MEMORANDUM

To: Bowdoinham Selectboard

From: Yvette Meunier, Director of Planning & Development

Date: 4/8/26

Re: Riverview House – Due Diligence, Environmental Review, and Brownfields Eligibility

Purpose

The purpose of this memo is to brief the Selectboard on the completion of outstanding due diligence and environmental review associated with the Riverview House property, including findings related to regulatory feasibility, projected costs, and potential funding sources for hazardous material abatement.

Background

Acorn Engineering has provided the Town with the final documents required for the FEMA BRIC contract. These materials include a comprehensive Final Due Diligence Report that interprets how the regulatory requirements identified in the November draft affect overall feasibility, anticipated costs, resilience, and long-term operations of the Riverview House project.

The final submission also includes the following supporting documents:

- Wastewater Pre-Treatment System Design and Cost Estimate
- Architectural Scope, which clearly separates building-related costs from site work, floodplain compliance, and permitting costs
- Soil Survey

Together, these documents complete the technical and regulatory review required for the current phase of the project and provide a clearer understanding of both capital and long-term operational considerations.

Additionally, staff engaged the Midcoast Council of Governments (MCOG) Brownfields Investigation Program at no cost to the Town to determine whether brownfields funding could be used to address potential hazardous materials in the building.

In March, the Town received a report prepared by MCOG's environmental consultant, Sevee & Maher Engineers, Inc. The report identified a modest amount of asbestos within the building that would require removal in the event of remodeling or demolition. The estimated cost for abatement ranges from $7,500–$10,000.

While this scope of work would typically be eligible for assistance through the Brownfields Program, a subsequent file review determined that the Town is not eligible for cleanup assistance for this building because a Phase I Environmental Site Assessment was not conducted at the time the property was purchased.

However, now that a Phase I assessment has been completed a future purchaser of the building, or if we were to significantly expand the building, we may be eligible to apply for a low-interest Brownfields loan, with the owner responsible for 25% of the project cost.

It should also be noted that the remainder of the Riverview House property has already undergone Phase I review. Further, neither the consultant nor Maine Department of Environmental Protection (DEP) identified contamination levels that would warrant additional evaluation or eligibility for other DEP cleanup programs.

Next Steps

All reports and supporting documentation are available on the Town's website for public review at: www.bowdoinham.com/project/riverview-house.

Staff will continue to use this information to inform future discussions with the Selectboard regarding the viability of redevelopment options, potential disposition of the property, and associated cost considerations.

ACORN ENGINEERING, INC.

Director of Planning & Development
Yvette Meunier
13 School Street
Bowdoinham, ME 04008

March 31, 2026

Re: Due Diligence Report
Map U01 Lot 001, 8 River Road, Bowdoinham, Maine

Dear Ms. Meunier:

The purpose of this document is to outline the due diligence and preliminary utility evaluation efforts with a focus on the potential limitations and key site zoning relating to the development of the property located at identified as Lot 001 on Tax Map U01 within the Village I Zoning District and General Development I (GD-1) Shoreland Zoning District in Bowdoinham, Maine.

Based upon record surveys and tax map information, the parcel area is approximately 20.1 acres and is bounded by River Road (Route 24) to the east, an existing railroad system to the north, Cathance River to the south. The parcel is currently occupied by a single story wood frame house as well as various paved parking lots, grass fields and walking trails available for recreational use. The property provides recreational access to Cathance River via an existing non-motorized boat launch.

Site Overview:

- Natural Resources:
  - The majority of the parcel, including the existing structure, is located within the existing shoreland zone. Due to the projects proximity to the Cathance River, it is recommended that the site be evaluated by a Certified Flood Plain Manager (CFM) to re-delineate the existing 100-yr floodplain elevation and ultimately remove the existing structure from the 100-yr flood zone (Zone AE). Acorn has a CFM on staff that can help coordinate these efforts.
  - A Wetland and Watercourse Delineation and Ecological Assessment Report prepared by Stantec on June 27th 2019 identified various wetland areas within the site, one of which appears to be located within 75' of the existing structure. See below for more information.
  - Maine Department of Inland Fisheries and Wildlife (MDIFW) "Beginning with Habitat" GIS has been reviewed for the project site. The map viewer shows Inland Waterfowl habitat on the project site.

- Streets:
  - River Road, also identified as Maine State Route 24, is classified as an Arterial Street. Access to the site is provided directly off of River Road via an existing paved driveway.

- Flood Zone:
  - The effective FEMA FIRM Panel (Map Number 23023C0094F), adopted July 16, 2015, shows portions of the subject parcel are within the Zone AE (1% annual flood chance) Special Flood Hazard Area (SFHA) with an associated base flood elevation (BFE) of 8' (NAVD 88). A section of the existing structure's foundation directly abuts the flood zone mentioned above.

Zoning Overview (Village – I):

- Allowed uses in Village-I Zoning District (As related to proposed development)
  - Institutional:
    - Civic, Convention Center (SPR)
    - Community Center (SPR)
    - Governmental Facilities (SPR)
    - Outdoor recreation (Parks, playgrounds, etc.) (SPR)
    - Public Facility Utility (SPR)
    - The construction, alteration, relocation, demolition or replacement of any building or part thereof. (CEO)
    - Accessory structures, uses or services (for institutional uses) (SPR)
  - Commercial Uses
    - Boat building/repair (SPR)
    - Gym / Fitness club (SPR)
    - Retail business (SPR)

SPR = Site Plan Review approval from Planning Board
CEO = Permitted with permit from Code Enforcement Officer

Refer to Bowdoinham Zoning Ordinance, Table 5.1 – Land use Permitted in Zoning Districts for the complete list of permitted uses & further information.

Table 1: Village I Dimensional Requirements (per Article 5 Section E)			
Min. Lot Size*	20,000 square feet	Max. Residential Density	1 DU/20,000 square feet
Min. Front Setback	20 feet	Min. Road Frontage	75 feet
Min. Rear Setback	10 feet	Min. Side Setback	10 feet
Max. Building Height	35 feet	Max. Lot Coverage (For Structures)	30%**
* 10,000 square foot minimum lot size for subdivision with community subsurface wastewater system.			
**Lots legally non-conforming due to lot size may have up to 50% structure coverage.			

Shoreland Zoning Overview (General Development I District):

- Allowed uses in General Development I Zoning District (As related to proposed development)
  - Principal Structures and Uses:
    - Commercial (PB)
    - Industrial (PB)
    - Governmental and Institutional (PB)
  - Small non-residential facilities for educational, scientific, or nature interpretation purposes (CEO)
  - Structures accessory to allowed uses (Yes)
  - Public and Private recreational areas involving minimal structural development (CEO)
  - Uses similar to allowed uses (CEO)
  - Uses similar to uses required a CEO permit (CEO)
  - Uses similar to uses requiring a PB permit (PB)

PB = Allowed with permit issued by the Planning Board
CEO = Allowed with permit issued by the Code Enforcement Officer
Yes = Allowed (No permit required by the use must comply with all applicable land use standards)

Refer to Bowdoinham Zoning Ordinance, Table 6.1 – Land Uses in the Shoreland Zone for the complete list of permitted uses & further information.

Table 2: Shoreland Zone Dimensional Requirements (per Article 7 Section D) **Governmental, Institutional, Commercial or Industrial per principal structure**			
Within the Shoreland Zone Adjacent to Tidal Areas			
Min. Lot Size	40,000 square feet	Min. Shore Frontage	200
Min. Setback from Normal High-Water Line	25 feet*	Max. Impervious Coverage	70%**

Table 3: Shoreland Zone Dimensional Requirements (per Article 7 Section D) **Public and Private Recreational Facilities**			
Within the Shoreland Zone Adjacent to Tidal and Non-Tidal Areas			
Min. Lot Size	40,000 square feet	Min. Shore Frontage	200
Min. Setback from Normal High-Water Line	25 feet*	Max. Impervious Coverage	70%**
*100 feet except developments within the General Development I District			
** 20% except developments within the General Development I District			

Site and Permitting Overview:

- ***Town of Bowdoinham Permitting:***
  - *Site Plan Review:* It is our understanding that the construction of a new building utilized for recreational development will be subject to Site Plan Review and public hearing with the Town of Bowdoinham Planning Board per the Bowdoinham Zoning Ordinance Land Use Tables. The development will be required to meet the Performance Standards (Article 4) & General Requirements (Article 10 Sec. D) of the

Bowdoinham Zoning Ordinance. Based on the decided use of the structure, the project may be subject to Use-Specific Performance Standards (Article 10 Sec. E)

The development will likely be classified as a Tier II project (Projects involving the construction or addition of fewer than five thousand (5,000) square feet of gross non-residential floor area.), which will require Preapplication conference and a Site Plan Application review of the Planning Board. It should be noted that the Town Planner shall ultimately classify each proposed project as Tier I, II, II or Amendment per Article 10 Sec. B – 2.A.

