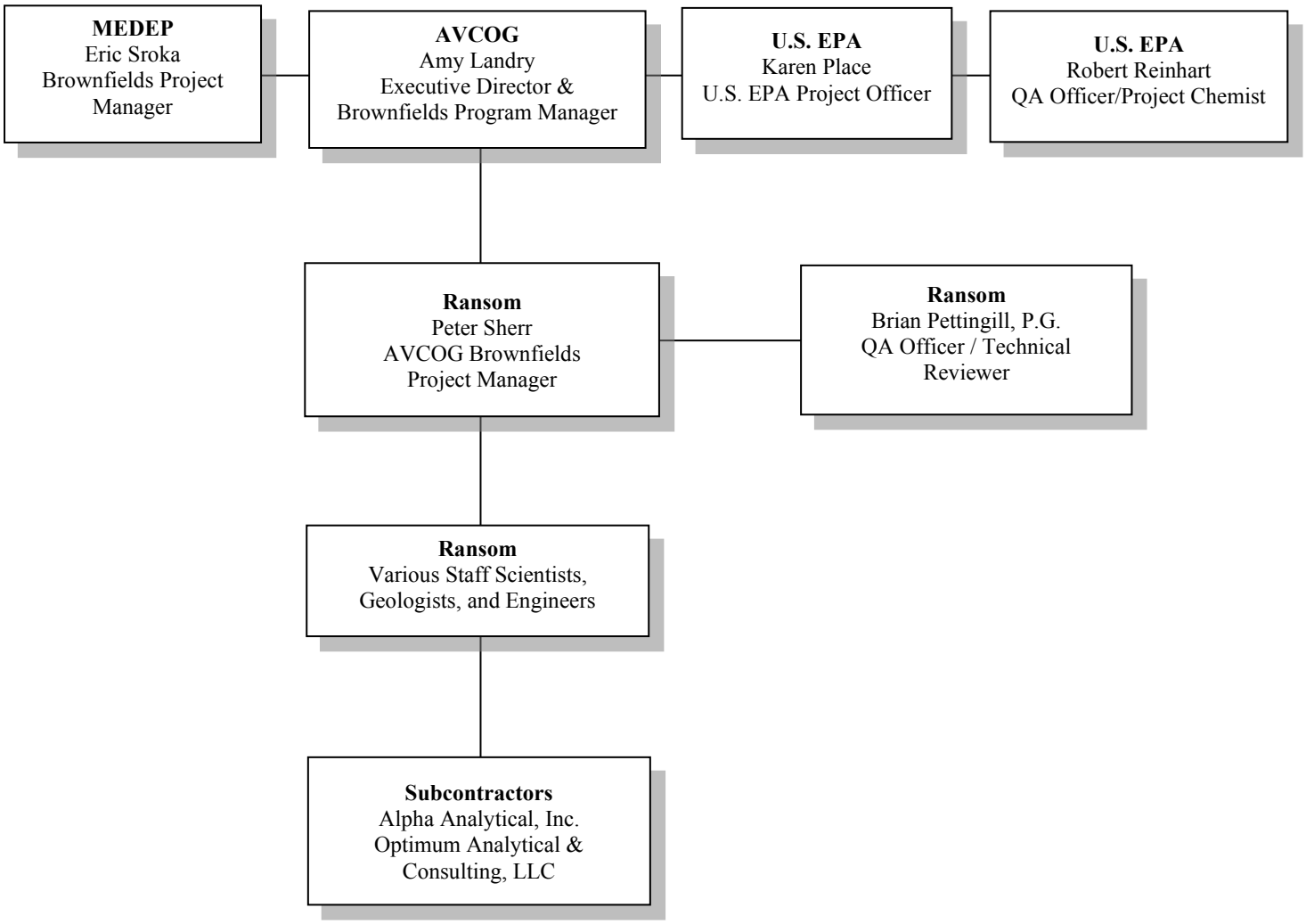
Figure 1-1 on the following page is a Project Organization Chart depicting the agencies and companies involved with this project. Table 1-1 below describes each participant's role in this project.

