



Phase I Environmental Site Assessment Report

Hampden Academy Property
1 Main Road North
Hampden, Maine 04444



Prepared for:

**Town of Hampden
106 Western Avenue
Hampden, Maine**

May 15, 2012

In Reference to:
Project No. 12001144

Submitted by:
Creder Associates, LLC
776 Main Street
Westbrook, ME 04092



CREDERE ASSOCIATES, LLC

776 Main Street
Westbrook, Maine 04092
Phone: 207-828-1272
Fax: 207-887-1051

May 15, 2012

Mr. Dean Bennett
Director of Community and Economic Development
Town of Hampden
106 Western Avenue
Hampden, Maine 04444

**Subject: Phase I Environmental Site Assessment Report
Hampden Academy Property
1 Main Road North
Hampden, Maine**

Dear Mr. Bennett:

Enclosed is a copy of the Phase I Environmental Site Assessment (ESA) report completed for the above referenced property. This report was completed in accordance with the ASTM International (ASTM) Standard Practice E 1527-05 and the Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312) for Phase I ESAs.

Five (5) recognized environmental conditions (RECs) were identified during this Phase I ESA. The RECs are associated with onsite and offsite underground storage tanks, sanitary septic systems, floor drains in the furnace rooms, and discarded automobiles and building debris. Additional investigation is needed to confirm or dismiss these RECs. We would be pleased to prepare a detailed work plan to complete this work at your request.

Please do not hesitate to contact me at (207) 828-1272 x21 if you have any questions.

Very truly,
Credere Associates, LLC

Silas Canavan, PE
Civil/Environmental Engineer

Jedd Steinglass
Senior Project Manager

Enclosure: Phase I ESA
cc: File



TABLE OF CONTENTS

Section	Title	Page No.
EXECUTIVE SUMMARY		ES-1
1. INTRODUCTION.....		1-1
2. USER PROVIDED INFORMATION.....		2-1
2.1	Review of Title and Judicial Records for Environmental Liens or Activity Use Limitations	2-1
2.2	Specialized Knowledge or Experience of the User.....	2-1
2.3	Actual Knowledge of the User.....	2-1
2.4	Reduction of Valuation for Environmental Issues	2-2
2.5	Commonly Known or Reasonably Ascertainable Information.....	2-2
2.6	Reason For Performing Phase I ESA.....	2-2
3. SITE DESCRIPTION.....		3-1
3.1	Site Ownership and Location.....	3-1
3.2	Site Description and Operations	3-1
3.3	Site Utilities	3-2
3.4	Topography and Drainage.....	3-2
3.5	Surface Water	3-3
3.6	Hydrogeologic Characteristics.....	3-3
4. SUMMARY OF PRIOR ENVIRONMENTAL DOCUMENTS		4-1
5. SITE RECONNAISSANCE.....		5-1
5.1	General Site Setting	5-1
5.2	Exterior Observations	5-2
5.3	Interior Building Observations	5-3
5.4	Underground and Aboveground Storage Tanks.....	5-6
5.5	PCB-Containing Electrical and Hydraulic Equipment	5-7
5.6	Site Reconnaissance Limitations	5-7
6. SITE AND AREA RECORDS REVIEW		6-1
6.1	Historical Use Records	6-1
6.2	Consideration of Data Failure.....	6-2
6.3	State Environmental Review.....	6-3
6.4	Federal Environmental Review.....	6-7
6.5	Environmental Liens.....	6-9
6.6	Institutional Controls	6-10
7. INTERVIEWS.....		7-1
7.1	Past and Present User(s), Owner(s), and Occupant(s)	7-1
7.2	State and/or Local Government Officials	7-2
8. ADDITIONS, EXCEPTIONS, AND DEVIATIONS.....		8-1



9. ASTM NON-SCOPE CONSIDERATIONS.....	9-1
9.1 Asbestos.....	9-1
9.2 Lead-Based Paint.....	9-1
9.3 Radon.....	9-1
9.4 Non-Scope PCB-Containing Equipment and Building Materials.....	9-2
10. DATA GAPS.....	10-1
11. FINDINGS AND OPINIONS	11-1
12. CONCLUSIONS	12-1
13. RECOMMENDATIONS.....	13-1
14. REFERENCES.....	14-1
15. LIMITATIONS.....	15-1
16. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	16-1

LIST OF FIGURES

Figure 1 – Site Location Map
Figure 2 – Detailed Site Plan

LIST OF APPENDICES

Appendix A – Resumes of Key Personnel
Appendix B – Scope of Work
Appendix C – User Questionnaire
Appendix D – Site Photographs
Appendix E – FirstSearch® Database Report
Appendix F – Historical USGS Maps & Aerial Photographs



EXECUTIVE SUMMARY

Credere Associates, LLC (Credere) performed a Phase I Environmental Site Assessment (ESA) of the Hampden Academy property located at 1 Main Road North in Hampden, Maine (the Site). This Phase I ESA was completed in conformance with the ASTM International (ASTM) Standard Practice E 1527-05 for Phase I ESAs, which meets the requirements of the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312).

The Site consists of three (3) contiguous parcels of land totaling approximately 21.2 acres located at 1 Main Road North in Hampden, Maine. The Site has reportedly been used as an educational facility since 1803. Prior to 1803, the Site was reportedly used as a theological seminary.

The Site currently contains a total of 16 buildings, all of which are associated with the Hampden Academy High School. The oldest building currently on the Site was constructed in 1843 and is listed on the National Register of Historic Places. Other stationary buildings on the Site were constructed at various times between the 1950s and the early 2000s. Five (5) mobile trailers are also present at the Site, each of which contains two classrooms. The mobile trailers were placed on the Site between 1995 and 2002.

Portions of the Site not occupied by buildings include paved and gravel driveways and parking areas, a grass athletic field, landscaped lawn areas, and undeveloped wooded areas. The undeveloped wooded area on the eastern portion of the Site abuts the Penobscot River.

Potable water is provided to the Site by the Town of Hampden Water District, which draws its water from Flood Pond in Otis, Maine (located approximately 17 miles east of the Site). According to the City of Hampden Water District, all properties within the vicinity of the Site are serviced by the public water supply. Wastewater from the majority of the Site is discharged to the Town of Hampden sewer system, with the exception of building 10, which utilizes an on-site septic system on the east side of the building. There is also one inactive septic system located west of building 1. Electricity is provided to the Site by the Bangor Hydro-Electric Company.

Buildings 1 through 10 are heated by a combination of five (5) No. 2 fuel oil-fired furnaces. Multiple floor drains were observed in the furnace rooms. Buildings 11 through 14 are heated with individual electric heaters, and buildings 15 and 16 are heated by individual oil-fired heating units.

Nine (9) aboveground storage tanks (ASTs) are located on the Site. Seven (7) of these ASTs (AST-3 through AST-9) are in service. The remaining two ASTs (AST-1 and AST-2) are not in service and appeared to be partially full of product. All the observed ASTs appeared to be in good conditions and no evidence of a release was observed on or around the ASTs. It should be noted that AST-7, which is in service and located in a locked storage room, was not observed



during this Phase I ESA because the oil company reportedly has the only key to the storage room.

Six (6) underground storage tanks (USTs) are registered at the Site. It was reported that three (3) of these USTs have been removed (UST-1, UST-2, and UST-3), two (2) USTs have been abandoned-in place (UST-4 and UST-6), and one (1) UST is currently in service (UST-5). Closure documentation for UST-1 and UST-2 indicated that the tanks were in good condition and no contamination was observed in the tank graves. No closure documentation or information regarding the conditions of the tanks and surrounding environmental media was obtained for UST-3, UST-4 and UST-6. UST-5 is in compliance with the Maine Department of Environmental Protection UST rules, and no documentation or evidence of a release from UST-5 was identified during this Phase I ESA.

This assessment revealed the following evidence of *recognized environmental conditions* (RECs):

- REC-1 – The former use of UST-3, UST-4 and UST-6 represents a REC because limited information is available regarding the condition of each tank and the environmental conditions surrounding each tank prior to closure. Based on the age of the USTs, undocumented releases may have impacted the environmental conditions of the Site.
- REC-2 – Multiple former No. 2 fuel oil and diesel USTs located on properties adjacent to and potentially upgradient of the Site represent a REC because, based on the lack of information regarding the conditions of the tanks and the environmental conditions surrounding each tank, potential undocumented releases may have occurred. These potential releases may have impacted the environmental conditions of the Site.
- REC-3 – The two (2) on-site septic systems represent a REC because disposal of hazardous substances may have been directed to them from historical practices associated with science, art, and photography classes taught in the school. These potential releases to the septic system may have impacted the environmental conditions of the Site.
- REC-4 – The presence of floor drains in the furnace rooms represent a REC because undocumented releases of oil and/or hazardous substances to the septic system or to potentially undocumented drywells may have occurred. These potential releases may have impacted the environmental conditions of the Site.
- REC-5 – Discarded automobiles, an automobile gasoline tank, and building debris were observed on the Site. This condition represents a REC because oil and/or hazardous substances may have been released from the discarded items and impacted the environmental conditions of the Site.

Additionally, Credere identified one (1) *de minimis environmental condition* (DMEC) at the Site.

- DMEC-1 – Multiple small oil stains were observed on the floors in the furnace rooms and on some of the No. 2 fuel oil ASTs. However, there is a low probability that these conditions

were associated with a significant release of oil, and it is unlikely that the observed staining would be regulated by the Maine Department of Environmental Protection.

The following three (3) ASTM *non-scope considerations* (NCs) were noted during this Phase I ESA:

- NC-1 – Asbestos has been previously identified within the Site buildings.
- NC-2 – Based on the age of the Site buildings, lead-based paint, and/or polychlorinated biphenyl (PCB)-containing building materials may be present in interior and exterior building materials and components.
- NC-3 – Depending on the future redevelopment plans for the Site, materials and equipment such as fluorescent lighting bulbs and ballasts, thermostats, exit signage, batteries, electrical equipment, switches, and cleaning and maintenance supplies within the buildings at the Site will likely be classified as universal and/or hazardous waste if they are no longer being used or are removed from service.

Credero makes the following recommendations regarding the identified RECs, DMECs, and NCs.

- Phase II ESA activities are recommended to confirm or dismiss the identified RECs.
- Additional investigation of the condition of AST-7, which could not be observed during the Site reconnaissance, should be conducted.
- All small-volume containers (less than 50 gallons each) of petroleum products and/or hazardous substances that will remain in use should be consolidated and properly stored to prevent accidental releases to the environment. All materials that will not be used should be consolidated and properly disposed once removed from service.
- Depending on the future redevelopment plans for the Site, lead-based paint, PCB-containing building materials, and additional asbestos surveys should be completed to confirm or dismiss the presence, and/or delineate the extent of hazardous building materials on or within the buildings. In addition, a universal and hazardous waste inventory should be performed and all identified universal and hazardous wastes should be properly disposed.
- The product contained in AST-1 and AST-2, which are not in service, should be removed and properly disposed.

1. INTRODUCTION

Credero Associates, LLC (Credero) performed a Phase I Environmental Site Assessment (ESA) of the Hampden Academy property located at 1 Main Road North in Hampden, Maine (the Site). This Phase I ESA was completed in conformance with the ASTM International (ASTM) Standard Practice E 1527-05 for Phase I ESAs, which meets the requirements of the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI); Final Rule (40 CFR Part 312).

This report was completed on behalf of the Town of Hampden, Maine. The report was completed by Mr. Silas Canavan, PE, Mr. Judd Newcomb, CG, PG, and Mr. Jedd Steinglass of Credero. Resumes for Mr. Canavan, Mr. Newcomb, and Mr. Steinglass are included in **Appendix A**.