- Floodplain Management
  Flood Hazard Development Permit: A portion of the property and existing building is within a FEMA SFHA and as such the project may be subject to a Flood Hazard Development Permit based on the final design direction of the project. Prior to any construction or other development within a SFHA, a Flood Hazard Development Permit shall be obtained from the Code Enforcement Officer. A Flood Hazard Development Permit would follow the Floodplain Application & Review Procedures (Article 8 Sec. B) and be subject to any applicable Development Standards (Article 8 Sec. C)

Renovation Option:

Please note the following sections assume the proposed use of the Riverview structure would be classified as a non-residential use. Additionally, Acorn recommends consulting with the Town's insurance agent for any specifics regarding premium rating with flood insurance and the mandatory purchase requirement rule.

If the existing Riverview structure is to remain and be renovated, the project would likely be considered a "substantial improvement" based on the Town's definition. Per Article 8 Sec. C of the Town's Floodplain Ordinance, a substantial improvement of the existing structure would require the lowest floor (including basement) to be elevated to at least three feet above the BFE or meet the requirements of Article 8 Sec. C.6.a.(i)-(iii). It should be noted that the existing finish floor elevation of the basement of the Riverview is approximately 0.37' (NAVD 88) and as such elevating the existing structure to 3' above the BFE is not feasible given both the cost and design constraints of elevating an existing structure over 10'. As such it's assumed the dry floodproofing standards of Article 8 Sec. C.6.a.(i)-(iii) would need to be met and certified by a licensed engineer or architect, this would entail the following considerations to be incorporated into the building renovation design:

- Reinforcement of the existing foundation to resist hydrostatic and dynamic pressures and floating debris impacts.
- Specialized windows and doors to be water tight when closed.
- Design of sump pumps in the basement.
- Backflow valves on sanitary sewer and storm drains.
- Mechanical equipment and circuits protected to above the BFE.
- Backup power for sump pumps.

This option would rely on mechanical systems to protect the building for flood protection which presents ongoing maintenance costs and concerns, in addition to higher insurance premiums with the structure being located within the SFHA.

New Construction Option:

If the existing Riverview Structure is selected to be demolished and replaced, and siting the new building outside of the SFHA is not feasible, the new building would be subject to the applicable Development Standards of Article 8 Sec. C. Key considerations include the 3' of freeboard for the lowest floor elevation above the BFE described in the previous description (or the dry floodproofing option). The project would be subject to the mandatory flood insurance purchase requirement for federally backed loans, and it would be expected that floodwaters would touch the perimeter of the building during the 1% annual exceedance probability flood event.

Alternatively, a Letter of Map Revision based on Fill (LOMR-F) through FEMA could be pursued that would remove a portion of the property from the SFHA. This would require fill be placed (in accordance with the attached guidelines) above the BFE and the new structure be located within the fill envelope. A LOMR-F is only approved by FEMA after the fill has been placed and the elevation certified by a licensed surveyor or engineer, as such the new structure would be subject to the Town's Floodplain Standards during the Site Plan and Building Permit Review process unless it was deemed acceptable by the Town's Floodplain Administrator to use evidence of a CLOMR-F (Conditional Letter of Map Revision based on Fill) approval by FEMA as sufficient evidence to exclude the project from the Town's Floodplain Ordinance. Moving forward with a map revision would remove the mandatory flood insurance purchase requirement for federally backed loans, additionally during a 1% annual exceedance probability flood event the building would be expected to be isolated from floodwaters.

Overall, Acorn would recommend a site design that locates a new structure outside of the SFHA without requiring earthwork within the SFHA. This option is the most resilient as the existing floodplain storage is preserved and the structure is expected to be located outside of the 1% annual exceedance probability flood event entirely. Additionally the new structure would not be subject to the mandatory flood insurance requirement that is mandatory for all federally backed loans for structures within a SFHA, more favorable insurance premiums would be offered if elected, and additional project efficiencies with the building not being subject to the Town's Floodplain Management Ordinance would be available. Absent of the Town's Floodplain Management Standards, the new building would require the lowest floor elevation to be elevated at least one foot above the BFE at a minimum (Article 7.D.2.a).

- ***Maine Department of Environmental Protection (MDEP) Permitting:***
  - *Stormwater Management Law Amendment (Existing Permit L-23928-NJ-E-N):* The Project will be required to meet basic and general stormwater standards. The previous project used MDEP redevelopment pollutant rankings to determine the stormwater treatment required for the parcel. The proposed pollutant rankings will need to be updated to reflect the as-built condition of the site and include the modifications proposed as part of this project.

- *Natural Resource Protection Act Permit:* Any work that may impact a natural resource (stream, wetland, river, etc.) will require a Natural Resource Protection Act (NRPA) Permit from MDEP. Certain activities within the proximity of natural resources require a Permit-by-Rule, which is a streamlined notification process which typically grants permits in 14 days. These types of activities include stormwater outfalls to a natural resource, some stream crossings, and activities within 75 feet of a natural resource. It is assumed that a new structure would be located outside the 75' setback.

  Projects with direct wetland impacts that do not qualify for Permit-by-Rule require an NRPA Individual Permit. The Individual Permit for wetland impacts is tiered based on impacted area: Tier 1 (0-14,999 sf), Tier 2 (15,000-43,560 sf) and Tier 3 (>43,560 sf).

Utility Investigation:

- Bowdoinham Water District:
  - The site is located within the jurisdiction of the Bowdoinham Water District. It is our understanding the structure onsite is currently served by a ¾" water service that increases to a 6" ACP water service and connects to the existing 8" water main in River Road. Based on the Plans provided by Pine Tree Engineering, it appears that 2" water service stubs were installed from the existing structure onsite to serve the park dry hydrants. Further coordination with Bowdoinham Water District will be required to confirm their capacity to serve the project once future demand is known.

- Bowdoinham Water District (for sewer services) & Richmond Utility District:
  - It is our understanding there is no sewer main located within River Road along the project's frontage and the existing structure onsite utilizes an existing subsurface wastewater disposal system. Once future use and demand are determined, a new pre-treatment device and pump station design will be provided, along with a new HHE-200 permit.
  - The current system flow was designed for 1,600 gallons per day (gpd) with 1,000 gallons of capacity built in for future use. If the capacity was doubled with a pretreatment unit, the system could handle up to 3,200 gpd minus 600 gpd for the existing bathroom facilities, which equates to **2,600 gpd of capacity**.
  - A restaurant use would need a multiplier of 1.3x due to wastewater strength resulting in **2,000 gpd for a design flow for restaurant use**.
    - Conservatively assuming 10 employees (cooks, servers, and dishwashers) at 12 gpd each (120 gpd total), 1,880 gpd remain for seating capacity, which would equate to:
      - **94 seats for 2 meals a day (20gpd per seat) or**
      - **62 seats for 3 meals a day (30 gpd per seat).**
  - Based on conversations with New England Septic Solutions, the proposed redevelopment could utilize a FujiClean USA CE-30 (see attached cut sheet) pretreatment system to provide pretreatment of the sanitary sewage flows prior to discharge into the future subsurface wastewater field to maximize use. Final designs, along with amending the existing HHE-200 will be required based on actual intended usage and flows.

- Central Maine Power (CMP):
  - Three phase overhead power is located along River Road. It is our understanding that the existing structure onsite is served overhead by an existing pole mounted transformer.

- Stormwater Infrastructure
  - There is an existing stormwater drainage network located on site. The drainage network outlets to riprap outlet protection prior to the Cathance River. Additionally, there is an existing 15" culvert that crosses the access driveway to the site and discharges to the Cathance River.
  - The Town of Bowdoinham Zoning Ordinance General Performance Standards Article 10 Sec. D-28 requires stormwater runoff be minimized and detained on site if possible.
  - The project will be subject to stormwater requirements as outlined in the Maine Department of Environmental Protection (MDEP) Permitting section above.
  - The proposed redevelopment could utilize a Roof Dripline Filtration BMP to meet Maine DEP water quality treatment requirements associated with the redevelopment of the structure.