Table 1-1: Project Personnel Responsibilities

Name	Title	Organizational Affiliation	Responsibilities
Amy Landry	Executive Director & Brownfields Program Manager	Androscoggin Valley Council of Governments (AVCOG)	Oversees and manages AVCOG's Brownfield Assessment Program.
Eric Sroka	Brownfields Project Manager	Maine Department of Environmental Protection (MEDEP)	Provides MEDEP Brownfields, VRAP, and technical oversight.
Karen Place	Project Officer	U.S. EPA	Reviews, oversees, and approves site eligibility, project-wide Quality Assurance Project Plan (QAPP), SSQAPPs, and general project modifications.
Robert Reinhart	Quality Assurance Officer / Project Chemist	U.S. EPA	Provides technical review and assistance, is responsible for U.S. EPA oversight of quality assurance procedures and protocols, and ensures that data quality objectives are met.
Peter Sherr	Brownfields Project Manager	Ransom	Provides overall technical direction and project management for Ransom. Serves as project manager in charge of project coordination, participates in data interpretation and preparation of deliverables.
Brian Pettingill	QA Officer	Ransom	Provides project quality assurance oversight and senior review of deliverables.
Lucas Hathaway	Hazardous Materials Specialist/ Field Lead	Ransom	Day-to-day technical lead in charge of HBMI field work; coordinates and conducts data collection; participates in data interpretation and preparation of deliverables; communicates and coordinates with subcontractors.

Figure 1-1, below, is a Project Organization Chart depicting the agencies and companies involved with this project.

Figure 1-1: Project Organization Chart



2.0 SCOPE OF WORK

This document is an addendum to Ransom's Generic QAPP prepared for Brownfield sites within the State of Maine (RFA #19053). This SSQAPP presents the sampling strategy, design, analytical methods, and schedule for the HBMI to be conducted at the Site. This SSQAPP was prepared using U.S. EPA Brownfields Funding provided under the AVCOG Brownfields Assessment Grant No. BF00A00665.

The quality assurance/quality control (QA/QC) requirements contained in the Generic QAPP will be followed relative to sample collection, handling and analysis, including chain of custody, data management and documentation, data validation, and data usability assessments. Field and laboratory Standard Operating Procedures (SOPs) are included in the Generic QAPP or have been previously submitted as part of prior SSQAPP Addendums.

Please note that activities and tasks proposed in this SSQAPP, as part of the U.S. EPA-funded Brownfields Assessment program, do not have the potential to cause "effects" on historical properties, as defined in Section 106 of the National Historic Preservation Act (NHPA).

2.1 Project Description and Background

AVCOG received a U.S. EPA Brownfields Assessment Grant to conduct site assessments and investigations at properties within the region with the intent to revitalize underutilized properties. These investigations provide the basis for site-specific remedial, reuse, and redevelopment planning and include the completion of Phase I and Phase II Environmental Site Assessments (ESAs), HBMIs, and the development of cleanup and reuse options for the selected sites.

The Site is included in AVCOG's Brownfields Assessment Program. The attached Site Location Map (Figure 2-1) locates the Site on the Lewiston, Maine quadrangle prepared by the United States Geological Survey (USGS).

The Site consists of one rectangular shaped parcel of land bounded by an addiction treatment center to the north, a music instruction business and parking lot beyond Dunn Street to the west, a floorcare business and residential properties beyond Third Street to the south, and residential properties to the east. The Site encompasses a total of approximately 0.56 acre and is identified on the City of Auburn Assessor's Tax Map 221 as Lot 196-001.

The Site was improved with a church in 1902. A residential dwelling was identified in the eastern portion of the Site on Sanborn Maps dated 1914 to 1988. A destructive fire reportedly occurred at the Site and surrounding neighborhood in 1933, and the former Site buildings reportedly were destroyed. The existing church and a second former residence reportedly were constructed after the fire. The second residence was demolished in 2004. Church operations at the Site ceased in 2013. Pilotage, LLC, a nonprofit that intended to convert the church into a community center, occupied the Site from 2014 to 2017. The City of Auburn subsequently acquired the Site in 2017, and the Site has remained unoccupied since that time.

The Site is currently improved with a single-story, approximately 8,500 square-foot church (the "Site building") with a mezzanine and concrete-floored basement. A concrete walkway, staircase and retaining wall and asphalt-paved driveway/parking area are located east of the Site building. Confined grass lawns

and limited landscaping are located north, west, and south of the Site building. A concrete stairway entrance is located west of the Site building.

See Figure 2-2 (Site Plan), which shows the extent of the proposed work, pertinent Site features, and adjacent properties.

2.2 Previous Investigations

Phase I Environmental Assessment, St. Louis Church, 32 Dunn Street, Auburn, Maine, prepared by Ransom, dated April 16, 2021

Ransom completed a draft Phase I ESA for the Site in April 2021. The Phase I ESA revealed no evidence of Recognized Environmental Conditions (RECs) in connection with the Site as defined by ASTM; however, the following business environmental risk was identified:

Certain ASTM non-scope considerations were reviewed and identified in connection with the Site that represent potential business environmental risk, including asbestos-containing building materials (ACM), lead-based paint (LBP), polychlorinated biphenyl (PCB)-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and/or other potential universal wastes. Depending on potential future Site development or renovation plans, these hazardous materials, if confirmed, may require abatement, special handling, and/or proper management/disposal, prior to and/or during future redevelopment activities. Therefore, Ransom recommends the performance of a HBMI to identify potential remaining hazardous building materials and to identify mitigation measures, if necessary, in order to support the current and future utilization of the Site.