No Phase I ESA can wholly eliminate uncertainty regarding the potential for *recognized environmental conditions* (RECs)¹ in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Site, and this practice recognizes reasonable limits of time and cost. To the extent possible, this Phase I ESA presents a concise summary that qualitatively identifies potential environmental liability and provides Credero's professional opinions relative to the identified RECs so that informed business decisions may be made regarding the Site. If the findings from this Phase I ESA indicate or reasonably imply that environmentally regulated materials are affecting the Site, then the need for additional testing to evaluate the scope, location, source, and nature of any release or threat of release is included as a recommendation. In contrast, the Phase I ESA may also conclude that the likelihood of environmental problems is not significant and that there is no evidence of RECs in connection with the Site. The benefit of the completed Phase I ESA is that any new owner would be eligible for the *bona fide prospective purchaser* liability protection.

Appendix B contains a detailed description of Credero's Scope of Work for Phase I ESAs, which can be divided into the following broad categories: Records Review; Site Reconnaissance; Interviews; and Reporting. However, the following report is subdivided further so that it generally conforms to the recommended report format provided in ASTM Practice E 1527-05.

¹ *Recognized Environmental Condition* - the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with the law.



2. USER PROVIDED INFORMATION

In accordance with ASTM E 1527-05, the *user* of this report (the Town of Hampden) was interviewed concerning their responsibilities under ASTM E 1527-05 Chapter 6. The following subsections summarize the information that the *user* of this report provided to demonstrate that they attempted to meet their responsibilities under ASTM E 1527-05. A copy of the ‘User Questionnaire’ completed by Mr. Dean Bennett, Director of Community and Economic Development for the Town of Hampden, is included in **Appendix C**.

2.1 REVIEW OF TITLE AND JUDICIAL RECORDS FOR ENVIRONMENTAL LIENS OR ACTIVITY USE LIMITATIONS

A third party, such as a state or federal governmental agency, may place environmental liens on a property in order to recover clean-up costs that were incurred by the party. The existence of a recorded environmental clean-up lien on a property is an indication that environmental conditions either currently exist or previously existed on a property. Activity or land use restrictions for a property may be placed on the property deed to prevent exposure to hazardous or contaminated materials. The existence of an environmental clean-up lien or activity/land use restrictions could be considered an indicator of potential environmental concerns, and could be a basis for additional environmental investigations on a property to determine the potential existence of ongoing or continued releases of hazardous substances or petroleum products.

A full chain-of-title was not provided by the *user*. However, Mr. Bennett did indicate that he is not aware of any environmental liens filed or recorded against the property deed for the Site. Credere also conducted a limited title search and searches of various databases as a part of this Phase I ESA. No environmental liens or activity and use limitations were discovered as a part of Credere’s work. Considering this information, it is Credere’s opinion that the lack of full chain-of-title information is not considered to be a significant data gap.

2.2 SPECIALIZED KNOWLEDGE OR EXPERIENCE OF THE USER

Mr. Bennett reported that he has no specialized knowledge of the Site and no significant direct experience with the Site for the purpose of identifying RECs.

2.3 ACTUAL KNOWLEDGE OF THE USER

Mr. Bennett reportedly has no actual knowledge of any environmental liens that may apply to the Site under federal, tribal, state, or local law, or Activity and Land Use Limitations for the Site such as institutional controls or engineering controls to limit exposure to hazardous substances or petroleum products.



2.4 REDUCTION OF VALUATION FOR ENVIRONMENTAL ISSUES

Mr. Bennett reported that the purchase price of the Site reasonably reflects the fair market value without discount for environmental issues.

2.5 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

Mr. Bennett is aware that the Site has been the location of a school since at least 1843 and that asbestos is likely present in the school based on its age. Mr. Bennett was not aware of any information that might indicate the presence of RECs on the Site.

2.6 REASON FOR PERFORMING PHASE I ESA

Mr. Bennett reported that the Town of Hampden plans to purchase the Site for future redevelopment.



3. SITE DESCRIPTION

3.1 SITE OWNERSHIP AND LOCATION

Property Identification:	Map 36, Lot 76 (parcel 1) Map 41, Lot 5 (parcel 2) Map 41, Lot 4 (parcel 3)
Site Owner(s):	Maine School Administrative District 22 (MSAD #22)
Site Occupants:	Hampden Academy High School
Date of Ownership:	Map 36, Lot 76: December 31, 1969 * Map 41, Lot 4: June 11, 1976 Map 41, Lot 5: October 1, 1975
Site Location:	1 Main Road North, Hampden, Maine
Zoning:	Map 36, Lot 76: Residential A (RA) & Residential B (RB) Map 41, Lot 4: RB Map 41, Lot 5: RB
County:	Penobscot
USGS Quadrangle:	Hampden, Maine Quadrangle
Latitude and Longitude:	N 44° 44' 23" Lat., W -68° 50' 14" Long. (Approximate)
NAICS Code:	611110 High School

* Note that the gravel parking lot portion of Map 36 Lot 76 was conveyed to MSAD #22 on May 5, 1992.

3.2 SITE DESCRIPTION AND OPERATIONS

The Site consists of three (3) contiguous parcels of land totaling approximately 21.2 acres located at 1 Main Road North in Hampden, Maine. The parcels are listed in the Town of Hampden Assessor's database as Map 36 Lot 7, Map 41 Lot 5, and Map 41 Lot 4, which are referred to hereinafter as parcel 1, parcel 2, and parcel 3, respectively.

The Site currently contains a total of 16 buildings, all of which are associated with the Hampden Academy High School. The oldest building on the Site was constructed in 1843 and is listed on the National Register of Historic Places. Other stationary buildings on the Site were constructed at various times between the 1950s and the early 2000s. Five (5) mobile trailers are also present at the Site, each of which contains two classrooms. The mobile trailers were placed on the Site between 1995 and 2002.

The Site has reportedly been used as an educational facility since 1803. Prior to 1803, the Site was reportedly used as a theological seminary. Portions of the Site not occupied by buildings include paved and gravel driveways and parking areas, a grass athletic field, landscaped lawn areas, and undeveloped wooded areas. The Penobscot River abuts the eastern edge of parcel 3.



Figure 1 locates the Site on the Hampden, Maine quadrangle prepared by the United States Geological Survey (USGS). **Figure 2** is a Site plan based on observations made during Credere's Site visit and the review of Site records.

3.3 SITE UTILITIES

Potable water is provided to the Site by the Town of Hampden Water District, which draws its water from Flood Pond in Otis, Maine (located approximately 17 miles east of the Site). According to the City of Hampden Water District, all properties within the vicinity of the Site are serviced by the public water supply.

Wastewater from building 10 is directed to a septic system on the east side of the building. Wastewater from the remainder of the Site is discharged to the Town of Hampden sewer system, which was connected to the Site in 2010. Prior to the sewer connection, the Site discharged wastewater to a septic system located on the west side of building 1.

Buildings 1 through 10 are heated by a combination of five (5) No. 2 fuel oil-fired boilers, which are supplied by a combination of five (5) aboveground storage tanks (ASTs) and one (1) underground storage tank (UST). Buildings 11 through 14 are heated with individual electric heaters. Buildings 15 and 16 are heated by individual oil-fired heating units, which are supplied by two (2) separate ASTs located adjacent to the buildings. See **Figure 2** for locations of USTs, ASTs, and furnace rooms.

Underground electricity is provided to the Site by the Bangor Hydro-Electric Company.

3.4 TOPOGRAPHY AND DRAINAGE

Based upon a review of the USGS Hampden, Maine Quadrangle map, the Site elevation is between 50 and 130 feet above mean sea level (MSL). Topography on the west side of the Site between US Route 1 and the Site buildings slopes gently to the west toward US Route 1. Topography on the east side of the Site slopes moderately to steeply to the southeast towards the Penobscot River. Regional topography within a 0.5-mile radius of the Site consists of relatively flat, moderate, and steep slopes with elevations ranging from 50 to 160 feet above MSL.

Stormwater runoff from the west side of the Site between US Route 1 and the buildings flows to the west towards US Route 1 via overland flow. Stormwater from between buildings 1, 2, and 8 is collected in catch basins and released from a storm drain to a swale upgradient of the athletic field. Stormwater runoff from the remainder of the Site flows to the north, east, and southeast via overland flow.

3.5 SURFACE WATER

The Penobscot River is located adjacent to the east side of the Site. Multiple small spring-fed streams were observed along a bank located within parcel 3. These streams flow towards the Penobscot River. No other surface water features are present on the Site.

3.6 HYDROGEOLOGIC CHARACTERISTICS

3.6.1 Surficial Geology

According to the *Surficial Geologic Map of Maine* and the *Maine Surficial Materials Map*, both published by the State of Maine, the surficial geology at the Site consists of glacial till. Information presented on these maps indicates that between 4 and 25 feet of unconsolidated material is present above bedrock in the area of the Site.

3.6.2 Bedrock Geology

According to the *Bedrock Geologic Map of Maine* published by the State of Maine, bedrock below the Site consists of Silurian to Ordovician aged calcareous sandstone, interbedded sandstone, and impure limestone of the Vassalboro Formation. Bedrock outcrops matching the description of these rocks were observed along the eastern edge of the athletic field and along the bank of the Penobscot River.

3.6.3 Groundwater Characteristics

In general, localized groundwater flow likely mimics regional topography and surface water flow. Therefore, based on area topography, the apparent regional groundwater flow is to the southeast towards the Penobscot River.



4. SUMMARY OF PRIOR ENVIRONMENTAL DOCUMENTS

Several prior environmental documents for the Site were obtained during this Phase I ESA. The following bullets summarize the documents identified:

- Multiple petroleum spills at the Site have been reported to the Maine Department of Environmental Protection (Maine DEP). The available spill reports were reviewed for evidence of RECs associated with the Site. The spill reports reviewed are discussed in **Section 6.3**.
- An Asbestos Hazard Emergency Response Act (AHERA) inspection was completed at the Site in 1988, in accordance with 40 CFR 763. Multiple asbestos containing building materials (ACBM) were identified throughout the Site buildings in the form of thermal system insulation and miscellaneous materials such as floor tiles, ceiling tiles, plaster, and transite panels. Subsequent AHERA re-inspections were conducted every three years, as required, to inspect the condition of the previously identified ACBM and to identify changes in the condition of the ACBM since the last inspection. According to the available re-inspection reports, multiple response actions have been completed at the Site between 1988 and the present, which included removal of pipe insulation, floor tiles, ceiling tiles, plaster, and transite from various portions of the Site. However, according to interviews with MSAD #22 representatives, ACBM still remains in the Site buildings. It should also be noted that AHERA inspections are typically non-destructive, which means hidden ACBM behind walls, above ceilings, underground, etc., may not have been identified.
- In 2010, Northeast Building Consultants, Incorporated provided a cost estimate of approximately \$195,000 for the complete removal of all identified ACBM in the Site buildings.



5. SITE RECONNAISSANCE

On April 11, 2012, Credere representatives Mr. Silas Canavan, PE and Mr. Judd Newcomb, CG, PG conducted a surficial inspection of the Site to obtain information indicating the likelihood of identifying RECs in connection with the Site. Mr. David Greenier, Vice Principal of the Hampden Academy, was also present during the Site reconnaissance and provided access to the buildings.

Pursuant to ASTM E 1527-05 Chapter 12.3, Mr. Canavan's and Mr. Newcomb's resumes are attached as **Appendix A** to demonstrate their qualifications to perform this work. **Appendix D** contains photographs taken during the Site reconnaissance.

5.1 GENERAL SITE SETTING

5.1.1 Current Use of the Site

Currently, the Site is used as a public high school.