Thank you for giving us the opportunity to assist you on this project. Please do not hesitate to contact me if you have any comments or questions.

Sincerely,

Peter Heil, P.E.
Senior Project Manager
Acorn Engineering, Inc.

RYAN SENATORE **ARCHITECTURE**

January 14, 2026

Riverview House

Bowdoinham, Maine

1.) Renovation of Existing Building Scope or Work Outline

- Abate Mold and Asbestos
- Lift Existing wood framed Structure
- Infill Openings in Basement walls, repair cracks etc
- Raise to of wall with a row of 8" CMU
- Insulated exterior of existing foundation to 18" below grade and cover with cement board and parge coating
- Fill Basement with gravel fill, provide perimeter drainage per Civil
- New Insulated 4" reinforced concrete slab
- Remove Wood framed Floor
- Set building back on new slab foundation
- Reinforce and structural wood frame repairs as needed
- Modify roof framing to accommodate removed bearing walls
- Remove finishes down to framing
- Insulate stud cavities
- Insulate roof to current energy code
- Confirm condition of Asphalt shingles, replace if necessary
- New electrical, mechanical and plumbing systems
- New drywall ceiling and wall finishes throughout
- New Flooring LVT or equal throughout
- New Zip-R insulated sheathing on exterior to meet energy code
- New siding and double pane insulated windows
- New insulated exterior doors
- New Ramp and exterior deck

The opinion of probably cost for the renovation of the 930 sf existing building is estimated to be in the range of **$290,000 and $325,000.**

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2.) New Building Construction

The opinion of probably cost for the construction of the 960 sf new building is estimated to be in the range of **$350,000 and $400,000.**

- Frostwall foundation to 4' below grade with 3" insulation
- Insulated 4" reinforced concrete slab
- 2x Framing with pre-engineered roof trusses
- Insulate stud cavities to energy code
- Insulate roof to energy code
- Asphalt roof shingles
- Drywall ceiling and wall finishes throughout
- Flooring LVT or equal throughout
- Zip-R insulated sheathing on exterior to meet energy code
- Lap siding and double pane insulated windows
- Insulated exterior doors
- Ramp and exterior deck
- (Excludes Commercial Kitchen)

207-650-6414

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
RIVERVIEW HOUSE
8 RIVER ROAD
BOWDOINHAM, MAINE

Prepared for

MIDCOAST COUNCIL OF GOVERNMENTS
165 Main Street
P.O. Box 62
Damariscotta, Maine 04543

On behalf of

TOWN OF BOWDOINHAM
13 School Street
Bowdoinham, Maine

Funded through the Midcoast Council of Governments
U.S.EPA Brownfields Assessment Grant

March 13, 2026

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Cumberland, Maine 04021

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SME
SEVEE & MAHER
ENGINEERS

TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF FIGURES
(Appended)

LIST OF TABLES

EXECUTIVE SUMMARY

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Sevee & Maher Engineers, Inc. (SME) on behalf of Midcoast Council of Governments (MCOG) and the Town of Bowdoinham, (the "Users") for the building known as the "Riverview House," located at 8 River Road in the Town of Bowdoinham, Sagadahoc County, Maine (the "Site"). This Phase I ESA was performed in accordance with the requirements of ASTM International Designation: E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2021* (ASTM E1527-21), which meets the requirements of the United States Environmental Protection Agency (U.S.EPA) All Appropriate Inquiry (AAI), 40 CFR Part 312. The purpose of this Phase I ESA was to document the environmental history of the Site, to evaluate the likelihood that a release of hazardous substances or petroleum products (HSPP) has occurred or has the potential to impact the Site, and to provide our professional opinion regarding evidence of Recognized Environmental Conditions (RECs) in connection with the Site.

The Site encompasses approximately 1,000 square feet and is owned by the Town of Bowdoinham. The Site is a portion of the real property identified by Town's Assessor's Office as Lot 1 on Tax Map U01. Lot 1 encompasses approximately 20.58 acres and is bound by Maine Central Railroad tracks to the north and northwest, Cathance River to the east, River Road to the northeast, and undeveloped wooded and wetland areas to the south. The Site consists of an office building, known as the "Riverview House," and exterior areas surrounding this building, which is located at 8 River Road (Route 24) in the Town of Bowdoinham. The Site is surrounded by remaining portions of Lot 1, which are considered "off-site" for the purposes of this ESA.

The Site is currently improved with an approximately 1,000 square-foot, single-story structure (the "Site building" or the "Riverview House"), which was constructed in 1945 on a concrete foundation with a full basement. The building has reportedly been utilized as an office (originally in support of the fertilizer facility and more recently rented as leased office space for a software company) and retail (an antique store) since its construction. The building has vinyl siding, an asphalt-shingled roof, and a basement with a concrete floor and foundation. The Site building is served with public water, provided by the Bowdoinham Water District, and is connected to a private septic system, located southeast of the building. The Site building is currently heated with a propane-fired heating system and was formerly heated by a fuel oil-fired heating system.

Based on available information, Lot 1, including the Site, reportedly consisted of unimproved land until the property was developed as a fertilizer repackaging and distribution facility circa 1900. Three companies (Sagadahoc Fertilizer Company, Corenco Corporation, and Central Chemical Corporation) reportedly operated the fertilizer repackaging and distribution facility until its closure circa 1988. During its operation, a fertilizer plant was constructed circa 1900 along Maine Central Railroad's tracks,

southwest of the Site building; a storage building was constructed circa 1957 near the Cathance River, also southwest of the Site building.

In 1998, Lot 1 was purchased by the Town of Bowdoinham to be used as their public works and the fertilizer plant building was demolished in 1999. Starting in the late 1990s, the Site building was occupied by an antiques store. After relocating Town Public Works operations to another location circa 2018, the storage building used by public works was demolished and off-site portions of Lot 1 were cleared to facilitate the Town's redevelopment of the property as a public park with a public boat ramp.

SME performed a reconnaissance of the Site on January 20, 2026. SME observed an approximate 100-gallon liquified propane, aboveground storage tank (LP AST) and fill and vent pipes for a 275-gallon fuel oil AST along the southwestern side of the Site building. The 275-gallon fuel oil AST is located in the Site building's basement. The 275-gallon AST reportedly contains residual fuel oil and SME observed *de minimis* fuel oil staining on top of the tank. The concrete floor of the basement was partially flooded with a few inches of standing water at the time of Site reconnaissance, including the floor beneath the AST. However, SME did not observe sheens, odors, or other evidence of a fuel oil release in connection with the AST. One sump with a sump pump was observed in the basement of the Site building. The sump pump discharges groundwater onto the ground surface near the eastern corner of the building. No odors, sheens, or other evidence of a HSPP release were observed on standing water in the sump or on the ground surface at the sump pump discharge location during reconnaissance.

SME observed various over-the-counter household cleaning chemicals (i.e., 1-pint to 1-gallon-sized) on the first floor of the Site building. No evidence of a HSPP release was observed in connection with the household cleaning chemicals during reconnaissance.

SME reviewed historical, local, state, and federal reports and records, environmental databases, and an environmental and historical documentation report provided by Environmental Data Resources, Inc. (EDR) to assist with the identification of RECs in connection with the Site or nearby properties. Properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon documented remedial activities and/or investigations completed by the Maine Department of Environmental Protection (MEDEP) and/or the locations and distances of these properties from the Site, which make it unlikely for these properties to have impacted environmental conditions at the Site.

The Site and remaining ("off-site") portions of Lot 1 were identified on MEDEP's Uncontrolled Sites List (Site# REM02926). Based on information provided by the Town and MEDEP, several Maine Board of Pesticide Control- and MEDEP- periodic inspections/audits were conducted when the fertilizer repackaging and distribution facility was operational and after its closure from 1986 to 1997. During their inspections, MEDEP and Maine's Board of Pesticide Control did not identify hazardous waste management violations or violations of pesticide control regulations. Additionally, previous Phase I ESAs were

completed for Lot 1 in 1998 and 2021, which identified several RECs in connection with the former use of the property as a fertilizer and chemical plant and as the Town's Public Works Department, and the property's proximity to the Maine Central Railroad tracks. MEDEP completed a subsurface investigation at the property in 2019, and Haley Ward completed two subsurface investigations at the property in 2021. Results of these subsurface investigations identified various contaminants of concern (COCs), including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and volatile and semi-volatile petroleum constituents. Resource Conservation Recovery Act (RCRA) 8 metals were detected in soil and pore water samples, but at concentrations that did not exceed MEDEP's Remedial Action Guidelines (RAGs) for Park User or Construction Worker exposure risk. Only arsenic (a metal) was detected in soils at the property at concentrations that exceed MEDEP's Undeveloped "Background" concentration, but the results of prior investigations concluded that arsenic-impacted soils are present at depths from 2 to 4 feet-below ground surface (bgs) and, therefore, arsenic-impacted soils would likely not pose an exposure risk to park users or construction workers at the property.