2.3 Data Quality Objectives

Data Quality Objectives (DQOs) specify the quality and quantity of data needed to support technical decisions during site assessments. DQOs are developed by considering the purpose of collecting the data and the intended use of the data. The Site building is proposed to be renovated for mixed residential and commercial use. Accordingly, this HBMI has been designed to characterize the Site for residential and commercial use and identify potential exposure risks to Site occupants during renovation of the Site building.

The objective of the HBMI is to conduct an inventory of hazardous and potentially hazardous building materials, including ACM, LBP, PCB-containing fluorescent light ballasts, paint, and/or caulking, heavy metals, and/or other hazardous/universal wastes. Identification of ACM and PCB-containing materials will be determined via collection and laboratory analysis of bulk samples. Identification of LBP will be determined via a direct-reading X-ray fluorescence (XRF) analyzer. Identification of PCB-containing fluorescent light ballasts, heavy metals, and other miscellaneous potential hazards associated with "universal" wastes will be determined via visual inventory.

Based on the age of the Site building (reconstructed in approximately 1933, remodeling status unknown), PCBs may be present in interior and exterior paints and caulking materials. Paints and caulks with elevated levels of PCBs are typically identified in buildings constructed or remodeled between 1950 and 1978; therefore, suspect paints and caulks observed at the Site building will be sampled and analyzed for PCB content as part of this HBMI. As provided under the Toxic Substances Control Act (TSCA), 40

CFR §761.3, the presence of PCBs in building materials at concentrations equal to or above 50 parts per million (ppm) constitute an "Unauthorized Use" and are characterized as "Bulk Product Waste" in the construction/demolition debris stream. Materials identified as Bulk Product Waste would require proper handling, transport and disposal during future renovation and/or demolition activities that would impact them.

A summary of data quality objectives that have been developed to meet the goals of this site investigation is provided in Table 2-1. Data quality assessments are discussed in Section 9 of the Generic QAPP prepared for Brownfields sites within the State of Maine.

Table 2-1: Summary of Data Quality Objectives

Matrix	Parameter	Methods	State or Federal Standard	Analytical Level [1]	Data Evaluation Tier[2]	Intended Data Use [3]
Bulk Material Samples	Asbestos Fiber	U.S. EPA polarized light microscopy (PLM) Method 600	U.S. EPA - Asbestos Hazard Emergency Response Act (AHERA)–40 CFR 763 U.S. EPA - National Emission Standard for Hazardous Air Pollutants (NESHAP)–40 CFR 61 Occupational Safety and Health Administration (OSHA) - Asbestos Standard for General Industry–29 CFR 1910.1001 OSHA - Asbestos Standard for Construction Industry–29 CFR 1926.1101 MEDEP - Statutory Sections - Title 38, Chapter 12-A: Asbestos §1271 - §1284 MEDEP - Chapter 425 - Asbestos Management Regulations, effective April 3, 2011	NA	NA	ID, CC, FA, HS

Matrix	Parameter	Methods	State or Federal Standard	Analytical Level [1]	Data Evaluation Tier[2]	Intended Data Use [3]
Painted Surfaces	Lead	Field Screening Using XRF Unit by MEDEP SOP.[4]	OSHA - Lead Standard for Construction Industry–29 CFR 1926.62	Level I	NA	ID, CC. FA, HS, FS
Building Materials	PCBs	U.S. EPA Method 8082 (Soxhlet Extraction)	TSCA Standard for PCBs 40 CFR 761.61	Level II	Tier I Plus	ID, CC, IR, FA, HS, FS
Universal Wastes	Heavy Metals, PCBs, & Ozone Depleting Chemicals (ODCs)	Visual Inspection. Suspected and/or Presumed Universal Wastes will be assumed to contain mercury or PCBs, respectively.	MEDEP Solid & Hazardous Waste Regulations	Visual Determination of Suspected / Presumed Universal Wastes	NA	ID, CC, FA, HS, FS

NOTES:
1. Analytical levels (U.S. EPA, April 22, 2013) Level I, on-site field screening and measurements, use one-point calibration. Level II analyses using standard laboratory QA/QC, including duplicate analyses, suitable calibration standards, sample preparation equipment, and operator training.
2. Tier levels for Region I, U.S. EPA-New England Environmental Data Review Program Guidance (U.S. EPA, April 22, 2013). Tier I Plus is described in Section 9.3.2 of this SSQAPP. NA = Not Applicable
3. Data Intended End Use is project-specific and may include: (EA) determine need for emergency action; (ID) identify waste material/contaminants; (CC) determine quantity and levels of contamination; (IR) identify impacted targets/receptors; (SS) develop site score; (FA) document need for further action or no further action; (HS) health & safety; (FS) field screening.
4. The XRF Unit detection limit for lead is 0.01 milligrams per square centimeter (mg/cm^2).