5.1.2 Current Uses of Adjoining Properties

The Site is located in a mixed residential and commercial area in Hampden. Adjoining properties include the following:

- North:* The Site is bordered to the north by a shopping plaza containing a hardware store and a pharmacy, residential properties, and undeveloped land (upgradient to cross-gradient).
- East:* The Site is bordered to the east by a residential property, undeveloped land, and the Penobscot River (upgradient, downgradient, and cross-gradient).
- South:* The Site is bordered to the south by residential properties, a cemetery, and undeveloped land (downgradient to cross-gradient).
- West:* The Site is bordered to the west by residential properties, a masonic hall, an elementary school property, and a school bus maintenance facility (upgradient).

References to up-gradient, downgradient, and cross-gradient indicate the perceived location of these features relative to the implied or inferred direction of regional groundwater flow, which has been inferred to be to the southeast towards the Penobscot River.

5.2 EXTERIOR OBSERVATIONS

The exterior of the Site and the buildings were observed visually during the Site reconnaissance. Exterior Site reconnaissance work for parcels 1 and 2 was conducted by walking the perimeter of the parcels, circling the buildings, traversing the open areas in a grid-like fashion, and traversing the trail in the northeast portion of parcel 2 to the northern property line. Parcel 3 was observed by traversing the western edge of the parcel along the athletic field, the eastern edge of the parcel along the Penobscot River, and by walking the two trails that were evident on the parcel. **Appendix D** contains photographs taken during the Site reconnaissance.

In general, the surface of the Site (**Pictures 1** and **2**) was covered by buildings, asphalt-paved and gravel driveways and parking areas, asphalt and concrete walkways, landscaped areas, a grass athletic field, and forested land. Nine (9) inter-connected buildings (buildings 1 through 9), two (2) stationary stand-alone buildings (buildings 10 and 11), and five (5) mobile trailers (buildings 12 through 16) occupied portions of parcel 1 and parcel 2. Exterior building materials consisted primarily of brick, metal, and wood siding. Roofing materials consisted primarily of flat rubber roofing, metal roofing, and asphalt shingles. A grass athletic field was located east of the buildings (**Picture 3**). The eastern-most portion of the Site (parcel 3) was completely wooded (**Picture 4**) with the exception of two dirt paths. Two (2) sewer manholes were observed along the path running north-south through parcel 3, which indicates that there is likely a sewer main traversing the Site in that location. Multiple small spring-fed streams were observed along the eastern edge of the Site flowing towards the Penobscot River (**Picture 5**).

Three (3) old discarded vehicles were observed at the edge of the Site property line along the path at the northern end of the athletic field on parcel 2 (**Picture 6**). An empty discarded automobile gasoline tank and what appeared to be discarded building debris were observed at the northwest edge of the gravel parking lot on parcel 1 (**Picture 7**).

Six (6) No. 2 fuel oil ASTs were observed throughout the exterior of the Site. AST-1 (275±-gallon) and AST-2 (275±-gallon), located adjacent to buildings 13 and 12, respectively, contain product, but are no longer in service as the buildings have been converted to electric heat (**Pictures 8** and **9**). AST-3 (1,000±-gallon) is located in the alley between buildings 1 and 6 and feeds the adjacent furnace in building 6 (**Picture 10**). AST-4 (550±-gallon) is located adjacent to building 4 and feeds the adjacent furnace in building 4 (**Picture 11**). AST-5 (275-gallon) and AST-6 (275±-gallon), located adjacent to buildings 16 and 15, respectively, feed the individual monitor heating systems within each building (**Pictures 12** and **13**). All of the exterior ASTs appeared to be in good condition. No surficial visual or olfactory evidence of a release from the tanks was observed during the Site reconnaissance.

Mr. Greenier reported that there are three (3) No. 2 fuel oil USTs present at the Site, but only one (1) is currently in service. UST-5 (4,000-gallon) is located adjacent to building 1 and feeds the adjacent furnace within building 1 (**Picture 14**). UST-4 (1,000-gallon) is reportedly located adjacent to building 10 and was abandoned-in-place in 1987 (**Picture 15**). Associated potential former fill and vent pipes were observed adjacent to building 10, which were cut flush with the



sidewalk and filled with concrete (**Picture 16**). UST-6 (4,000-gallon) is reportedly located adjacent to building 4 and was abandoned-in-place in 2010 (**Picture 17**). Three (3) additional USTs are registered to the Site, but have reportedly been removed. No surficial visual or olfactory evidence of releases from the existing USTs was observed during the Site reconnaissance. No surficial evidence of additional USTs was observed during the Site reconnaissance.

Two (2) septic systems are reportedly present at the Site. One system, located adjacent to the west side of building 1, is no longer in service. The second septic system, located adjacent to the east side of building 10 is currently in service and serves only building 10 (**Picture 18**). The location and orientation of the leach fields associated with the septic systems could not be determined during this Phase I ESA.

One (1) pad-mounted electrical transformer (**Picture 19**) and one (1) pole mounted electrical transformer were observed at the Site. Both transformers appeared to be in good condition and no surficial visual or olfactory evidence of a release was observed during the Site reconnaissance.

The gravel parking lot on parcel 1 appears to have been constructed with fill material as the parking lot surface is approximately 2 to 3 feet higher than the surrounding undeveloped land. MSAD #22 representatives indicated that they are not aware of the exact source of the fill material but that it is likely from a local gravel pit.

No surficial visual evidence of stained soil or distressed vegetation that may be indicative of a significant release of oil and/or hazardous materials was observed at the Site. No pits, ponds, or lagoons were observed on the Site. No evidence of petroleum exploration, extraction, or a petroleum refinery was observed on the Site.

5.3 INTERIOR BUILDING OBSERVATIONS

The Site was occupied by 16 building structures during the Site reconnaissance. In general, the majority of the building space consisted of classrooms and office space. Other spaces consisted of furnace and utility rooms, basements, storage closets, bathrooms, a gymnasium, locker rooms, a cafeteria, a kitchen, a stage, and a library. Buildings 1 through 10 are heated by the combination of five (5) No. 2 fuel oil-fired furnaces located throughout the Site. Buildings 11 through 14 are heated by individual electric heating units. Buildings 15 and 16 are heated by individual fuel oil-fired monitor heating units. Descriptions of observations and operations identified during the Site reconnaissance within each building are provided below:

Building 1

Building 1 consisted primarily of science classrooms with tile floors, painted concrete masonry unit (CMU) walls, and dropped ceiling tiles (**Picture 20**). Science laboratory chemicals were stored in a ventilated closet (**Picture 21**). A furnace room was located on the west side of the building (**Picture 22**). Two (2) floor drains were observed within the furnace room. No oil



tanks were present in the furnace room, as the furnace was fed by UST-5. Minimal oil staining was observed on the floor within the furnace room; however, no odors or other evidence of a significant release was observed around the furnace. No additional evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with Building 1.

Building 2

Building 2 consisted primarily of standard classrooms and offices with tile floors, painted CMU walls, and dropped panel ceilings (**Picture 23**). No evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 2.

Building 3

Building 3 consisted primarily of standard classrooms and offices with tile floors, painted CMU walls and dropped panel ceilings. No evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 3.

Building 4

Building 4 consisted primarily of standard classrooms, offices, and a photography dark room with tile floors, painted CMU walls and dropped panel ceilings. A furnace room was located on the northern end of the building (**Picture 24**). One (1) floor drain was observed within the furnace room. No oil tanks were present in the furnace room, as the furnace was fed by AST-4, which was positioned adjacent to the northwestern exterior wall of building 4. Minimal oil staining was observed on the floor within the furnace room; however, no odors or other evidence of a significant release was observed around the furnace. No additional evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 4.

Buildings 5 and 6

Buildings 5 and 6 consisted of the former gymnasium, which has been converted into a cafeteria (**Picture 25**), a kitchen (**Picture 26**), locker rooms, storage closets, and a stage. Construction generally consisted of concrete, wood, and tile floors, painted CMU walls, and dropped panel ceilings. A basement area is located in building 6 below the stage. The basement was primarily used for storage of maintenance materials and unused classroom supplies (**Picture 27**). Multiple small-volume containers (less than 50 gallons each) of cleaning and maintenance supplies were neatly stored on shelves in the basement. A furnace room is located on the south side of building 6 (**Picture 28**). Two (2) floor drains were observed within the furnace room. No oil tanks were present in the furnace room, as the furnace was fed by AST-3, which was positioned adjacent to the southern exterior wall of building 6. Minimal oil staining was observed on the floor within the furnace room; however, no odors or other evidence of a significant release was observed around the furnace. No additional evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with buildings 5 and 6.



Building 7

Building 7 consisted of the library, which had carpet flooring, painted CMU walls, and dropped panel ceilings. No evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 7.

Building 8

Building 8 consisted of the gymnasium, locker rooms, and a band room. The band room was locked and was not entered during the Site reconnaissance. The gymnasium was constructed with a wood floor, painted CMU walls, and an exposed steel beam ceiling (**Picture 29**). Only the boy's locker room was entered during the Site reconnaissance, which was constructed with concrete and tiled floors, painted CMU walls, and painted concrete ceilings (**Picture 30**). A furnace room was located on the northern side of building 8 (**Picture 31**). Two (2) floor drains were observed within the furnace room. Minimal oil staining was observed on the floor within the furnace room; however, no odors or other evidence of a significant release was observed around the furnace. Reportedly, a 5,000-gallon No. 2 fuel oil AST (AST-7) is located in a storage room adjacent to the furnace room. However, this room and the AST were not observed by Credere during the Site reconnaissance because the door was locked and Mr. Greenier reported that the oil company maintained the only key. No additional evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 8.

Building 9

Building 9 consisted of a basement, one classroom and office on the first floor, and two classrooms on the second floor. The basement was constructed of concrete floors and walls, and was used for the storage of unused computers, desks, and other classroom supplies (**Picture 32**). The office and first and second floor classrooms were constructed of wood floors, painted plaster walls, and dropped tile ceilings (**Picture 33**). No evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 9.

Building 10

Building 10 consisted of the technical education classrooms and workshop (**Picture 34**), an art classroom, and two additional classrooms. Construction consisted of concrete and tile floors, painted CMU walls, and exposed steel and dropped panel ceilings. A furnace room was located on the western side of the building (**Picture 35**). Minimal oil staining was observed on the floor within the furnace room; however, no odors or other evidence of a significant release was observed around the furnace. Two (2) 350-gallon No. 2 fuel oil ASTs (AST-8 and AST-9) were observed in the storage room adjacent to the furnace room (**Picture 36**). Minimal staining was observed on top of AST-9, which was likely the result of an over-fill; however, no significant staining or odors were observed below the tank. No additional evidence of bulk storage or use of



petroleum and/or hazardous substances or evidence of a release was observed in association with building 10.

Building 11

Building 11 consisted of the choir room, which had tile flooring, painted sheetrock walls, and a dropped panel ceiling (**Picture 37**). No evidence of bulk storage or use of petroleum and/or hazardous substances or evidence of a release was observed in association with building 11.

Buildings 12 through 16

Buildings 12 through 16 were mobile trailer units, each containing two classrooms constructed with carpet flooring, and painted walls and ceilings (**Picture 38**). Buildings 12, 13, and 14 were heated with individual electric heating systems. Buildings 15 and 16 were heated with individual fuel oil-fired monitor heating units fed by AST-5 and AST-6, which are located outside of the buildings.