In 2025, Air Quality Management Services, Inc. (AQM) performed a mold and asbestos assessment of the Site building, which consisted of the collection of mold air samples, mold surface samples, and asbestos bulk samples. AQM detected elevated mold levels in an air sample and surface sample collected in the basement. AQM also identified asbestos-containing flooring and floor underlayment in the Site building.

Based on the results of this Phase I ESA, SME has not identified RECs in connection with the Site. SME also concludes that the RECs identified in Acorn's 2021 Phase I ESA for Lot 1 are considered Historical Recognized Environmental Conditions (HRECs). This conclusion is based on the results of MEDEP's 2019 and Haley Ward's 2021 environmental investigations, which identified various COCs in soil and pore water samples collected at Lot 1, but at concentrations that did not exceed their current MEDEP RAGs (November 15, 2023) for Park User or Construction Worker exposure risk.

Based on the findings of this assessment, SME does not recommend further investigation at this time. However, SME recommends the following with respect to the Town of Bowdoinham's proposed redevelopment of the property as a public park:

1. Consideration should be given to entering the Site into the MEDEP Voluntary Response Action Program (VRAP). MEDEP VRAP is a voluntary program that offers technical review of environmentally-impacted sites and ultimately provides state liability protections for interested parties, provided that proper and appropriate environmental assessment and cleanup/remedial actions are completed, as approved by MEDEP;

   As a condition of VRAP approval, MEDEP may require a deed restriction and/or institutional controls in the form of a Declaration of Environmental Covenant (DEC). The DEC may require preparation and adherence to an Environmental Media Management Plan (EMMP) since soils at the property should not be exported off-site for unrestricted reuse since soils contain various

COCs, but at concentrations that do not exceed MEDEP's RAGs (November 15, 2023) for Park User or Construction Worker exposure risk.

2. Hazardous building materials, including asbestos-containing materials (ACM) and universal waste, identified in the Site building, will need to be properly abated and/or removed, if these materials are disturbed during future Site redevelopment including renovation and/or demolition of the building, depending on the extent of redevelopment; and
3. Over-the-counter household cleaning chemicals remaining in the Site building, the 100-gallon LP AST, and inactive 275-gallon fuel oil AST and associated piping should also be removed from the Site, as necessary, prior to proposed renovation and/or demolition of the building.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
RIVERVIEW HOUSE
8 RIVER ROAD
BOWDOINHAM, MAINE

1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Sevee & Maher Engineers, Inc. (SME) on behalf of Midcoast Council of Governments (MCOG) and the Town of Bowdoinham, (the "Users") for the building known as the "Riverview House," located at 8 River Road in the Town of Bowdoinham, Sagadahoc County, Maine (the "Site"). The Site is identified by Town's Assessor's Office as a portion of Lot 1 on Tax Map U01 and is currently owned by the Town of Bowdoinham (the "Owner"). Lot 1 encompasses approximately 20.58 acres and is proposed to be redeveloped by the Town as a public park.

Please refer to Figure 1, Site Location Map, to view the general location of the Site on a 7.5-minute topographic quadrangle.

1.1 Purpose

The purpose of this Phase I ESA is to assess the environmental conditions of the Site by performing all appropriate inquiry into the previous ownership and uses of the Site, consistent with good commercial or customary practice, taking into account commonly known and reasonably ascertainable information. The goal of the assessment was to identify Recognized Environmental Conditions (RECs) in connection with the Site. The term REC means:

> (1) The presence of hazardous substances or petroleum products in, on, or at the Site due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Site due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Site under conditions that pose a material threat of a future release to the environment.

The term REC is not intended to include *de minimis* conditions, which are conditions related to a release that generally do not present a threat to human health or the environment and that would not be the subject of an enforcement action if brought to the attention of appropriate government agencies. The term REC includes both controlled RECs (CRECs) and historical RECs (HRECs) as defined below. The term CREC means:

A REC affecting the Site that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations, or other property use limitations).

The term HREC means:

A release of hazardous substances or petroleum products affecting the Site that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Site to any controls (for example, activity and use limitations, or other property use limitations).

By performing a Phase I ESA with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 42 U.S.C. §9601) and petroleum products, the User of the ESA satisfies one of CERCLA's requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

Per ASTM Standard E1527-21, an ESA completed less than 180 days prior to the date of a property acquisition is considered valid. This Phase I ESA can therefore be considered valid for 180 days from the earliest date that the following components were completed:

- Interviews with Owner, operators, and/or occupants – January 20, 2026;
- Searches for recorded environmental cleanup liens – January 20, 2026;
- Reviews of federal, tribal, state, and local government records – January 19, 2026;
- Visual inspection of the Site and adjoining properties – January 20, 2026; and
- Declaration by the environmental professional responsible for the assessment – March 13, 2026.

This Report can be relied upon for up to one year provided that the above-mentioned components are updated within 180 days prior to the acquisition. After one year, the ESA will not be valid, cannot be updated, and cannot be relied upon to meet due diligence.

1.2 Limitations, Exceptions, Deviations, and Data Gaps

Along with the limitations set forth in various sections of the ASTM E1527-21 protocol, the accuracy and completeness of this report is limited by the following:

- Access Limitations: None;

- Physical Obstructions to Observations: Snow coverage limited complete observation of the ground surfaces throughout the exterior portions of the Site during the reconnaissance;
- Outstanding Information Requests: None;
- Historical Data Source Failure: None;
- Exceptions: None; and
- Deviations: None.

1.3 Significant Assumptions

No significant assumptions were made during the performance of this Phase I ESA.

1.4 Scope of Work, Special Terms and Conditions

This Phase I ESA was performed in accordance with the requirements of ASTM E1527-21 and SME's contract with MCOG, executed on November 14, 2025. The services, findings, and conclusions, noted herein, and the contents of any project reports and associated documents provided to the client by SME are solely for the benefit of MCOG and the Town of Bowdoinham, their affiliates and subsidiaries and their successors, assigns, and grantees, as applicable. Other than for public informational purposes, reliance or any use of this report by anyone other than the named beneficiaries, for whom it was prepared, is prohibited. Reliance or use by any such third party without explicit authorization in the report does not make said third party a beneficiary to SME's contract with MCOG. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties, or representations, expressed or implied in this report, are made to any such third party.

2.0 USER-PROVIDED INFORMATION

The ASTM Standard Practice requires that the Users of this ESA (the Town of Bowdoinham) identify, to the best of their knowledge, any possible RECs in connection with the Site, including information related to environmental liens and any actual, commonly known, or specialized knowledge related to RECs on the Site.

Yvette Meunier, Director of Planning & Development for the Town of Bowdoinham, completed the Phase I ESA User Questionnaire as the User's representative on February 3, 2026. Yvette Meunier was aware of the Site's historical use as a fertilizer plant and public works facility. However, Yvette Meunier did not have specialized knowledge or experience related to the Site. Yvette Meunier provided SME with the Town's Code Enforcement and Assessor files for the Site. A copy of the User Questionnaire is provided within Appendix A and information acquired from the User's representative has been provided in pertinent sections throughout this report.

3.0 PHYSICAL SETTING

3.1 Site Location and Description

The Site encompasses approximately 1 acre and consists of an office building, known as the "Riverview House," and exterior areas surrounding this building. The Site is a portion of the 20.58-acre parcel located at 8 River Road (Route 24) in the Town of Bowdoinham and is identified as a portion of Lot 1 on Tax Map U01, as shown on Figure 1 (Site Location Map). Lot 1, including the Site, is owned by the Town of Bowdoinham.