A summary of the regulatory standards criteria is presented in Table 2-2 below. As of the date of this SSQAPP addendum, the current State and/or Federal regulatory standards have been incorporated into Appendix A, and the reporting limits and standards have been reviewed for accuracy.

Table 2-2: Regulatory Standards Criteria

Media	Regulatory Standard
Building Materials	
Asbestos	MEDEP Solid Waste Management Rules Chapter 425
Lead	U.S. EPA Residential Lead-Based Paint Hazard Reduction Act of 1992 OSHA - Lead Standard for Construction Industry–29 CFR 1926.62
PCBs	TSCA Standard, July 1, 2007

MEDEP Chapter 425 defines ACM as "any material containing asbestos in quantities greater than or equal to one percent by volume as determined by weight, visual evaluation, and/or point count analysis." Bulk PLM analysis via U.S. EPA Method 600 can identify asbestos fiber in samples at concentrations as low as one percent by volume, thereby satisfying the data quality objectives of this SSQAPP.

The U.S. EPA and MEDEP define LBP as paint or other surface coatings that contain lead in excess of 1.0 milligrams per square centimeter (when measured using an XRF analyzer) or 0.5 percent by weight (via laboratory analysis). The hand-held XRF analyzer, specified for use herein, reports lead concentrations, as low as 0.01 mg/cm^2, thereby satisfying the data quality objectives of this SSQAPP.

2.4 Conceptual Site Model

2.4.1 Site Familiarity

The information obtained during Ransom's Phase I ESA conducted at the Site served as the basis for development of this Conceptual Site Model (CSM).

2.4.2 Site Geology and Hydrogeology

According to the Maine Geological Survey Surficial Geology of the Lewiston Quadrangle, Maine, surficial soils at the Site are identified as Braided stream alluvium (Pa). These soils generally consist of fluvially deposited sand, silt, and gravel.

According to the 1985 Bedrock Geologic Map of Maine, bedrock at the Site is situated within the Silurian Sangerville Formation, which consists of metamorphic greenschist facies and/or epidote-amphibolite facies, as well as sedimentary limestone and/or dolostone units. Ransom did not observe bedrock outcrops at the Site or immediate vicinity during reconnaissance.

Topography at the Site and vicinity slopes downward generally north. Accordingly, groundwater at the Site and vicinity is inferred to flow generally north. Groundwater flow direction at the Site cannot be confirmed without a groundwater elevation survey. Shallow groundwater flow may also be influenced by underground utilities, heterogeneous subsurface soil strata, and/or other subsurface structures which may act as preferred pathways of flow.

2.4.3 Source Areas and Contaminants of Concern

Based on the business environmental risk documented in Ransom's Phase I ESA, the following area of concern (AOC) has been identified at the Site:

<u>AOC 1: Building Structures/Materials</u>

AOC 1 encompasses the Site building. Potential contaminant of concern (COC) sources associated with AOC 1 include hazardous building materials. The proposed HBMI focuses on assessing hazardous building materials at the Site building that will need to be identified and may require abatement prior to building renovation and/or interior demolition.

The Site building may contain ACM, LBP, PCBs, and/or universal wastes. Any redevelopment activities which involve the renovation or demolition of the Site building will require an inspection for ACM and other potentially hazardous building materials, including LBP, PCB-containing light ballasts, mercury-containing fluorescent lamps, and other universal wastes. Identification of potentially hazardous building materials will be necessary prior to building renovation in order to protect worker safety, and to maintain compliance with applicable

materials handling, maintenance, and/or disposal regulatory criteria. Specifically, the areas of the Site building targeted for evaluation under the provisions of this SSQAPP include the following building materials at interior and exterior portions of the Site building.

Table 2-3 Conceptual Site Model Summary

AOC	COC Source	COC Analytical Parameter	Potential Media Affected	Potential Exposure Routes	Potential Migration Pathways	Receptors
AOC 1: Building Structures/Materials	Hazardous Building Materials	Asbestos, lead, PCBs, and universal wastes.	Interior and Exterior Building Components	Ingestion of particles via dirty hands or dust. Inhalation of airborne dust particles	Airborne transport of dust particles.	Potential receptors of contamination include humans and the environment. Potential human receptors include future demolition/construction/ excavation workers and future site users.

2.5 Sampling Plan

Based on the findings of Ransom's Phase I ESA, a sampling program has been developed to evaluate for the presence of hazardous building materials including asbestos, lead, PCBs and universal wastes.