5.4 UNDERGROUND AND ABOVEGROUND STORAGE TANKS

Nine (9) No. 2 fuel oil ASTs are located at the Site. Eight (8) of these ASTs were observed during the Site reconnaissance. AST-7 was not observed because the room it was housed in was locked and the oil company reportedly maintained the only key. A summary of the ASTs located at the Site is below:

AST ID	SIZE (gallons)	CONTENTS	STATUS	EVIDENCE OF A RELEASE OBSERVED
AST-1	275	No. 2 Fuel Oil	Not in service Partially full	None
AST-2	275		Not in service Partially full	None
AST-3	1,000		Feeds furnace in building 6	None
AST-4	550		Feeds furnace in building 4	None
AST-5	275		Feeds monitor heating units in building 16	None
AST-6	275		Feeds monitor heating units in building 15	None
AST-7	5,000		Feeds furnace in building 8	Could not be observed
AST-8	350		Feeds furnace in building 10	None
AST-9	350		Feeds furnace in building 10	Minimal staining on top of AST. No staining below AST.



Six (6) No. 2 fuel oil USTs are registered at the Site (*Maine DEP UST Registration #2379*), which are described below:

UST ID	SIZE (gallons)	INSTALLATION DATE	STATUS
UST-1	10,000	1976	Removed in 1998
UST-2	4,000	1970	Removed in 1995
UST-3	1,000	1968	Removed in 1987
UST-4	1,000	1965	Abandoned-In-Place in 1987
UST-5	4,000	1985	In Service
UST-6	4,000	1987	Abandoned-In-Place in 2010

Mr. Greenier reported that only one (1) UST was currently in service (AST-5), and two (2) USTs are still present, but are not in service (UST-4 and UST-6). Mr. Greenier reported that all other USTs (UST-1, UST-2, and UST-3) have been removed. No surficial visual or olfactory evidence of contamination was observed in the reported areas of any of the current and former USTs at the Site during the Site reconnaissance. No surficial evidence of any additional USTs was identified by Credere during the Site reconnaissance. See **Section 6.3** for additional discussion of these USTs.

5.5 PCB-CONTAINING ELECTRICAL AND HYDRAULIC EQUIPMENT

ASTM Standards for Phase I ESAs specifically exclude fluorescent lighting fixtures that may contain polychlorinated biphenyls (PCBs) from electrical equipment unless they are found in waste form. Multiple fluorescent light fixtures were observed to be in use during the Site reconnaissance. No fluorescent lighting fixtures were observed in waste form. No hydraulic elevators or lifts were observed at the Site.

One (1) pole-mounted electrical transformer and one (1) pad-mounted electrical transformer were observed at the Site. No exterior indications of PCB-containing dielectric fluids were observed on the transformers. However, both transformers appeared to be in good conditions and no staining or stressed vegetation was observed below the transformers.

5.6 SITE RECONNAISSANCE LIMITATIONS

The ASTM Standards for Phase I ESAs require the identification of limitations that were encountered that may affect the ability to identify potential environmental conditions on the Site and to provide an opinion as to the significance of the limitation with regard to the ability to identify potential environmental conditions onsite.

- A reported 5,000-gallon No. 2 fuel oil AST in building 8 (AST-7) could not be viewed by Credere because the oil company reportedly maintained the only key. This limitation prevented Credere from identifying potential evidence of a release from the AST.

- Multiple rooms could not be entered during the Site reconnaissance because they were locked and keys were not readily available, or classes were in session and could not be disturbed. Most of these rooms were small closets, bathrooms, and classrooms. Credere does not believe that this limitation has affected the ability to identify RECs associated with the Site because no environmental concerns would likely be associated with the uses identified in these rooms.
- The ceiling materials above the dropped panel ceilings in multiple buildings could not be viewed. However, Credere does not believe that this limitation has affected the ability to identify RECs associated with the Site.



6. SITE AND AREA RECORDS REVIEW

Files at the Town of Hampden Tax Assessor's and Code Enforcement Offices, City Fire Department, and online at the Maine DEP and EPA Region 1 were reviewed to obtain information concerning incidents involving releases of petroleum or hazardous substances at the Site. In addition, an Environmental FirstSearch[®] database search was conducted on March 30, 2012, and is included as **Appendix E**.

The purpose of these searches is to identify potential RECs in connection with the Site. This research should not be considered inclusive of all regulatory records, but only those records that were reasonably ascertained and practically reviewable.

6.1 HISTORICAL USE RECORDS

ASTM standards for Phase I ESAs require that historical records of the Site be searched for information on the Site dating back to the Site's earliest development or 1940, whichever is earliest, based on available documentation. All standard historical sources, as defined by ASTM E 1527-05, were ascertained and reviewed as part of this Phase I ESA. Title search information was provided by the current owner of the Site, MSAD #22. Additional records of historical ownership and Site usage were provided by other personnel familiar with the Site and by deed research conducted by Credere.

According to interviews and public records, the Site has been used as a school since 1803. Prior to 1803, the Site was reportedly a theological seminary. Public records indicate that the original school building was destroyed by fire in 1842 and rebuilt in 1843. The 1843 building is still present at the Site today (building 9). The other buildings that are currently present were originally constructed between the 1950s and the 1970s. Multiple renovations have been completed between the original construction dates and the present.

Historical USGS Maps

Historical USGS maps dated 1900, 1948, and 1982 were reviewed relative to the Site and surrounding area. Copies of these historical USGS maps are located in **Appendix F**.

Historical USGS Map (Year)	Land Use	Evidence of RECs and/or Bulk Storage or Release of Petroleum Products or Hazardous Substances
1900	Site appears to be developed with one building present.	None
1948		
1982		

Aerial Photographs

Historical aerial photographs of the Site and surrounding area dated 1942, 1973, 1985, 1996, and 2009 were reviewed relative to the Site and surrounding area. Copies of these historic aerial photographs are located in **Appendix F**.

Aerial Photo (Year)	Land Use	Evidence of RECs and/or Bulk Storage or Release of Petroleum Products or Hazardous Substances
1942	Site appears to be developed with one building present.	None
1973	Site is developed with multiple buildings present	
1985		
1996		
2009		

Ownership Records

A chain of title for the Site was provided by MSAD #22, which indicated that the Site parcels were obtained by MSAD #22 between 1969 and 1992. The Site was previously owned by multiple Town and State educational districts. Due to the number and complexity of the deeds, Credere did not tabulate the ownership data for this report. As the Site has reportedly been used as an educational facility since 1803, Credere did not observe any evidence of RECs associated specifically with ownership records.

Town Directories

Town Directories are available for Hampden dated 1965, 1967, 1992, 1995, 2000, 2004, and 2007. These directories were reviewed for evidence of RECs. Consistently from 1965 to 2007, these records indicated that the uses of the Site and surrounding area were primarily commercial and residential. No high risk property uses were identified within the vicinity of the Site in the Town Directory. The Town Directory report is included with the FirstSearch® report in **Appendix E**.

Sanborn Fire Insurance Maps

According to the FirstSearch® report, no Sanborn Fire Insurance Maps are available for the Site or surrounding area.

6.2 CONSIDERATION OF DATA FAILURE

Data failure is defined as a failure to achieve the historical research objectives of ASTM E 1527-05 even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful dating back to the Site’s earliest development or 1940, whichever is earlier.



Data failure was encountered during this Phase I ESA as historical documents and information relating to the Site were only obtained back to 1803, which was when the Site was reportedly first used as a school. However, public records indicate that the Site was used as a theological seminary prior to the use as a school facility. The date of earliest development is unknown. However, based on the date of the earliest information obtained and the fact that the Site was reportedly a theological seminary prior to use as a school, which is not considered a high-risk use, Credere does not believe that data failure has prevented the identification of any RECs associated with the Site.

6.3 STATE ENVIRONMENTAL REVIEW

The Maine DEP maintains online databases, which include information for USTs, solid waste facilities, hazardous waste generators, uncontrolled hazardous waste sites and remedial programs, and spill response sites. The following provides the results of the Maine DEP database search for the Site and surrounding area.

State Spill Sites

The State of Maine through the Maine DEP maintains a list of all reported petroleum and hazardous material spills, including leaking UST sites. It should be noted that Maine DEP records begin in about 1974; therefore, any spills occurring prior to this date would not be in the database.

According to the FirstSearch[®] report, seven (7) reported spills have been documented at the Site and 16 spill reports, including 12 leaking UST reports, have been documented within the 0.5-mile approximate minimum search distance. After review of the offsite spill reports, pertinent cleanup efforts, and the locations of these spills relative to the Site, it has been determined that none of the offsite spills have a high potential to have impacted the environmental conditions of the Site.

The onsite spill reports are summarized below:

Maine DEP Spill #B-424-1995:

In 1995, UST-2 (4,000-gallon No. fuel oil UST) was removed from the Site. According to the report, the tank showed no holes and there was no sign of contamination in the excavation. During removal of UST-2, the Maine DEP representative noticed that the adjacent UST-5 (4,000-gallon No. 2 fuel oil UST) was not installed in compliance with the current Maine DEP standards because the feed and return lines were not buried deep enough. Ultimately, the tank piping was modified to bring the tank into compliance. As no contamination was observed during removal of UST-2, it is unlikely that a release from this UST has impacted the environmental conditions of the Site.

Maine DEP Spill #B-505-1996:



In 1996, 26 gallons of No. 2 fuel oil was released as the result of an over-fill at an unspecified UST. Approximately 19 gallons of product was reportedly recovered during the cleanup effort. No soil was reportedly removed from the Site. Based on the small quantity of product that was not recovered (7 gallons), it is unlikely that this release has significantly impacted the environmental conditions of the Site.

Maine DEP Spill #B-447-1998:

In 1998, UST-1 (10,000-gallon No. fuel oil UST) was removed from the Site. According to the report, the tank showed no holes and there was no sign of contamination in the excavation. As no contamination was observed during removal of UST-1, it is unlikely that a release from this UST, if one occurred, has impacted the environmental conditions of the Site.

Maine DEP Spill #B-178-2002:

In 2002, approximately 1 gallon of motor oil was released from a contractor's equipment at the Site. The spill was cleaned up with granular oil-absorbent material. Based on the small quantity of product that was released and cleanup activities that were performed, it is unlikely that this release has significantly impacted the environmental conditions of the Site.

Maine DEP Spill #B-59-2007:

In 2007, approximately 0.5 gallons of No. 2 fuel oil was released as the result of an over-fill at an unspecified AST. The product was released onto the asphalt below the AST and was collected using oil-absorbent pads. Based on the small quantity of product that was released and as no soil was directly impacted, it is unlikely that this release has significantly impacted the environmental conditions of the Site.

Maine DEP Spill #B-441-2008:

In 2008, approximately 60-gallons of kerosene were released from a monitor heating unit located in building 12, which is a mobile trailer unit. The cause of the release was determined to be a loose fitting within the building's monitor heating unit. The release reportedly impacted materials within the building such as wall boards, carpet, floor boards, and floor insulation. In addition, oil stains were observed on the pavement below the building. The pavement was reportedly cracked, which allowed the oil to seep into the soil below. The impacted building materials and approximately 3 cubic yards of contaminated soil were reportedly disposed at the Pine Tree Landfill in Hampden, Maine. MSAD#22 reportedly arranged for indoor air quality monitoring. The Maine DEP reported no complaints related to the spill and considered the cleanup efforts satisfactory. Due to the reported cleanup efforts conducted following the spill, it is unlikely that significant contamination associated with this spill remains at the Site.

Maine DEP Spill #B-522-2008:

In 2008, approximately 0.5 gallons of No. 2 fuel oil was released as the result of an over-fill at an unspecified UST. The product was released onto the concrete and soil below the vent pipe and was collected using oil-absorbent pads. It was not indicated whether any soil was removed, but



based on the small quantity of product that was released, it is unlikely that this release has significantly impacted the environmental conditions of the Site.