Lot 1 encompasses approximately 20.58 acres and is bound by Maine Central Railroad tracks to the north and northwest, Cathance River to the east, River Road to the northeast, and undeveloped wooded and wetland areas to the south. The Site is surrounded by remaining portions of Lot 1, which are considered "off-site" for the purposes of this ESA.

A Site Plan is included as Figure 2.

3.2 Ownership History

Historical ownership of the Site based publicly available deeds is provided in Table 1.

TABLE 1

HISTORICAL SITE OWNERSHIP

Owner	Acquisition Date
Town of Bowdoinham	September 28, 1998
Central Chemical Company	January 27, 1976
Corenco Corporation	January 10, 1967
Sagadahoc Fertilizer Company	Prior to January 10, 1967

3.3 Current Use of the Site

The Site building is currently utilized as office and is leased to a software company. Exterior portions of the Site are utilized as publicly accessible recreational space.

3.4 Description of Structures and Infrastructure

The Site is currently improved with an approximately 1,000-square-foot, single-story structure (the "Site building" or the "Riverview House"), which was constructed in 1945 on a concrete foundation with a full basement. The building has reportedly been utilized as an office and antique store since its construction. The building has vinyl siding, an asphalt-shingled roof, and a basement with a concrete floor and foundation. The Site building is served with public water, provided by the Bowdoinham Water District,

and is connected to a private septic system, located southeast of the building. The Site building is currently heated with a propane-fired heating system and was formerly heated by a fuel oil-fired heating system.

3.5 Current Use of Nearby Properties

As previously discussed, the Site is surrounded by remaining portions of Lot 1, which are considered "off-site" for the purposes of this ESA. Lot 1 is owned by the Town of Bowdoinham and is utilized as a park, boat launch, and parking area. Properties to the northwest across the railroad tracks are primarily residential. The area southwest of the Site is undeveloped and the Cathance River is adjacent to the Site to the southeast.

3.6 Topography

According to United States Geological Survey (USGS) topographic mapping, the average surface elevation of the Site is approximately 6.5 feet-above mean sea level. The Site is sloped southeast toward the Cathance River.

3.7 Geology/Hydrogeology

According to the 2003 Surficial Geology Map of the Bowdoinham Quadrangle, Maine, on-site soils are identified as Holocene wetland deposits and artificial fill underlain by Presumpscot formation soils. Holocene wetland deposits consist of muck, peat, silt, and sand approximately 1- to 10-feet-thick. U.S. Department of Agriculture Soil Conservation Service mapping indicates that soil across the Site is classified as Lamoine-Buxton complex.

According to the 2021 Limited Phase II ESA performed by Haley Ward, soils throughout developed portions of Lot 1 generally consisted of fill material (mixed sand and gravel) to approximately 3 feet-bgs, underlain by gray silty clay of the Presumpscot formation.

According to the 2010 Bedrock Geology of the Bowdoinham Quadrangle, Maine, bedrock on the Site is identified as Nehumkeag Pond formation, which consists of weathering plagioclase-quartz-biotite gneiss. No bedrock outcroppings were observed at the Site.

The Site is adjacent to the Cathance River. Based on the Town of Bowdoinham Preliminary Flood Insurance Rate Map (FIRM) (Community Panel Number 23023C0094F, effective July 16, 2015), the Site is located in a Flood Zone. The direction of groundwater flow has not been established on-site; however, groundwater is suspected to flow southeast towards the Cathance River.

4.0 SITE RECONNAISSANCE

The objective of the Site reconnaissance was to identify the potential for RECs associated with the Site. The following subsections describe the methodology and limiting conditions associated with the reconnaissance. A log containing photographs from the reconnaissance is included in Appendix B.

4.1 Methodology and Limiting Conditions

Stephen Dyer and Caitlin Keady of SME performed a reconnaissance of the Site on January 20, 2026. SME was accompanied by Max Johnstone (MCOG – Senior Planner), Mike Mars (Maine Department of Environmental Protection (MEDEP) – Project Manager), and Jason Lamoreau (Town of Bowdoinham, Recreation Director) during the Site reconnaissance. Robert Bertulli, the current tenant, provided access to the interior of the structure. Interior and exterior portions of the Site were traversed to document current conditions.

4.2 Exterior Observations

The Site is currently improved with an approximately 1,000-square-foot, single-story structure (the "Site building" or the "Riverview House"). The building has vinyl siding, an asphalt-shingled roof, and a basement with a concrete floor and foundation. The Site building is connected to a private septic system, located southeast of the building. SME did not observe sheens, odors, or other evidence of a HSPP release in connection with the septic system. One sump with a sump pump was observed in the basement of the Site building. The sump pump discharges groundwater onto the ground surface near the eastern corner of the building. No odors, sheens, or other evidence of a HSPP release were observed on standing water in the sump or on the ground surface at the sump pump discharge location during reconnaissance.

The Site building is currently heated with a propane-fired heating system and was formerly heated by a fuel oil-fired heating system. SME observed an approximate 100-gallon liquified propane, aboveground storage tank (LP AST) and fill and vent pipes for a 275-gallon fuel oil AST along the southwestern side of the Site building. The 275-gallon fuel oil AST is located in the Site building's basement. No evidence of a fuel oil release was observed in connection with AST's fill and vent pipes at exterior portions of the Site.

4.3 Interior Observations

The Site building has a main floor, a basement, and an attic. The attic is accessed through a hatch on the first floor; however, SME was unable to access the attic during the Site reconnaissance. SME observed several office spaces in the Site building that contained computers, printers, boxes of files, and other miscellaneous items on the first floor. SME also observed a mini fridge, a microwave, two air conditioner window units, and various over-the-counter household cleaning chemicals (i.e., 1-pint to 1-gallon-sized)

on the first floor of the Site building. No evidence of a HSPP release was observed in connection with the household cleaning chemicals during reconnaissance.

SME observed one 275-gallon fuel oil AST in the basement of the Site building. The AST reportedly contains residual fuel oil. SME observed *de minimis* fuel oil-staining on top of the tank. The concrete floor of the basement was partially flooded with a few inches of standing water at the time of Site reconnaissance, including the floor beneath the AST. However, SME did not observe sheens, odors, or other evidence of a fuel oil-release in connection with the AST. Remaining areas of the basement were utilized for storage and SME observed a hot water heater and boiler that appeared to be in good condition.

5.0 ENVIRONMENTAL RECORDS REVIEW

The purpose of the environmental records review is to obtain and review records that will help identify RECs in connection with the Site or nearby properties. SME initiated the environmental records review process on January 20, 2026. This included, but was not limited to, the review of historical environmental, local, and federal reports and records associated with the Site and nearby properties. The following sections present the results of this review.

5.1 Standard Environmental Record Sources

Environmental Data Resources, Inc. (EDR) performed a search of electronic environmental databases for the Site. Historical use data reported by EDR is provided in Appendix C, and the full report provided by EDR is included in Appendix D. This search included, but was not limited to, the following major record sources and corresponding search radii as defined in the Phase I ESA Standard Practice for each database:

- Federal Sources;
  - National Priority List (NPL) Site (1.0 mile),
  - Proposed NPL Sites (1.0 mile),
  - Delisted NPL Sites (1.0 mile),
  - Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites (0.5 mile),
  - CERCLIS No Further Remedial Action Planned (NFRAP) Sites (0.5 mile),
  - Resource Conservation and Recovery Act (RCRA) Corrective Action (CORRACTS) Report (1.0 mile),
  - RCRA Treatment Storage and Disposal Facility (TSDF) Sites (0.5 mile),
  - RCRA Generators List – Large Quantity and Small Quantity Generators (0.25 mile),
  - Federal Emergency Response Notification System (ERNS) Sites (Site only),
  - Hazardous Materials Information Reporting System (HMIRS) Sites (Site only),
  - Institutional Control/Engineering Control Registry (Site only),
  - U.S. Brownfields Sites (0.5 mile),
  - Superfund (CERCLA) Consent Decrees (1.0 mile), and
  - Facility Index System/Facility Registry System (FINDS) Sites (Site only);

- State and Tribal Sources;
  - State Hazardous Waste Sites (SHWS) (1.0 mile),
  - State Septage and Sludge Sites (0.5 mile),
  - State Landfill or Solid Waste Disposal Sites (0.5 mile),
  - State Listing of Potentially Hazardous Waste Sites (ALLSITES) (0.5 mile),
  - State Leaking Storage Tank Sites (0.5 mile),
  - State Registered Storage Tank (UST/AST) list (Site and Adjoining Properties),
  - State Lien list (LIEN) (Site only),
  - State Land Use Controls (AUL) Sites (Site only),
  - State Voluntary Cleanup Sites (0.5 mile),
  - State Brownfields Sites (0.5 mile), and
  - State Baseline Environmental Assessment (BEA) Database Sites (0.5 mile).