A summary of the proposed investigation, including areas of investigation, media to be sampled and analytical program is included in Table 2-4. Field sampling standard operating procedures for this project are listed in Table 2-5 and are included in the Generic QAPP. Laboratory standard operating procedures are also listed in Table 2-6. Field quality control samples to be collected for this project are described in Table 2-7. Table 2-8 presents the sample analysis requirements, including analyses to be performed, required sample volumes, containers, preservation, and maximum holding times. Please refer to Section 12 of the Generic QAPP for field document control procedures. The scope of work to meet the objectives of the sampling plan is detailed below.

2.5.1 Site Health & Safety Plan

Ransom will prepare a Site-specific health and safety plan (HASP) in accordance with OSHA regulations.

2.5.2 Hazardous Building Materials Inventory

Ransom will perform an HBMI to identify and quantify hazardous and potentially hazardous building materials, including ACM, LBP, PCB-containing caulks and paints, and universal wastes, such as systems or fixtures that contain mercury, heavy metals, and/or PCBs.

The asbestos survey will be performed by a State-certified asbestos inspector in accordance with MEDEP Chapter 425 sampling requirements. These regulations require that buildings be inspected for suspect ACM prior to demolition or major renovation projects. The MEDEP defines ACM as "greater than or equal to one percent asbestos." MEDEP Chapter 425 stipulates that all friable ACM, as well as non-friable ACM that is in poor condition, or could become friable by renovation activity, be removed or otherwise appropriately abated before they are disturbed.

Bulk samples of suspect ACM will be collected and submitted for laboratory analysis by PLM with dispersion staining. Non-friable organically bound (NOB) materials such as floor tile, caulk, and roof materials will be analyzed using PLM NOB–EPA 600/R-93/116 with the gravimetric preparation method. The approximate quantity and location of each suspect ACM will be documented to facilitate possible future abatement, in the event these materials test positive for asbestos.

Samples will be analyzed by Optimum Analytical and Consulting, LLC (Optimum) of Salem, New Hampshire. Optimum is a State of Maine-licensed asbestos analytical laboratory and is also certified to perform bulk sample analysis by the National Voluntary Laboratory Accreditation Program (NVLAP).

The number of bulk samples collected will be dictated by conditions and material variability encountered at the Site, and applicable sample collection protocols. As indicated in Tables 2-4

and 2-7, a minimum of three bulk samples are required per homogenous area of most suspect materials (certain materials may require more). Designation of homogenous areas and sample locations will be at the inspector's discretion, based on field observations, building conditions, access limitations, safety considerations, etc. Ransom intends to evaluate all accessible areas of the Site building interior and exterior; limitations to Ransom's inspection or sampling plan will be documented accordingly. Based on observations made during the Phase I ESA, Ransom anticipates collecting approximately 150 samples for laboratory analysis, or 50 distinct materials collected in triplicate, in accordance with MEDEP Chapter 425.

Interior and exterior painted surfaces of the Site building will be analyzed for the presence of lead-based paint utilizing a field-portable XRF. Based on Ransom's and the MEDEP's experience with multiple Brownfields sites, XRF screening results typically correlate closely with laboratory analytical data, especially for lead, and shall be considered sufficient for assessing risk-based criteria related to painted surfaces. Therefore, Ransom does not anticipate collecting confirmatory paint chip samples for laboratory analysis at this time.

The actual number and location of XRF screenings will be dictated by field observations, building conditions, access limitations, safety considerations, and the variety/ distribution of painted surfaces. At a minimum, two XRF screenings will occur at each type/color of paint observed, with additional screenings for more widely distributed applications. Ransom intends to evaluate all accessible areas of the Site building interior and exterior. Limitations to Ransom's inspection or sampling plan will be documented in the inspection report.

Suspect caulks and paints observed at the Site building will be sampled and analyzed for PCB content in accordance with SOP 06/10. The number of bulk and caulk/sealant material samples collected will be dictated by conditions and material variability encountered at the Site, along with applicable sample collection protocols. Based on observations made during the Phase I ESA and our general familiarity with the Site, if suspect caulks and paints are observed, Ransom anticipates collecting approximately 5 samples for laboratory analysis for PCBs.

Universal wastes, such as mercury-containing switches and fluorescent light bulbs, potentially PCB-containing light ballasts, emergency/exit lighting fixtures, etc. will be identified and inventoried by visual count.

2.5.3 Reporting

A report will be completed as described in the Generic QAPP. The report will include the following items:

1. Summary of results and conclusions.

2. Tabular analytical results found above laboratory detection limits for compounds analyzed (analytes exceeding regulatory standards will be in bold face type).

3. A plan documenting sampling locations and location of Site features.

4. A data quality assessment to document the precision, bias, accuracy, representativeness, comparability, and completeness of the results.

5. A discussion of deviations from the approved SSQAPP and the effect on data usability, if any.

6. Recommendations for additional work, if necessary, and justifications, based upon data quality objectives and the conceptual site model.