Master Underground Storage Tanks Listing

According to Maine DEP Master UST list, there are six (6) No. 2 fuel oil USTs registered at the Site (*Maine DEP UST Registration #2379*). The UST registration card indicates that UST-1 through UST-4 have been removed and UST-5 and UST-6 are still active. However, based on interviews with MSAD #22 representatives and field observations, the only UST currently in service is UST-5, and UST-4 and UST-6 have not been removed, but abandoned-in-place. The registered USTs are summarized in the table below:

UST ID	SIZE (gallons)	INSTALLATION DATE	STATUS
UST-1	10,000	1976	Removed in 1998
UST-2	4,000	1970	Removed in 1995
UST-3	1,000	1968	Removed in 1987
UST-4	1,000	1965	Abandoned-In-Place in 1987
UST-5	4,000	1985	In Service
UST-6	4,000	1987	Abandoned-In-Place in 2010

Documentation of the removal of UST-1 and UST-2 indicated that the tanks were in good condition and no soil or groundwater contamination was observed in the excavation.

No documentation of the condition of UST-3 upon removal was available in the Maine DEP files for review. No documentation of the condition of UST-4 and UST-6 upon abandonment-in-place was available in the Maine DEP files for review. Therefore, it is unknown if releases from these tanks have impacted the environmental media at the Site.

UST-5 is currently in service and is constructed of steel with cathodic protection, flexible double-walled piping with secondary containment and continuous electronic leak detection, and electronic overfill protection. The UST is in compliance with the Maine DEP UST rules and no indication of a release from this tank has been documented. For the reasons stated above, it is unlikely that a release from this tank has impacted the environmental conditions of the Site.

According to the FirstSearch[®] report, a total of six (6) USTs have been registered at three (3) adjacent properties, all of which are upgradient of the Site. Review of the available UST documentation indicates that all of the USTs have been removed. However, there was no documentation available describing the condition of the USTs or surrounding soil and groundwater upon removal. Therefore, it is unknown if undocumented releases from these tanks have impacted the environmental conditions of the Site. The available UST information is summarized below:

NUMBER OF USTs	UST CONTENTS	SIZE (gallons)	INSTALLATION DATE	REMOVAL DATE
UST Registration No. 243, 244, and 245, Shopping Plaza, Main Road North Northern Site Abutter				
3	No. 2 Fuel Oil	500	1967 1968 1972	1987 1993 1993
UST Registration No. 12371, Former Fire Station, 106 Main Road North Southeastern Site Abutter				
2	Diesel	500	1977 1985	1991 1991
UST Registration No. 18793, Academy Apartments, 2 Main Road North Eastern Site Abutter				
1	No. 2 Fuel Oil	2,000	1981	1994

State Uncontrolled Sites

The Maine DEP Bureau of Remediation and Waste Management maintains a list of Uncontrolled Hazardous Substance Sites that is periodically updated. Sites on this list include both State Active and State Inactive Sites. Sites listed as Maine Active Sites are being investigated by the State or will be investigated when priorities allow. Maine Inactive Sites include sites that were reported to the Maine DEP but were referred to other departments, agencies, programs, etc., or were determined to be sites where no further action was warranted.

The Site is not listed as a State Uncontrolled Site.

One (1) State Uncontrolled Site is listed within the 1.0-mile approximate minimum search distance from the Site, which is referred to as the International Minerals and Chemical Corporation Facility. The facility is located approximately 0.75 miles east of the Site in the Town of Orrington. The facility is hydraulically disconnected from the Site by the Penobscot River; therefore, it is unlikely that contamination from this facility has impacted the environmental conditions of the Site.

VRAP Sites

The Maine Voluntary Response Action Program (VRAP) is a state program that promotes investigation, remediation and redevelopment of contaminated properties by offering liability assurances/protections from state enforcement actions. For a site to be included in the VRAP program, an application must be completed, which includes documentation of all previous ESAs and environmental investigations that have occurred on the Site. Following review and acceptance of previous investigations and a Remedial Action Plan (if necessary), the Maine DEP will issue a "No Action Assurance" letter stating that if the site is remediated to Maine DEP satisfaction, the Maine DEP will provide the applicant liability assurances against future state enforcement actions. Following satisfactory completion of all response actions required in the plan, the Maine DEP will issue a "Certificate of Completion" acknowledging the applicant has satisfactorily completed all necessary response actions. The Certificate of Completion includes



the applicable liability release provisions for either a complete or partial cleanup. The No Action Assurance and Certificate of Completion generally apply to the party responsible for implementing the cleanup work and the parties providing financing to the persons completing the cleanup work.

The Site is not listed as a VRAP site.

There are no VRAP sites located within the 0.5-mile approximate minimum search distance from the Site.

Solid Waste Facilities

The Maine DEP maintains a current listing of licensed solid waste facilities.

The Site is not listed with the Maine DEP as a solid waste facility. No Solid waste facilities are located within the 0.5-mile approximate minimum search distance of the Site.

6.4 FEDERAL ENVIRONMENTAL REVIEW

The EPA maintains a number of databases that track properties and facilities that are regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Emergency Response Notification System (ERNS), and the Federal Institutional Control/Engineering Control (IC/EC) database.

CERCLA Sites

CERCLA is a federally established program that created a fund to identify hazardous waste sites for remediation. The fund is known as Superfund. The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is a compilation of known and/or suspected uncontrolled or abandoned hazardous waste sites that are eligible for funding under Superfund. The Superfund program includes Federal Facility sites, short- and long-term clean-up sites, National Priority Listing (NPL) sites, delisted NPL sites, Sites Awaiting NPL Decisions (SAND), and No Further Remedial Action Plan (NFRAP) sites. These are defined below:

- Federal Facility sites are hazardous waste sites where the Department of Defense is the lead agency in the investigation or remediation of the site.
- Hazardous waste sites that do not require a long-term cleanup process are considered short-term cleanups, or "removal actions". Although the cleanup process for these sites may not be as lengthy as for long-term cleanups, these sites may still affect the health and environment of those who live near the site.



- Long-term clean-up sites are often caused by years of polluting and may take several years, even decades, to remediate. The most serious uncontrolled or abandoned hazardous waste sites identified as candidates for long-term cleanup are listed on the NPL.
- The database of delisted NPL sites lists those sites where no further response is appropriate and the site may be deleted from the NPL.
- SAND sites had site assessments performed, but a decision regarding NPL proposal has not been recorded. SAND sites include sites that have been assessed by the Superfund program, are now being addressed under state program authorities, or are in various stages of assessment and cleanup by federal or state agencies.
- The No Further Remedial Action Plan (NFRAP) list is a database of archive designated CERCLA sites that, to the best of the EPA's knowledge, assessment has been completed and the EPA has determined that no further steps will be taken to list that site on the NPL.

According to the FirstSearch[®] report, the Site is not listed as a Federal Facility, NPL site, SAND, CERCLA, or NFRAP facility.

According to the FirstSearch[®] report, no NPL sites are located within the 1.0-mile approximate minimum search distance of the Site and no SAND, CERCLA, CERCLIS, or NFRAP sites are located within the 0.5-mile approximately minimum search distance from the Site.

RCRA Sites

Sites listed in the EPA RCRA database are sites that are hazardous waste treatment, storage, and disposal (RCRA TSD) facilities, or generate small or large quantities of hazardous wastes (RCRA GEN).

Accidents or other activities at RCRA facilities can result in the release of hazardous waste or hazardous constituents to the environment. The RCRA Corrective Action program (CORRACT) requires these facilities to conduct investigations and cleanup actions as necessary. Facilities under the CORRACTs program need to implement necessary corrective action as part of the process to obtain a permit to treat, store, or dispose of hazardous waste.

According to the FirstSearch[®] report, the Site is not listed as a RCRA GEN facility, RCRA TSD facility, or CORRACT facility.

According to the FirstSearch[®] report, one RCRA CORRACT facility is located approximately 0.75 miles east of the Site. The facility is referred to as the International Minerals and Chemical Corporation Facility (*EPA Registry ID 110000314598*). The facility is hydraulically disconnected from the Site by the Penobscot River; therefore, it is unlikely that contamination from this facility has impacted the environmental conditions of the Site.

According to the FirstSearch[®] report, no RCRA TSD facilities are located within the 0.5-mile approximate minimum search distance of the Site.



According to the FirstSearch[®] report, one (1) RCRA generator is located adjacent to the Site to the north in the shopping plaza. The facility is referred to as the Schacht's True Value Hardware Store (*EPA Registry ID 110032669869*) and is listed as No Longer Reporting (NLR). Based on the usage of this property and its current regulatory status, it is unlikely that this facility has impacted the environmental conditions of the Site.

ERNS Sites

The Emergency Response Notification System (ERNS) is a database used to store information on notifications of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort among the EPA Headquarters, the Department of Transportation (DOT) Research and Special Programs Administration's John A. Volpe National Transportation Systems Center, other DOT program offices, the ten EPA Regions, and the National Response Center (NRC). ERNS data provides comprehensive data compiled on notifications of oil discharges and hazardous substance releases. The ERNS website was redesigned and the data now resides at the NRC. The primary function of the NRC is to serve as the sole national point of contact for reporting all oil, chemical, radiological, and biological discharges into the environment anywhere in the United States and its territories.

According to the FirstSearch[®] report, the Site is not listed as an NRC/ERNS facility.

Federal IC/EC

The Federal Institutional Control/Engineering Control (Federal IC/EC) is a database of Superfund sites that have either an engineering or institutional control to limit exposure to contamination remaining on a site.

According to the FirstSearch Report, the Site is not listed as a Federal IC/EC site.

6.5 ENVIRONMENTAL LIENS

A third party, such as a state or federal government agency, may place environmental liens on a property in order to recover clean-up costs that were incurred by that third party. The existence of a recorded environmental clean-up lien on a property is an indication that environmental conditions either currently exist or previously existed on a property. The existence of an environmental clean-up lien could be considered an indicator of potential environmental concerns, and could be a basis for additional environmental investigations on the Site to determine the potential existence of ongoing or continued releases of petroleum products and/or hazardous substances.

The records review and *user* interviews conducted as part of this Phase I ESA identified no environmental liens for the Site.



6.6 INSTITUTIONAL CONTROLS

Institutional controls or environmental-related covenants for a property are put in place to minimize the potential for human exposure to existing environmental conditions on that property by limiting land or resource use. Types of institutional controls may be referred to as land-use controls, or activity and use limitations, and these controls may be in the form of deed restrictions, zoning restrictions, building or excavation permits, well drilling prohibitions, easements, or covenants. A property owner wishing to maintain liability protections under state or federal law must comply with any existing land use restrictions and maintain any existing institutional control employed at the site in connection with a response action.

The local, state, and federal records reviews and *user* interviews conducted as part of this Phase I ESA identified no typical institutional controls and/or engineering controls for the Site.



7. INTERVIEWS

In accordance with ASTM E 1527-05 Chapters 10 and 11, interviews with present owners, operators, and occupants of the Site were conducted, for the purpose of gathering information regarding the potential for RECs at the Site. The following presents a summary of the interviews that were conducted.

7.1 PAST AND PRESENT USER(S), OWNER(S), AND OCCUPANT(S)

7.1.1 Users

Mr. Dean Bennett, a representative of the Town of Hampden and a *user* of this Phase I ESA, was interviewed to obtain information about the *user's* specialized and reasonably ascertainable knowledge concerning the Site; knowledge of Site purchase price; historic Site use and current use; and any environmental liens, and activity and use limitations. Mr. Bennett indicated that he was aware that there is asbestos within the buildings, but had no specialized knowledge of potential RECs associated with the Site.