Additional environmental record databases were searched by EDR to enhance and supplement the standard environmental record sources. Appendix D supplies a full listing of databases and sources searched. In addition, EDR was also contracted to provide a Historical Aerial Photograph Report, Historical Topographic Map Report, and a City Directory Report which are provided in Appendix C. Sanborn® Fire Insurance Maps were not available for this Site.

5.2 Environmental Records Review Results

Federal, State, and Tribal environmental records databases were searched by EDR within the search radius defined in the Phase I ESA standard for each database (see Section 5.1). EDR's database search report (including databases searched, radius search distances, and detailed information regarding listed properties) is presented as Appendix D. Results of the environmental records review are provided in the following subsections.

5.2.1 Federal, State, and Tribal Record Results for the Site

The Site and remaining ("off-site") portions of Lot 1 were identified on MEDEP's Uncontrolled Sites List (Site# REM02926). Based on information provided by the Town and MEDEP, several MEDEP inspections and previous environmental investigations have been conducted at Lot 1, as summarized in Section 5.4.

5.2.2 Federal, State, and Tribal Record Results within the Search Radii

SME has evaluated the properties identified within the environmental regulatory databases identified in Section 5.1 that are within the appropriate search radii. The following paragraphs discuss listed properties within appropriate radii that were identified by EDR in upgradient locations from the Site are unlikely to have adversely impacted environmental conditions at the Site:

- According to MEDEP spill report P-618-2006, approximately one gallon of #2 fuel oil was discharged to a concrete basement of a residence located at 3 Spring Street, approximately 500 feet-northwest and upgradient from the Site. The spill report stated that product was recovered and no further action was necessary, therefore this spill is not anticipated to impact environmental conditions at the Site.
- According to MEDEP spill report P-974-2008, a "minimal" quantity of #2 fuel oil was discharged into the crawl space of a residence located at 17 School Street, approximately 850 feet-northwest and upgradient from the Site. The crawl space had an earthen floor that consisted of bedrock outcroppings and gravel. The spill report stated that oil-contaminated gravel was removed down to bedrock and a vapor barrier was installed. Based on the remedial actions discussed in the spill report and the reported quantity of product released, this spill is unlikely to have impacted environmental conditions at the Site.
- According to MEDEP spill report P-1031-2024, a "small" discharge of #2 fuel oil was reported at 11 Spring Street in Bowdoin. No such address was located in the Town of Bowdoin, therefore SME determined that this spill was mislabeled by MEDEP and was actually located at 11 Spring Street in Bowdoinham, which is approximately 500 feet-northwest and upgradient from the Site. The spill report stated that product was cleaned by CN Brown. Due to the reported cleanup efforts and quantity released, this spill is not anticipated to have impacted environmental conditions at the Site.

Based on our review of EDR's findings and MEDEP and municipal records, remaining properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have adversely impacted environmental conditions at the Site. This conclusion is based upon information provided by MEDEP, which indicated that these properties have been properly investigated and/or remediated with prior MEDEP oversight/guidance or the properties are located at distances/elevations that are unlikely to have adversely impacted the Site.

Copies of relevant spill reports, tank registrations, and MEDEP records are provided in Appendix D.

EDR Orphan Sites

EDR orphan site designation indicates insufficient address information for the property to be plotted. SME reviewed the three (3) orphan sites identified by EDR. These properties were determined to be located at distances that are unlikely to impact the Site.

MEDEP Environmental and Geographic Analysis Database and PFAS Properties

The MEDEP Environmental and Geographic Analysis Database (EGAD) was searched for information regarding septage and sludge spreading properties that may be located on or near the Site. No septage or sludge spreading properties were identified in the vicinity of the Site. According to EGAD, there has been no testing for per- or polyfluoroalkyl substances (PFAS) on or near the Site.

5.3 Historical Local Records

On January 20, 2026, SME reviewed historical records, tax cards, and reports associated with the Site. This documentation included redevelopment plans for the Site, septic plans, environmental records, and various permits.

These records have been included within Appendix D.

5.4 Prior Environmental Site Assessments

The following paragraphs present a summary of historic environmental investigations that have been completed for the Site. Copies of these reports have been previously filed with the Town of Bowdoinham and/or MEDEP. Copies are included in Appendix A and Appendix D.

- "Central Chemical Co., Center Street Facility, Phase I Environmental Site Assessment," Bowdoinham, Maine, Pine Tree Engineering, Inc., April 1998.
- "Final Preliminary Assessment Report for Central Chemical Corporation, Bowdoinham, Maine," MEDEP, March 2020.
- "Phase I Environmental Site Assessment, Former Town of Bowdoinham, Maine Public Works Site, 8 River Road, Bowdoinham, Maine 04008," Acorn Engineering, Inc., February 2021.
- "Limited Phase II Environmental Site Assessment, Former Bowdoinham Public Works Property, 8 River Road, Bowdoinham, Maine," Haley Ward Inc., August 2021.
- "Additional Soil Sampling, Former Bowdoinham Public Works Property, 8 River Road, Bowdoinham, Maine," Haley Ward Inc., October 2021, and

- "Mold & Asbestos Assessment at 8 River Road property in Bowdoinham, Maine," Air Quality Management Services, Inc., December 2025.

From 1986 to 1997, MEDEP and Maine's Board of Pesticide Control conducted periodic inspections/audits when the fertilizer repackaging and distribution facility was operational and after its closure. During their inspections, MEDEP and Maine's Board of Pesticide Control did not identify hazardous waste management violations or violations of pesticide control regulations.

A 1998 Phase I ESA performed by Pine Tree Engineering, Inc. (Pine Tree) identified petroleum storage containers, floor drains, and solid waste debris at the property, but did not identify any RECs associated with Lot 1, including the Site. Pine Tree did not recommend further environmental investigation at that time.

In 2019, MEDEP performed a limited Phase II ESA, which was triggered by a citizen's report of petroleum sheen being observed along the banks of the Cathance River adjacent to Lot 1. MEDEP's Phase II ESA included the installation of two (2) pore water sample locations along the banks of the Cathance River, excavation of 11 test pits at the property, and the collection of soil and pore water samples for laboratory analysis of contaminants of concern (COCs), including volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), volatile and semi-volatile petroleum constituents, Resource Conservation Recovery Act (RCRA) 8 metals, and polychlorinated biphenyls (PCBs).

Based on the laboratory results, various COCs were detected in soil and pore water samples, but at concentrations that did not exceed MEDEP's Remedial Action Guidelines (RAGs), with the exception of arsenic detected in soil samples. Arsenic was detected at concentrations ranging from 6.54 to 17 milligrams per kilogram (mg/kg). Some of the arsenic concentrations exceeded MEDEP's RAG for Residential exposure risk (9.3 mg/kg), but none of the arsenic concentrations exceeded MEDEP's RAG for Park User (26 mg/kg) or Undeveloped "Background" concentration of arsenic in Maine soils of 28 mg/kg. Based on these results, MEDEP did not recommend further investigation or remedial action at that time.

In February 2021, Acorn Engineering, Inc. (Acorn) completed a Phase I ESA and identified several RECs in connection with the former use of Lot 1 as a fertilizer and chemical plant and as the Town's Public Works Department, and the property's proximity to the Maine Central Railroad tracks. Based on their Phase I ESA findings, Acorn recommended additional investigation be conducted to evaluate whether the identified RECs had adversely impacted environmental conditions at the Site.

In July 2021, Haley Ward, Inc. (Haley Ward) conducted a Limited Phase II ESA at Lot 1 to further evaluate RECs identified in Acorn's Phase I ESA. Haley Ward's Limited Phase II ESA included the advancement of 20 soil borings throughout the property, and the collection of soil samples for laboratory analysis of various

COCs, including VOCs, SVOCs, volatile and semi-volatile petroleum constituents, RCRA 8 metals, PCBs, pesticides, and herbicides.