7. Abatement cost estimates for removal and disposal of identified hazardous building materials by properly trained and qualified workers.

2.5.4 Sample Management

Samples will be collected and managed as described in the project-wide SOPs. Sample preservation requirements are listed in Table 2-8.

2.6 Project Schedule

The HBMI is planned to be completed in Summer 2021. Field activities are anticipated to be completed in one to two field days. Laboratory analytical results are expected within one to two weeks, upon completion of the field activities, and a draft report of findings will be prepared within three weeks, following receipt of laboratory analytical results.

Table 2-4: Summary of Site Investigations

AOC	Sample Location/ Source Area [1]	Task/Media	Sample IDs	Depth of Sample	Analytical Parameter	Number of Lab Samples [2]	Number of Duplicates	Rationale	Field Analyses/ Observations [2]
AOC 1: Building Structures / Materials	On-site Interior and Exterior Building Materials	Bulk Building Materials	Field determined, as necessary	NA	Asbestos	Thermal Insulation: As necessary to confirm ACM in tees, elbows and valves; at least 1 from small, patched areas (less than 6 sq. ft.); at least 3 from each homogeneous area. Surfacing Materials: At least 3 from each type of material (quantities less than 1,000 sq. ft.); at least 5 from each type of material (quantities between 1,000 sq. ft. and 5,000 sq. ft.); at least 7 from each type of material (quantities greater than 5,000 sq. ft.) Miscellaneous Samples: 3 from each material; 1 if the quantity is less than 6 sq. ft./6 linear feet. Estimated total of (150) samples for asbestos analysis, from (50 triplicate) discrete materials/homogenous areas.	Replicates, as Required Per MEDEP and AHERA Asbestos Inspection Protocols (Minimum 3 samples per homo-geneous area).	To identify asbestos-containing materials	Visual Observations
		Caulks and Paints	Field determined, as necessary	NA	PCBs	As warranted by field conditions. Estimated total of (5) bulk samples for PCB analysis.	1	To identify potential PCB-containing materials	Visual Observations

AOC	Sample Location/ Source Area	Task/Media	Sample IDs	Depth of Sample	Analytical Parameter	Number of Lab Samples (2)	Number of Duplicates	Rationale	Field Analyses/ Observations (2)
AOC 1: Building Structures / Materials	On-site Interior and Exterior Building Materials	Painted Surfaces	NA	NA- painted surfaces	Total Lead	NA: XRF screening of painted surfaces	Minimum of two readings per surface	To identify lead-based paint	Visual Observations & XRF Field Screening

Table 2-5: Project Sampling SOPs Reference Table

SOP Reference Number	Title, Revision Date and/or Number	Originating Organization
RWM-DR-012	Chain of Custody Protocol, SOP No. RWM-DR-012, Rev. 06, April 28, 2015.	MEDEP
RWM-DR-013	Documentation of Field Activities and Development of a Trip Report, SOP No. RWM-DR-013, Rev. 03, April 28, 2015.	MEDEP
RWM-DR-014	Development of a Sampling and Analysis Plan, SOP No. RWM-DR-014, Rev. 03, March 6, 2017.	MEDEP
RWM-DR-017	Equipment Decontamination Protocol, SOP No. RWM-DR-017, Rev. 04, March 6, 2017.	MEDEP
RWM-DR-025	Protocol for Collecting Data Using an Innov-X Field Portable X-Ray Fluorescence Spectrometer for Certain Metals in Solid Media, SOP No. RWM-DR-025, Rev. 1, April 2015.	MEDEP
S22	Standard Operating Procedure for Asbestos Bulk Inspection and Bulk Sampling, Maine, Rev.1, October 2012.	Ransom