7.1.2 Current Owners, Operators, and Occupants

MSAD #22

Mr. Emil Genest, Assistant Superintendent for MSAD #22 and representative of the current owner and occupant of the Site, was interviewed on April 11, 2012, to obtain information in regards to identifying RECs at the Site. Mr. Genest provided information regarding previous asbestos survey reports, locations of in-service and out-of-service USTs and ASTs, building construction dates, building plans, and property acquisition dates. According to Mr. Genest, there was ACBM identified throughout the buildings. There has been a long history of renovations and asbestos abatement at the Site, but asbestos still remains within the buildings. Mr. Genest reports that he is not aware of any contamination associated with the past and present No. 2 fuel oil USTs and ASTs at the Site. Mr. Genest reported that he has no knowledge of any drywells at the Site and believes all drains inside the buildings are connected to the municipal sewer, except building 10, which is connected to a septic system. Mr. Genest reported that he believes the fill associated with the gravel parking lot came from a local gravel pit. Mr. Genest had no further information regarding the identification of RECs at the Site.

Mr. David Greenier, Assistant Principal of Hampden Academy, was interviewed on April 11, 2012, to obtain information in regards to identifying RECs at the Site. Mr. Greenier provided access to the buildings and information regarding previous asbestos survey reports, locations of in-service and out-of-service USTs and ASTs, and locations of in-service and out-of-service sanitary septic systems. According to Mr. Greenier, there was ACBM identified throughout the buildings. Mr. Greenier had no further information regarding the identification of RECs at the Site.



7.1.3 Past Owners, Operators, and Occupants

No past owners, operators, and occupants of the Site were identified and were not included in the interview process.

7.2 STATE AND/OR LOCAL GOVERNMENT OFFICIALS

Town of Hampden Code Enforcement Office

Records at the Town of Hampden Code Enforcement Office were reviewed to identify evidence of RECs at the Site. The records review did not reveal any evidence of RECs associated with the Site.

Town of Hampden Tax Assessor's Office

Records at the Town of Hampden Tax Assessor's office were reviewed to identify evidence of RECs at the Site. The records review did not reveal any evidence of RECs associated with the Site.

Town of Hampden Fire Department

A representative of the Town of Hampden Fire Department was interviewed over the telephone on April 9, 2012, in regards to identifying the presence of RECs at the Site. The representative indicated that there were no files relating to environmental concerns at the Site.



8. ADDITIONS, EXCEPTIONS, AND DEVIATIONS

According to Chapter 12.13 of ASTM E 1527-05, all additions and deviations from this practice shall be listed individually in detail. This includes any client-imposed constraints. In this regard, the following additions and deviations to this practice were identified:

Additions

The following ASTM Non-Scope considerations were added (see **Section 9**) to Credere's scope of work as a part of this Phase I ESA:

- Asbestos
- Lead-Based Paint
- Radon
- Excluded PCB-Containing Equipment

These were included as a part of this Phase I ESA because they are deemed to add value for assessments conducted for the Town of Hampden.

Exceptions and Deviations

No exceptions or deviations to the ASTM Practice E 1527-05 were made during the creation of this report.



9. ASTM NON-SCOPE CONSIDERATIONS

The following is a discussion of findings made during this Phase I ESA as it relates to items not included within the scope of ASTM E 1527-05.

9.1 ASBESTOS

Asbestos is a heat-resistant, naturally occurring mineral that breaks into fibers. Asbestos is the generic term for six different types of minerals. Some forms of asbestos are highly toxic by inhalation of dust particles. Past uses of asbestos include pipe and boiler insulation, fire and soundproofing, brakes, gaskets, floor tiles, roofing materials, window caulk, cement products, curtains, and water pipes.

Previous AHERA reports obtained by Credere indicate that ACBM has been identified throughout the Site buildings. Some of the ACBM has been abated over the years, but ACBM still remains. Based on the ages of the buildings, Credere believes there may be other ACBM present in inaccessible portions of the buildings (i.e. behind walls and under roofing materials) that was not discovered during the initial ACBM surveys, as these AHERA surveys were primarily inspections of accessible portions of the Site buildings.

9.2 LEAD-BASED PAINT

Lead is toxic by ingestion and inhalation of dust or fumes. Health effects are generally correlated with blood test levels. Infants and young children absorb ingested lead more readily than older children and young adults. Primary exposure routes include lead-based paint, lead solder, pipes in drinking water lines, and air quality in inner city settings. Lead-based paint testing is typically warranted for residential properties constructed prior to 1978 and properties where children spend a significant amount of time, such as a daycare facility.

Based on the age of the current structures, it is likely that lead-based paint may have been applied to the interior and/or exterior of the Site buildings.

9.3 RADON

Credere has included the general information pertaining to radon for informational purposes only. The EPA has prepared a map to assist national, state, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones. Zone 1 is those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 Pico Curies per Liter (pCi/L), Zone 2 is where average predicted radon levels are between 2.0 and 4.0 pCi/L, and Zone 3 is where average predicted radon levels are less than 2.0 pCi/L.

It is important to note that the EPA has found structures with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a

specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Review of the EPA Map of Radon Zones places the Site in Zone 1, where average predicted radon levels are greater than 4.0 pCi/L. Subgrade spaces are present in the buildings. If redevelopment plans include using the building basements as residential or regularly occupied space in the future, radon testing may be warranted. Recognizing that the Site gets potable water from the public water supply, which is tested for radon, the presence of radon in drinking water is not a concern at this time.

9.4 NON-SCOPE PCB-CONTAINING EQUIPMENT AND BUILDING MATERIALS

Caulk, paint, sealants, adhesives, and other materials containing PCBs were used in many buildings during building construction, renovation, or repair from the 1930s through the early 1980s. PCBs were not widely distributed in commerce after 1978. PCB-containing building materials may represent a risk to human health and the environment and may be regulated for disposal. Based on the reported construction dates of the Site buildings, it is possible that PCB-containing building materials may have been used at the Site during construction and/or renovations. However, no definitive statements can be made regarding the presence of PCBs without sampling and analysis. Therefore, if redevelopment or demolition activities may impact or necessitate the disposal of building materials, potential risk posed by PCB-containing building materials will warrant assessment.



10. DATA GAPS

ASTM E 1527-05 Chapter 12.7 requires the identification of data gaps that may affect the ability to identify potential environmental conditions on the Site, to further identify the sources of information consulted to attempt to fill these data gaps, and the significance of the data gap with regard to the ability to identify potential environmental conditions onsite.

- AST-7 was not observed by Credere during the Site reconnaissance because the door to the storage room housing the AST was locked and the oil company reportedly maintained the only key. Although Credere believes it is unlikely that a release from this tank has impacted the environmental conditions of the Site since the AST is inside and likely placed on a concrete pad, no statements can be made regarding the condition of the AST without additional observation.
- Multiple rooms could not be entered during the Site reconnaissance because they were locked and keys were not readily available or classes were in session and could not be disturbed. Most of these rooms were small closets, bathrooms, and classrooms. Credere does not believe that this limitation has affected the ability to identify RECs associated with the Site.
- Previous owners and operators of the Site were not interviewed during this Phase I ESA because they were not identified and no contact information could be obtained by Credere. However, as the Site has been used for educational purposes since 1803, it is Credere's opinion that this data gap has not affected the ability to identify RECs at the Site.
- Historical information was not obtained dating back to the earliest development of the Site, which was reportedly prior to 1803. However, as the Site has been used as an educational facility since 1803 and the previous use was reportedly a theological seminary, it is Credere's opinion that this data failure has not affected the ability to identify RECs at the Site.



11. FINDINGS AND OPINIONS

The following is a summary of relevant environmental findings concerning the Site and Credere's professional opinion concerning these findings:

- Six (6) No. 2 fuel oil USTs have been registered to the Site (*Maine DEP UST Registration #2379*). UST-1 (10,000-gallon) was installed in 1976 and removed in 1998. Documentation of the condition of UST-1 upon removal indicated that no holes were present in the UST and no contamination was observed in the excavation. UST-2 (4,000-gallon) was installed in 1970 and removed in 1995. Documentation of the condition of UST-2 upon removal indicated that no holes were present in the UST and no contamination was observed in the excavation. UST-3 (1,000-gallon) was installed in 1968 and removed in 1987. No documentation of the condition of UST-3 upon removal was obtained by Credere. UST-4 (1,000-gallon) was installed in 1965 and reportedly abandoned-in-place in 1987. No closure documentation for UST-4 was obtained by Credere. UST-5 (4,000-gallon) is the only currently in-service UST at the Site. This UST is in compliance with the Maine DEP UST rules and annual inspection forms indicate that no significant contamination associated with UST-5 has been observed. UST-6 (4,000-gallon) was installed in 1987 in the same location as UST-3. UST-6 was reportedly abandoned-in-placed in 2010; however, no closure documentation for this tank was obtained by Credere. Based on the age and limited knowledge of the conditions of UST-3, UST-4, and UST-6 at the time of closure and/or removal, undocumented releases from these tanks may have occurred, which may have impacted the environmental conditions of the Site.
- Five (5) No. 2 fuel oil USTs and one (1) diesel UST were registered at properties adjacent to and potentially upgradient of the Site. UST registration cards for these tanks indicated that all were removed between 1987 and 1998. No documentation of the condition of these tanks upon removal was obtained by Credere. Based on the ages of the USTs, the proximity of the USTs to the Site, and the potential upgradient location of the USTs relative to the Site, undocumented releases from these USTs may have impacted the environmental conditions of the Site.
- Two (2) sanitary septic systems were identified at the Site. The septic system adjacent to the west side of building 1 is out-of-service. The septic system adjacent to the east side of building 10 currently only serves building 10. The remainder of the Site is connected to the municipal sanitary sewer system. Based on the age of the school and activities such as science, art, and photography classes that may have disposed of petroleum products and hazardous substances down sink drains, releases to the septic systems may have impacted the environmental conditions of the Site.
- Multiple small stains were observed on the floors of the furnace rooms. However, these stains are not indicative of a significant release of oil, and it is unlikely that these stains would be regulated by the Maine DEP.
- Multiple floor drains were identified in the five (5) furnace rooms throughout the Site. It is unknown if the floor drains are connected to the municipal sewer system, the septic systems,



or other undocumented subsurface locations. Although no significant staining was observed around the floor drains, potential undocumented releases of petroleum products to these drains may have impacted the environmental conditions of the Site.

- Three (3) discarded automobiles were observed in the wooded area in the northeast corner of parcel 2. In addition, one (1) discarded automobile gasoline tank and a small collection of discarded building debris were observed in the wooded area at the northwest corner of the gravel parking lot on parcel 1. Releases of oil and/or hazardous substances from these discarded items may have impacted the environmental conditions of the Site.
- Fill appears to have been used to construct the gravel parking lot on the northern portion of parcel 1. According to MSAD #22, the source of the fill is likely a local gravel pit. Therefore, it is unlikely that the fill has impacted the environmental conditions of the Site.
- Nine (9) No. 2 fuel oil ASTs were observed throughout the interior and exterior of the Site. No documentation or surficial visual or olfactory evidence of a significant unremediated release from these ASTs was observed by Credere. Therefore, it is unlikely that releases from these ASTs have impacted the environmental conditions of the Site. It should also be noted that AST-1 and AST-2, which are not in service, were observed to be partially full of product. As these ASTs are not planned for future use, the product should be removed and properly disposed.
- Seven (7) spill reports have been documented at the Site and 16 spills reports, including 12 leaking UST reports, have been documented within the 0.5-mile approximate minimum search distance. After review of the on-site and offsite spill reports, cleanup efforts, and locations relative to the Site, it has been determined that none of the spills have a high potential to have impacted the environmental conditions of the Site.
- One (1) pole-mounted electrical transformer was located adjacent to the west side of the Site and one (1) pad-mounted electrical transformer was located adjacent to the north side of building 8. Multiple attempts were made to contact the Bangor Hydro Electric Company to inquire about the transformer construction types (oil-filled or dry), the presence of PCB-containing dielectric fluid, and former releases from the transformers; however, the Bangor Hydro Electric Company was not responsive. The transformers appeared to be in good condition and no dead or stressed vegetation was observed below the transformers. Therefore, it is unlikely that releases from these transformers have impacted the environmental conditions of the Site. However, PCB-containing dielectric fluid may be present inside the transformers.
- ACBM have been previously identified at the Site during the AHERA inspections. MSAD #22 reports that some of the identified ACBM has been abated during renovations projects between the original inspection in 1988 and the present, but some ACBM still remains in the buildings. Credere believes there may be additional ACBM in inaccessible portions of the building (i.e. behind walls and under roofing material) as the AHERA inspections are typically inspections of accessible portions of the buildings.
- Based on the age of the Site buildings, lead-based paint and PCBs may be present in association with building materials.