Based on the laboratory results, various COCs were detected in soil samples, but at concentrations that did not exceed MEDEP's RAGs with the exception of arsenic detected in one soil sample. Similar to MEDEP's 2019 subsurface investigation results, arsenic was detected in one soil sample at a concentration of 30 mg/kg, which exceeded its MEDEP RAG for Park User (26 mg/kg). Based on these results, Haley Ward recommended additional delineation of surficial soils with arsenic concentrations exceeding MEDEP's RAG for Park User exposure risk. Note that Haley Ward submitted soil samples from 0 to 4 feet-below ground surface (bgs) interval for laboratory analysis, which was not compliant with MEDEP's RAGs for Park User exposure risk (0 to 2 feet-bgs).

In September 2021, Haley Ward completed a supplemental soil investigation to evaluate the extent of soils with arsenic concentrations exceeding MEDEP's RAG for Park User exposure risk. Haley Ward's supplemental investigation consisted of collecting six (6) surficial soil samples (0 to 2 feet-bgs for laboratory analysis of arsenic. Results of this investigation indicated that arsenic was detected in surficial soils at Lot 1, but at concentrations that did not exceed their respective MEDEP Undeveloped "Background" concentrations or RAGs for Park User exposure risk. Haley Ward concluded that previously identified, arsenic-impacted soils were likely concentrated in the 2 to 4 feet-bgs depth, and recommended that the Town of Bowdoinham "remain observant of soils during future Site work." Haley Ward did not recommend additional investigations at that time.

In 2025, Air Quality Management Services, Inc. (AQM) performed a mold and asbestos assessment of the Site building, which consisted of the collection of mold air samples, mold surface samples, and asbestos bulk samples. AQM detected elevated mold levels in an air sample and surface sample collected in the basement. AQM also identified asbestos-containing flooring and floor underlayment in the Site building.

5.5 Historical Use Information on the Site

To determine the historical use of the Site, SME reviewed historical records, including USGS topographic quadrangles, aerial photographs, and Town of Bowdoinham municipal files for the Site. Sanborn® Fire Insurance Maps were not available for this Site.

The following historical records were reviewed as part of this ESA:

- Historical topographic maps from 1892, 1894, 1920, 1957, 1980, 1991, 1996, 2000, 2014, 2018, 2021, and 2024;
- Aerial photographs from 1940, 1953, 1960, 1972, 1977, 1985, 1996, 2007, 2011, 2015, 2018, and 2023;

- City Directory records from 1961, 1967, 1992, 1995, 2000, 2005, 2010, 2014, 2017, and 2022; and
- Publicly available municipal files for the Site.

Based on available information, Lot 1, including the Site, reportedly consisted of unimproved land until the property was developed as a fertilizer repackaging and distribution facility circa 1900. Three companies (Sagadahoc Fertilizer Company, Corenco Corporation, and Central Chemical Corporation) reportedly operated the fertilizer repackaging and distribution facility until its closure circa 1988. During its operation, a fertilizer plant was constructed circa 1900 along Maine Central Railroad's tracks, southwest of the Site building; and a storage building was constructed circa 1957 near the Cathance River, also southwest of the Site building.

In 1998, Lot 1 was purchased by the Town of Bowdoinham, and the fertilizer plant building was demolished in 1999. Starting in the late 1990s, the Site building was occupied by an antiques store and remaining developed portions of Lot 1 were used by the Town's Department of Public Works. After relocating Town Public Works operations to another location circa 2018, the storage building was demolished, and off-site portions of Lot 1 were cleared to facilitate the Town's redevelopment of the property as a public park with a public boat ramp.

Copies of aerial photographs, topographic maps, and City Directory records are provided in Appendix C.

5.6 Historical Use Information on Adjoining Properties

The historical uses of the properties adjacent to the Site were researched using the same environmental reports and records listed within Section 5.5 above. As previously discussed, the Site ("Riverview House") is surrounded by remaining portions of Lot 1, which are considered "off-site" for the purposes of this ESA. Therefore, the historical use information for adjoining properties is summarized in Section 5.5.

6.0 INTERVIEWS

6.1 Interview with the Owner's Representative

The Town of Bowdoinham is the current Owner of the Site. Yvette Meunier, the Director of Planning and Development for the Town of Bowdoinham, was identified as the Owner's representative and was interviewed on January 29, 2026.

Yvette Meunier stated that the Site is utilized as a park and office space. According to Yvette Meunier, the Site is connected to municipal water and has a septic tank that was installed circa 1950. Yvette Meunier was aware of former on-site tanks that were removed in 1985. Yvette Meunier was not aware of noxious odors, stressed vegetation, or drums at the Site. Yvette Meunier provided SME with code enforcement and assessor files associated with the Site.

Interview documentation is contained in Appendix E and information obtained from the Owner Interview Questionnaire has been included in pertinent sections of this report.

6.2 Interviews with Local Government Officials

SME attempted to interview two local officials who might have knowledge of environmental issues associated with the Site for this ESA.

SME spoke with Yvette Meunier, the Director of Planning and Development for the Town of Bowdoinham, on January 20, 2026, regarding information about the Site. Yvette Meunier did not have personal knowledge of information pertaining to RECs at the Site. Yvette Meunier provided SME with available code enforcement and assessor files on the Site to review. Information obtained from these files has been included in pertinent sections of the report.

SME made numerous attempts to contact the Bowdoinham Fire Department to obtain information associated with the Site. However, the Fire Department has not responded to SME's request for information at the time this report was prepared.

7.0 FINDINGS

The Site encompasses approximately 1,000 square feet and is owned by the Town of Bowdoinham. The Site is a portion of the real property identified by Town's Assessor's Office as Lot 1 on Tax Map U01. Lot 1 encompasses approximately 20.58 acres and is bound by Maine Central Railroad tracks to the north and northwest, Cathance River to the east, River Road to the northeast, and undeveloped wooded and wetland areas to the south. The Site consists of an office building, known as the "Riverview House," and exterior areas surrounding this building, which is located at 8 River Road (Route 24) in the Town of Bowdoinham. The Site is surrounded by remaining portions of Lot 1, which are considered "off-site" for the purposes of this ESA.

The Site is currently improved with an approximately 1,000-square-foot, single-story structure (the "Site building" or the "Riverview House"), which was constructed in 1945 on a concrete foundation with a full basement. The building has reportedly been utilized as an office (originally in support of the fertilizer facility and more recently rented as leased office space for a software company) and retail (an antique store) since its construction. The building has vinyl siding, an asphalt-shingled roof, and a basement with a concrete floor and foundation. The Site building is served with public water, provided by the Bowdoinham Water District, and is connected to a private septic system, located southeast of the building. The Site building is currently heated with a propane-fired heating system and was formerly heated by a fuel oil-fired heating system.

Based on available information, Lot 1, including the Site, reportedly consisted of unimproved land until the property was developed as a fertilizer repackaging and distribution facility circa 1900. Three companies (Sagadahoc Fertilizer Company, Corenco Corporation, and Central Chemical Corporation) reportedly operated the fertilizer repackaging and distribution facility until its closure circa 1988. During its operation, a fertilizer plant was constructed circa 1900 along Maine Central Railroad's tracks, southwest of the Site building; and a storage building was constructed circa 1957 near the Cathance River, also southwest of the Site building. In 1998, Lot 1 was purchased by the Town of Bowdoinham to be used as their public works, and the fertilizer plant building was demolished in 1999. Starting in the late 1990s, the Site building was occupied by an antiques store. After relocating Town Public Works operations to another location circa 2018, the storage building used by public works was demolished and off-site portions of Lot 1 were cleared to facilitate the Town's redevelopment of the property as a public park with a public boat ramp.

SME performed a reconnaissance of the Site on January 20, 2026. SME observed an approximate 100-gallon LP AST and fill and vent pipes for a 275-gallon fuel oil AST along the southwestern side of the Site building. The 275-gallon fuel oil AST is located in the Site building's basement. The 275-gallon AST reportedly contains residual fuel oil and SME observed *de minimis* fuel oil staining on top of the tank. The concrete floor of the basement was partially flooded with a few inches of standing water at the time of Site reconnaissance, including the floor beneath the AST. However, SME did not observe sheens, odors,

or other evidence of a fuel oil release in connection with the AST. One sump with a sump pump was observed in the basement of the Site building. The sump pump discharges groundwater onto the ground surface near the eastern corner of the building. No odors, sheens, or other evidence of a HSPP release were observed on standing water in the sump or on the ground surface at the sump pump discharge location during reconnaissance. SME observed various over-the-counter household cleaning chemicals (i.e., 1-pint to 1-gallon-sized) on the first floor of the Site building. No evidence of a HSPP release was observed in connection with the household cleaning chemicals during reconnaissance.