Table 2-6: Laboratory SOPs Reference Table

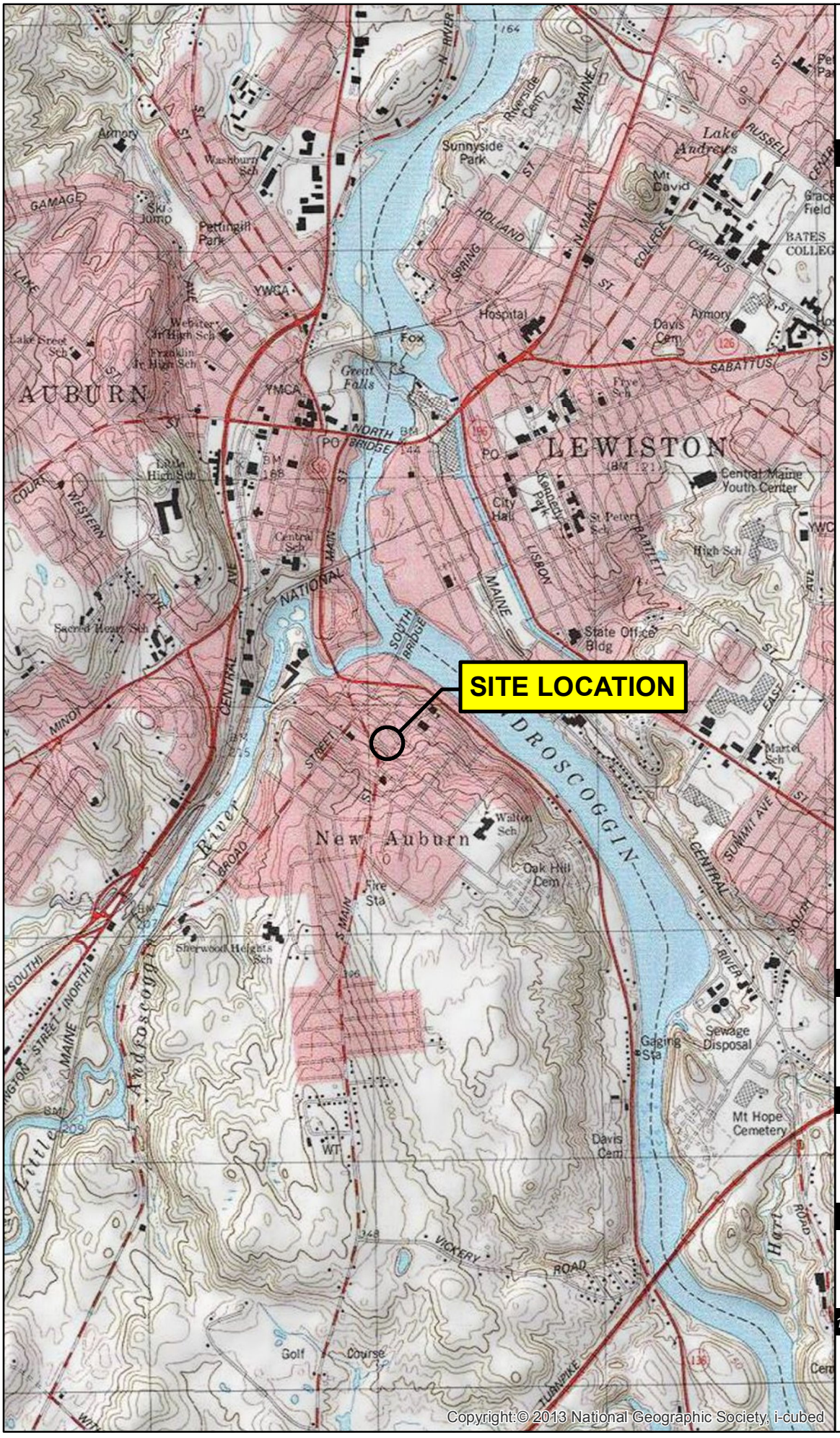
SOP Reference Number	Title, Revision Date and/or Number	Originating Organization
Alpha ID: 1559	Sample Receipt & Login, March 18, 2016.	Alpha
Alpha ID: 1560	Sample Custody & Tracking, September 16, 2015.	Alpha
Alpha ID: 1561	Bottle Order Preparation, September 17, 2014.	Alpha
Alpha ID: 1737	Inorganic Glassware Cleaning & Handling, April 18, 2012.	Alpha
Alpha ID: 1954	Soxhlet Extraction, August 27, 2013.	Alpha
Alpha ID: 2129	PCBs by Capillary Column Gas Chromatography, Rev 9, April 8, 2019.	Alpha
Alpha ID: 2136	Laboratory Method for Acid Digestion of Sediments, Solids, and Soils, September 4, 2015.	Alpha
Alpha ID: 2144	Laboratory Method for Inductively Coupled Plasma- Atomic Emission Spectrometry, March 28, 2016.	Alpha
Alpha ID: 2156	Laboratory Method for Inductively Coupled Plasma- Mass Spectrometry, December 23, 2015.	Alpha
Alpha ID: 2274	Data Validation Package, April 16, 2014.	Alpha
Alpha ID: 2413	Chain of Custody Procedure, July 13, 2012.	Alpha
Alpha ID: 2492	Data Review Package, July 17, 2013.	Alpha
NA	Optimum Analytical and Consulting, LLC, Quality Assurance Program, Rev. 7, January 18, 2017	Optimum
2.0	Phase Contrast Microscopy, Revised 9/3/2013.	Optimum
2.1	Polarized Light Microscopy for the Determination of Asbestos in Bulk (Building) Materials, Revised 1/3/2017	Optimum
11.0	Gravimetric Reduction for Non-Friable Organically Bound Bulk Materials, Revised 2/8/2013.	Optimum