- Although the Site is located in EPA Radon Zone 1, based on the fact that the Site gets potable water from the public water supply and specific redevelopment plans have not been established, radon is not a concern at the Site at this time. However, if redevelopment plans will include subgrade building spaces and/or a private drinking water supply well, radon monitoring and/or mitigation may be necessary.
- Multiple maintenance and cleaning chemicals were observed in the basement area in building 6. These items were neatly stored in an organized fashion and do not represent a threat to the environment as they were observed. However, consistent with the future redevelopment plans, these items and any additional small-volume containers of oil and/or hazardous substances identified at the Site should be properly consolidated and disposed.
- Depending on the future redevelopment plans for the Site, materials and equipment such as fluorescent lighting bulbs and ballasts, thermostats, exit signage, batteries, and electrical equipment and switches within the Site buildings will be classified as universal and/or hazardous waste once removed from service.



12. CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 of 1 Main Road North in Hampden, Maine, the property. Any exceptions to, or deletions from, this practice are described in **Section 8** of this report. This assessment has revealed no evidence of *recognized environmental conditions* in connection with the property except for the following:

- REC-1 – The former use of UST-3, UST-4, and UST-6 represents a REC because limited information is available regarding the condition of each tank and the environmental conditions surrounding each tank prior to closure. Based on the age of the USTs, undocumented releases may have impacted the environmental conditions of the Site.
- REC-2 – Multiple former No. 2 fuel oil and diesel USTs located on properties adjacent to and potentially upgradient of the Site represent a REC because, based on the lack of information regarding the conditions of the tanks and the environmental conditions surrounding each tank, potential undocumented releases may have occurred. These potential releases may have impacted the environmental conditions of the Site.
- REC-3 – The two (2) on-site septic systems represent a REC because disposal of hazardous substances may have been directed to them from historical practices associated with science, art, and photography classes taught in the school. These potential releases to the septic system may have impacted the environmental conditions of the Site.
- REC-4 – The presence of floor drains in the furnace rooms represent a REC because undocumented releases of oil and/or hazardous substances to the septic system or to potentially undocumented drywells may have occurred. These potential releases may have impacted the environmental conditions of the Site.
- REC-5 – Discarded automobiles, an automobile gasoline tank, and building debris were observed on the Site. This condition represents a REC because oil and/or hazardous substances may have been released from the discarded items and impacted the environmental conditions of the Site.

Additionally, Credere identified one (1) *de minimis environmental condition* (DMEC) at the Site.

- DMEC-1 – Multiple small oil stains were observed on the floors in the furnace rooms and on some of the No. 2 fuel oil ASTs. However, there is a low probability that these conditions were associated with a significant release of oil and it is unlikely that the observed staining would be regulated by the Maine Department of Environmental Protection.

The following three (3) ASTM *non-scope considerations* (NCs) were noted during this Phase I ESA:

- NC-1 – Asbestos has been previously identified within the Site buildings.



- NC-2 – Based on the age of the Site buildings, lead based paint, and/or polychlorinated biphenyl (PCB)-containing building materials may be present in interior and exterior building materials and components.
- NC-3 – Depending on the future redevelopment plans for the Site, materials and equipment such as fluorescent lighting bulbs and ballasts, thermostats, exit signage, batteries, electrical equipment, switches, and cleaning and maintenance supplies within the buildings at the Site will likely be classified as universal and/or hazardous waste if they are no longer being used or are removed from service.



13. RECOMMENDATIONS

The ASTM Standards require that the environmental professional determine the degree of obviousness of the presence or likely presence of contamination, releases, or other environmental conditions at the Site, and the ability to detect contamination. Based on the findings of this Phase I ESA, obvious conditions that are indicative of potential contamination or past releases are present at the Site. In order to maintain *bona fide prospective purchaser* liability protection under CERCLA, the seller or purchaser must demonstrate appropriate care, which typically will entail the completion of the following recommendations:

Credero makes the following recommendations regarding the identified RECs, DMEC, and NCs.

- Phase II ESA activities are recommended to confirm or dismiss the identified RECs.
- Additional investigation of the condition of AST-7, which could not be observed during the Site reconnaissance, should be conducted.
- All small-volume containers (less than 50 gallons each) of petroleum products and/or hazardous substances that will remain in use should be consolidated and properly stored to prevent accidental releases to the environment. All materials that will not be used should be consolidated and properly disposed once removed from service.
- Depending on the future redevelopment plans for the Site, lead-based paint, PCB-containing building materials, and additional asbestos surveys should be completed to confirm or dismiss the presence, and/or delineate the extent of hazardous building materials on or within the buildings. In addition, a universal and hazardous waste inventory should be performed and all identified universal and hazardous wastes should be properly disposed.
- The product contained in AST-1 and AST-2, which are not in service, should be removed and properly disposed.



14. REFERENCES

The online Maine DEP files, the EPA website, and various other sources including geological and historical maps were researched for the Site and surrounding properties.

LOCAL RESOURCES

- **Town of Hampden Official Website:**
<http://www.hampdenmaine.com/>
- **Town of Hampden Assessors and Code Enforcement Office:** April 11, 2012
- **Town of Hampden Fire Department:** Telephone interview on April 9, 2012

MAINE DEP RESOURCES

- **Maine DEP Division of Remediation Active Landfill List:**
<http://www.maine.gov/dep/waste/solidwaste/index.html>
- **Active and Out of Service Registered USTs:**
https://fortisportal.maine.gov/fortisportal/DisplayQueryPrompts.aspx?Database=OfficeDocs&Query=DEP_Tanks&QuerySet=Portal_Queries&User=Portal.DEP&Password=DEPPortal
- **Maine DEP Master Underground Storage Tanks List:**
<http://www.maine.gov/dep/rwm/data/pdf/regundtanks.pdf>
- **Maine DEP Division of Remediation Master Site List:**
http://www.maine.gov/dep/gis/datamaps/brwm_remediation_sites/rpt_rem_site_list.pdf
- **Maine DEP Spill Files:**
<http://www.maine.gov/dep/rwm/data/pdf/spills.pdf>

EPA RESOURCES

- **CERCLIS Hazardous Waste Sites:**
<http://www.epa.gov/superfund/sites/cursites/>
- **CERCLIS NFRAP:**
<http://www.epa.gov/superfund/sites/cursites/>
- **RCRIS Database:**
<http://www.epa.gov/enviro/facts/rcrainfo/search.html>
- **EPA Enforcement and Compliance History Online (ECHO):**
<http://www.epa-echo.gov/echo/>
- **Superfund Database:**
<http://www.epa.gov/superfund/sites/cursites/>



ADDITIONAL RESOURCES

- **Maine Significant Sand and Gravel Aquifer Maps:**
<http://www.maine.gov/doc/nrimc/mgs/pubs/online/aquifers/aq-hampden.pdf>
- **Maine Surficial Materials Map:**
<http://www.maine.gov/doc/nrimc/mgs/pubs/online/surficial.htm>
- **Surficial Geology Map:**
<http://www.maine.gov/doc/nrimc/mgs/pubs/online/surficial.htm>
- **Bedrock Geological Map of Maine:**
<http://www.maine.gov/doc/nrimc/mgs/pubs/online/bedrock.htm>
- **Significant Sand and Gravel Aquifer Maps:**
<http://www.maine.gov/doc/nrimc/mgs/mgs.htm>
- **USGS Topographic Maps:** Hampden, Maine USGS Quadrangle
- **FirstSearch[®] Database Report:** March 30, 2012



15. LIMITATIONS

This report has been prepared as part of an agreement between Credere Associates, LLC and the Town of Hampden. This agreement was established in order to provide the Town of Hampden with information upon which they can rely concerning the existence or likely existence of various environmental contaminants on or adjacent to the Site.

The report does not provide sufficient information to unequivocally determine that no hazardous waste contamination is present at the Site. Additional work beyond that completed for this study would be necessary to provide such information. Further, this report is not an audit for regulatory compliance or a detailed condition survey for the presence of asbestos, lead paint, PCBs, radon or any other pollutant specific compound.

Our conclusions regarding the Site are based on Credere's interpretation of the Site's historical land use and on observations of the existing Site's conditions during our field reconnaissance visits. The results of this study must be qualified in that no borings, soil or groundwater sampling or chemical testing was conducted as part of this study. Therefore, our conclusions regarding the condition of the Site do not represent a warranty that the facility, parking areas, adjacent properties, etc., are of the same quality as may be inferred from observable property conditions and readily available property history files.

Credere Associates, LLC performed this Phase I ESA in conformance with the ASTM Standard Practice E 1527-05 and AAI Standards. No exceptions or significant deviations were made to this practice during the completion of the Phase I ESA.



16. SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

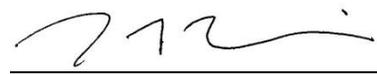
The following individuals performed this Phase I ESA in conformance with ASTM Standard Practice E 1527-05 and AAI Standards. Any work completed on this Phase I ESA by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional listed after the Environmental Professionals Statement provided below.



Silas Canavan, PE
Civil/Environmental Engineer

Environmental Professionals Statement

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set for in 40 CFR Part 312.



Jedd Steinglass
Senior Project Manager

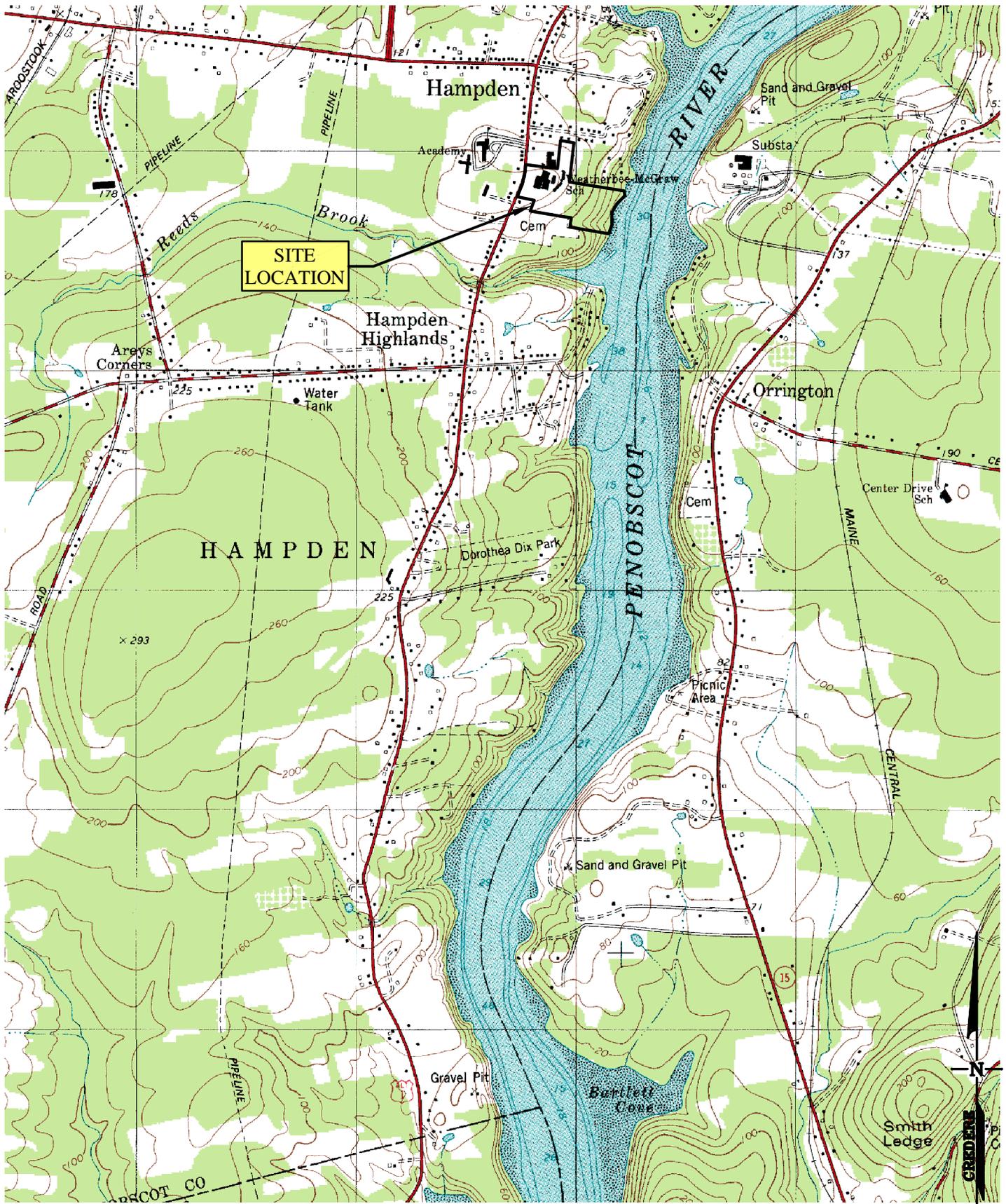


Judd Newcomb, CG, PG
Geologist

FIGURES

- FIGURE 1** – SITE LOCATION MAP
FIGURE 2 – DETAILED SITE PLAN





USGS QUADRANGE INFORMATION: HAMPDEN, MAINE 7.5 MINUTE SERIES

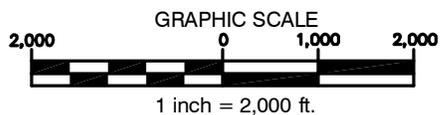
DRAWN BY: SWC	DATE: 3/30/12
CHECKED BY: JSS/RSV	PROJECT: 12001144

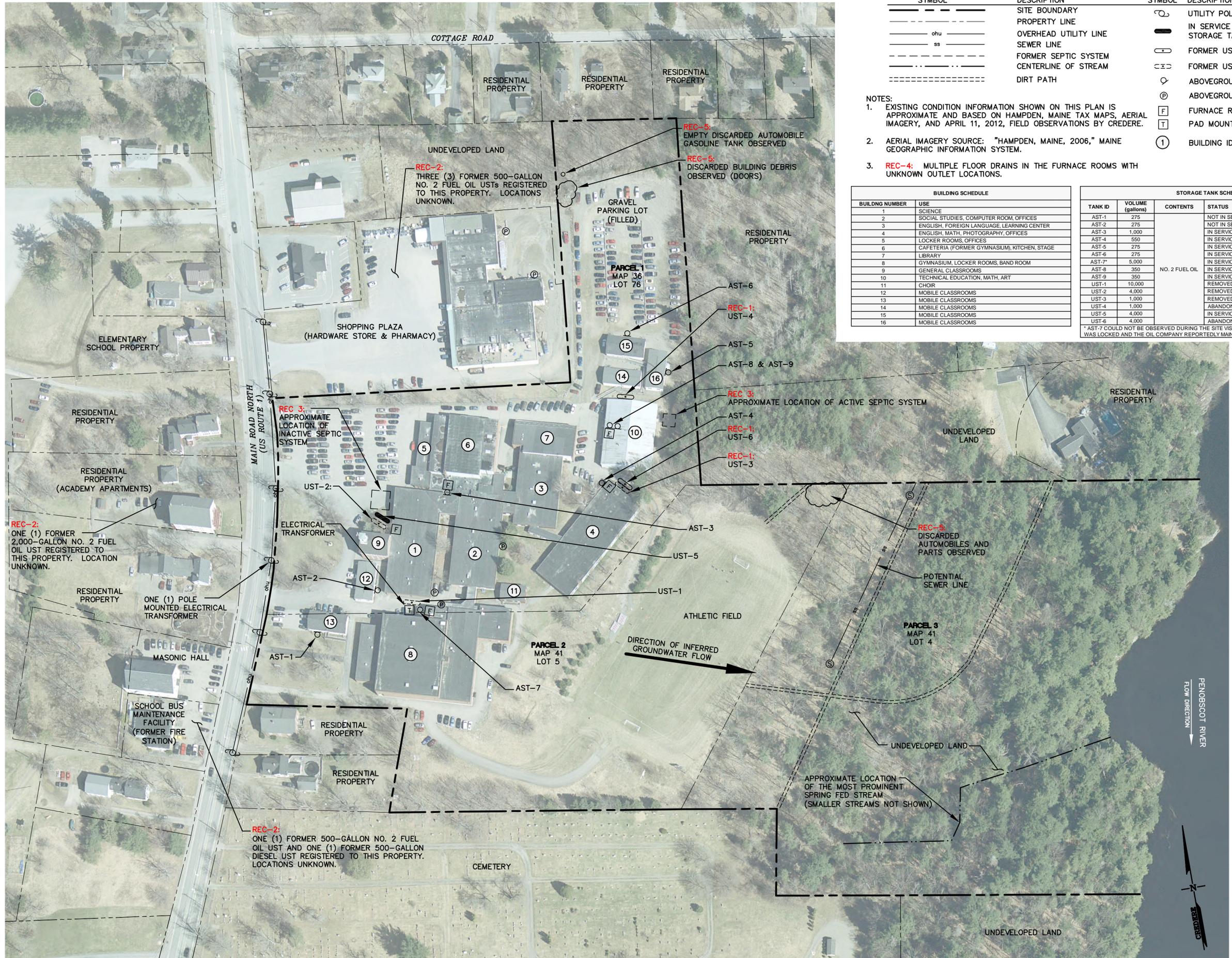
FIGURE 1 - SITE LOCATION MAP



CREDERE ASSOCIATES, LLC
 776 MAIN STREET
 WESTBROOK, MAINE 04092
 TEL: 207.828.1272
 FAX: 207.887.1051
 WWW.CREDERELLC.COM

HAMPDEN ACADEMY
 PROPERTY
 1 MAIN ROAD NORTH
 HAMPDEN, MAINE





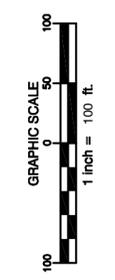
SYMBOL		DESCRIPTION	SYMBOL		DESCRIPTION
[Solid line]		SITE BOUNDARY	[Circle with cross]	UTILITY POLE	
[Dashed line]		PROPERTY LINE	[Thick black line]	IN SERVICE UNDERGROUND STORAGE TANK (UST)	
[Line with 'ohu']		OVERHEAD UTILITY LINE	[Thin black line]	FORMER UST (ABANDONED-IN-PLACE)	
[Line with 'ss']		SEWER LINE	[Dashed circle]	FORMER UST (REMOVED)	
[Dashed line]		FORMER SEPTIC SYSTEM CENTERLINE OF STREAM	[Circle with 'A']	ABOVEGROUND STORAGE TANK (AST)	
[Dotted line]		DIRT PATH	[Circle with 'P']	ABOVEGROUND PROPANE TANK	
			[Square with 'F']	FURNACE ROOM	
			[Square with 'T']	PAD MOUNTED ELECTRICAL TRANSFORMER	
			[Circle with '1']	BUILDING IDENTIFICATION NUMBER	

- NOTES:
- EXISTING CONDITION INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE AND BASED ON HAMPDEN, MAINE TAX MAPS, AERIAL IMAGERY, AND APRIL 11, 2012, FIELD OBSERVATIONS BY CREDERE.
 - AERIAL IMAGERY SOURCE: "HAMPDEN, MAINE, 2006," MAINE GEOGRAPHIC INFORMATION SYSTEM.
 - REC-4: MULTIPLE FLOOR DRAINS IN THE FURNACE ROOMS WITH UNKNOWN OUTLET LOCATIONS.

BUILDING SCHEDULE	
BUILDING NUMBER	USE
1	SCIENCE
2	SOCIAL STUDIES, COMPUTER ROOM, OFFICES
3	ENGLISH, FOREIGN LANGUAGE, LEARNING CENTER
4	ENGLISH, MATH, PHOTOGRAPHY, OFFICES
5	LOCKER ROOMS, OFFICES
6	CAFETERIA (FORMER GYMNASIUM), KITCHEN, STAGE
7	LIBRARY
8	GYMNASIUM, LOCKER ROOMS, BAND ROOM
9	GENERAL CLASSROOMS
10	TECHNICAL EDUCATION, MATH, ART
11	CHOIR
12	MOBILE CLASSROOMS
13	MOBILE CLASSROOMS
14	MOBILE CLASSROOMS
15	MOBILE CLASSROOMS
16	MOBILE CLASSROOMS

STORAGE TANK SCHEDULE			
TANK ID	VOLUME (gallons)	CONTENTS	STATUS
AST-1	275	NO. 2 FUEL OIL	NOT IN SERVICE, PARTIALLY FULL
AST-2	275		NOT IN SERVICE, PARTIALLY FULL
AST-3	1,000		IN SERVICE
AST-4	550		IN SERVICE
AST-5	275		IN SERVICE
AST-6	275		IN SERVICE
AST-7*	5,000		IN SERVICE
AST-8	350		IN SERVICE
AST-9	350		IN SERVICE
UST-1	10,000		REMOVED IN 1998, NO EVIDENCE OF A RELEASE
UST-2	4,000		REMOVED IN 1995, NO EVIDENCE OF A RELEASE
UST-3	1,000		REMOVED AND REPLACED BY UST-6 IN 1987
UST-4	1,000		ABANDONED-IN-PLACE IN 1987
UST-5	4,000		IN SERVICE
UST-6	4,000		ABANDONED-IN-PLACE IN 2010

* AST-7 COULD NOT BE OBSERVED DURING THE SITE VISIT BECAUSE THE STORAGE ROOM DOOR WAS LOCKED AND THE OIL COMPANY REPORTEDLY MAINTAINS THE ONLY KEY.



**FIGURE 2
DETAILED SITE PLAN**
HAMPDEN ACADEMY PROPERTY
1 MAIN ROAD NORTH
HAMPDEN, MAINE

DRAWN BY: SWC
CHECKED BY: JSS/RSY | PROJECT: 12001144
DATE: 4/16/12
CREDERE ASSOCIATES, LLC
776 MAIN STREET
WESTBROOK, MAINE 04092
TEL: 207.828.1272
FAX: 207.887.1051
WWW.CREDERELLO.COM