Table 2-7: Field Quality Control Samples

QC Sample	Frequency	Acceptance Criteria	Corrective Action
Triplicate sampling for Asbestos, as required under MEDEP Chapter 424	Minimum 3 samples per homogeneous area	Per U.S. EPA data evaluation guidelines for comparison of field duplicates	Compare for resampling or reanalysis

Table 2-8: Sampling and Analysis Methods Requirements

Analytical Parameter	Medium/ Matrix	Sampling SOP	Analytical Method & Lab SOP	Sample Volume	Containers (Number, size and type)	Preservation Requirements (temperature)	Maximum Holding Time
Asbestos	Building Materials	S22	PLM with dispersion staining & Gravimetric preparation for NOB Bulk Materials	Bulk	Zip-top bags	None	None
PCBs	Bulk building materials	S23	U.S. EPA Method 8082. (Alpha ID: 2129).	Bulk	4 oz glass jar	4°C	180 days



RANSOM
Consulting Engineers and Scientists

Regional Locator Map

Notes

1. Data Source: USGS National Map Seamless Server, 24K DRG, 1/3" NED
2. USGS Quad Name: Auburn
3. 994,797.6984 -169,611.4595

Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

Prepared For

Androscoggin Valley Council of Governments
125 Manley Rd, Auburn, ME 04210

Site Address

St. Louis Church
32 Dunn Street
Auburn, ME 04210

151.06123.048 | June 2021

Figure 2-1

Site Location Map

P:\2015\151.06123\048 - St. Louis Church, Auburn Phase I ESA\drawings\151.06123.048_site_loc_85x11_ME.mxd

RANSOM
Consulting Engineers and Scientists

Legend & Notes

Site Boundary

Above Ground Storage Tank (AST)

Notes
1. Site Plan based on ESRI and Digital Globe Orthophotography
2. Some features are approximate in location and scale
3. This plan has been prepared for Androscoggin Valley Council of Governments. All other uses are not authorized unless written permission is obtained from Ransom Consulting, LLC.

Scale & Orientation

0 20 40 ft

1 inch = 40 feet

Prepared For

Androscoggin Valley Council of Governments
125 Manley Rd.
Auburn, ME 04210

Site Address

St. Louis Church
32 Dunn Street
Auburn, Maine 04210

151.06123.048 | June 2021

Figure 2-2
Site Plan

\\SERVERME2016\Projects\2015\151.06123\048 – St. Louis Church, Auburn Phase I ESA\drawings\151.06123.048–figures.dwg site–plan–1–40 figure2 Apr 23,2021

Attachment A - Summary of Laboratory Reporting Limits & Regulatory Guidelines for Various Target Analytes

Contaminants of Concern	CAS No.	Laboratory Practical Quantitation Limit (PQL)	Laboratory Method Detection Limit (MDL)	MEDEP Remedial Action Guidelines for Sites Contaminated with Hazardous Substances (October 19, 2018)					MEDEP Chapter 425 (Asbestos)	USEPA Regional Screening Levels (RSLs) (Nov. 2018)		HUD Lead Based Paint Guidelines	40 CFR 761 (USEPA TSCA)
				Residential	Commercial	Construction	Background Undeveloped	Background Rural		Residential	Industrial		
			Soil (mg/kg)	Soils (mg/kg)						Soils (mg/kg)			
Metals in Soil													
Lead	7439-92-1	0.06	0.0146	140	440	450	32	NE	NA	400	800	NA	NA
Hazardous Building Materials													
Asbestos*	1332-21-4	NA	1%	NE	NE	NE	NE	NE	1%	NE	NE	NA	NA
Lead Based Paint via XRF Screening	1319-46-6	NA	NA	NE	NE	NE	NE	NE	NA	NE	NE	1.0 mg/cm^2	NA
PCBs in Caulking/Paint (Solid)	various	NA	NA	NE	NE	NE	NE	NE	NA	NE	NE	NA	50 mg/kg

NOTES:

MEDEP = Maine Department of Environmental Protection
USEPA = United States Environmental Protection Agency
HUD = United States Housing and Urban Development
CAS = Chemical Abract Service Number
TSCA = Toxic Substance Control Act
mg/kg = milligrams per kilogram
mg/cm^2= miligrams per square centimeter
*Asbestos quantities presented as percentage of asbestos by weight of sample
NE indicates that a standard or guideline is "not established' for the referenced parameter.
NA = Not Applicable.
Sources:
Alpha Analytical Laboratory PQLs and MDLs (VOCs, SVOCs, EPH, VPH, and PCBs), Quality Systems Manual Revision 14, dated February 1, 2019
MEDEP RAGs for Sites Contaminated with Hazardous Substances, October 19, 2018.
USEPA RSLs, dated November 2018.