SME reviewed historical, local, state, and federal reports and records, environmental databases, and an environmental and historical documentation report provided by EDR to assist with the identification of RECs in connection with the Site or nearby properties. Properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon documented remedial activities and/or investigations completed by MEDEP and/or the locations and distances of these properties from the Site, which make it unlikely for these properties to have impacted environmental conditions at the Site.

The Site and remaining ("off-site") portions of Lot 1 were identified on MEDEP's Uncontrolled Sites List (Site# REM02926). Based on information provided by the Town and MEDEP, several MEDEP inspections and previous environmental investigations have been conducted at Lot 1, as summarized below:

- From 1986 to 1997, MEDEP and Maine's Board of Pesticide Control conducted periodic inspections/audits when the fertilizer repackaging and distribution facility was operational and after its closure. During their inspections, MEDEP and Maine's Board of Pesticide Control did not identify hazardous waste management violations or violations of pesticide control regulations.
- A 1998 Phase I ESA performed by Pine Tree identified petroleum storage containers, floor drains, and solid waste debris at the property, but did not identify any RECs associated with Lot 1, including the Site. Pine Tree did not recommend further environmental investigation at that time.
- In 2019, MEDEP performed a limited Phase II ESA, which was triggered by a citizen's report of petroleum sheen observed along the banks of the Cathance River adjacent to Lot 1. MEDEP's Phase II ESA included the installation of two (2) pore water sample locations along the banks of the Cathance River, excavation of 11 test pits at the property, and the collection of soil and pore water samples for laboratory analysis of COCs, including VOCs, SVOCs, volatile and semi-volatile petroleum constituents, RCRA 8 metals, and PCBs. Based on the laboratory results, various COCs were detected in soil and pore water samples, but at concentrations that did not exceed MEDEP's RAGs with the exception of arsenic detected in soil samples. Arsenic was detected at concentrations ranging from 6.54 to 17 mg/kg. Some of the arsenic concentrations exceeded MEDEP's RAG for Residential exposure risk (9.3 mg/kg), but none of the arsenic concentrations exceeded MEDEP's RAG for Park User (26 mg/kg) or Undeveloped "Background" concentration of

arsenic in Maine soils of 28 mg/kg. Based on these results, MEDEP did not recommend further investigation or remedial action at that time.

- In February 2021, Acorn completed a Phase I ESA and identified several RECs in connection with the former use of Lot 1 as a fertilizer and chemical plant and as the Town's Public Works Department, and the property's proximity to the Maine Central Railroad tracks. Based on their Phase I ESA findings, Acorn recommended an additional investigation should be conducted to evaluate whether their RECs had adversely impacted environmental conditions at the Site.
- In July 2021, Haley Ward conducted a Limited Phase II ESA at Lot 1 to further evaluate RECs identified in Acorn's Phase I ESA. Haley Ward's Limited Phase II ESA included the advancement of 20 soil borings throughout the property, and the collection of soil samples for laboratory analysis of various COCs, including VOCs, SVOCs, volatile and semi-volatile petroleum constituents, RCRA 8 metals, PCBs, pesticides, and herbicides. Based on the laboratory results, various COCs were detected in soil samples, but at concentrations that did not exceed MEDEP's RAGs, with the exception of arsenic detected in one soil sample. Similar to MEDEP's 2019 subsurface investigation results, arsenic was detected in one soil sample at a concentration of 30 mg/kg, which exceeded its MEDEP RAG for Park User (26 mg/kg). Based on these results, Haley Ward recommended additional delineation of surficial soils with arsenic concentrations exceeding MEDEP's RAG for Park User exposure risk. Note that Haley Ward submitted soil samples from 0 to 4 feet-bgs interval for laboratory analysis, which was not compliant with MEDEP's RAGs for Park User exposure risk (0 to 2 feet-bgs).
- In September 2021, Haley Ward completed a supplemental soil investigation to evaluate the extent of soils with arsenic concentrations exceeding MEDEP's RAG for Park User exposure risk. Haley Ward's supplemental investigation consisted of collecting six surficial soil samples (0 to 2 feet-bgs) for laboratory analysis of arsenic. Results of this investigation indicated that arsenic was detected in surficial soils at Lot 1, but at concentrations that did not exceed their respective MEDEP Undeveloped "Background" concentrations or RAGs for Park User exposure risk. Haley Ward concluded that previously identified, arsenic-impacted soils were likely concentrated in the 2 to 4 feet-bgs depth and recommended that the Town of Bowdoinham "remain observant of soils during future Site work." Haley Ward did not recommend additional investigations at that time.
- In 2025, AQM performed a mold and asbestos assessment of the Site building, which consisted of the collection of mold air samples, mold surface samples, and asbestos bulk samples. AQM detected elevated mold levels in an air sample and surface sample collected in the basement. AQM also identified asbestos-containing flooring and floor underlayment in the Site building.

8.0 CONCLUSIONS AND OPINIONS

SME has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E1527-21 and U.S.EPA AAI (40 CFR Part 312) for the Site identified as the "Riverview House," located at 8 River Road in the Town of Bowdoinham, Sagadahoc County, Maine. Any exceptions to, or deletions from, this practice are described in Sections 1.2 and 10.0 of this report.

Based on the results of this Phase I ESA, SME has not identified RECs in connection with the Site.

SME also concludes that the RECs identified in Acorn's 2021 Phase I ESA for Lot 1 are considered HRECs. This conclusion is based on the results of MEDEP's 2019 and Haley Ward's 2021 environmental investigations, which identified various COCs in soil and pore water samples collected at Lot 1, but at concentrations that did not exceed their current MEDEP RAGs (November 15, 2023) for Park User or Construction Worker exposure risk.

9.0 RECOMMENDATIONS

Based on the findings of this assessment, SME does not recommend further investigation at this time. However, SME recommends the following with respect to the Town of Bowdoinham's proposed redevelopment of the property as a public park:

1. Consideration should be given to entering the Site into the MEDEP VRAP. MEDEP VRAP is a voluntary program that offers technical review of environmentally-impacted sites and ultimately provides state liability protections for interested parties, provided that proper and appropriate environmental assessment and cleanup/remedial actions are completed, as approved by MEDEP.

   As a condition of VRAP approval, MEDEP may require a deed restriction and/or institutional controls in the form of a DEC. The DEC may require preparation and adherence to an EMMP since soils at the property should not be exported off-site for unrestricted reuse since soils contain various COCs, but at concentrations that do not exceed MEDEP's RAGs (November 15, 2023) for Park User or Construction Worker exposure risk.

2. Hazardous building materials, including ACMs and universal waste, identified in the Site building will need to be properly abated and/or removed, if these materials are disturbed during future Site redevelopment, including renovation and/or demolition of the building, depending on the extent of redevelopment; and

3. Over-the-counter household cleaning chemicals remaining in the Site building, the 100-gallon LP AST, and inactive 275-gallon fuel oil AST and associated piping should also be removed from the Site, as necessary, prior to proposed renovation and/or demolition of the building.

10.0 NON-SCOPE CONSIDERATIONS

The following environmental issues are outside the scope of the Standard Practice defined by ASTM E1527-21. This Phase I ESA did not include identification or evaluation of these non-scope items including, but not limited to:

- Asbestos-containing building materials;
- Biological agents;
- Cultural and historic resources;
- Ecological resources;
- Endangered species;
- Health and safety;
- Indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment;
- Industrial hygiene;
- Lead-based paint;
- Lead in drinking water;
- Mold;
- PCB-containing building materials;
- Naturally occurring radon;
- Regulatory compliance;
- Substances not defined as hazardous substances unless or until such substances are classified as a CERCLA hazardous substance; and
- Wetlands.

11.0 SIGNATURE OF THE ENVIRONMENTAL PROFESSIONAL

This Phase I ESA was conducted in accordance with the requirements of ASTM E1527-21 by the undersigned. Work completed on this Phase I ESA by an individual who is not considered an environmental professional was completed under the supervision of an environmental professional.

SIGNATURES OF REPORT AUTHOR

Caitlin Keady
Environmental Engineer

The undersigned individuals meet the definition of an Environmental Professional as defined in 312.10 of 40 CFR Part 312, and have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. Except for the limitations listed in Section 1.2, SME has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

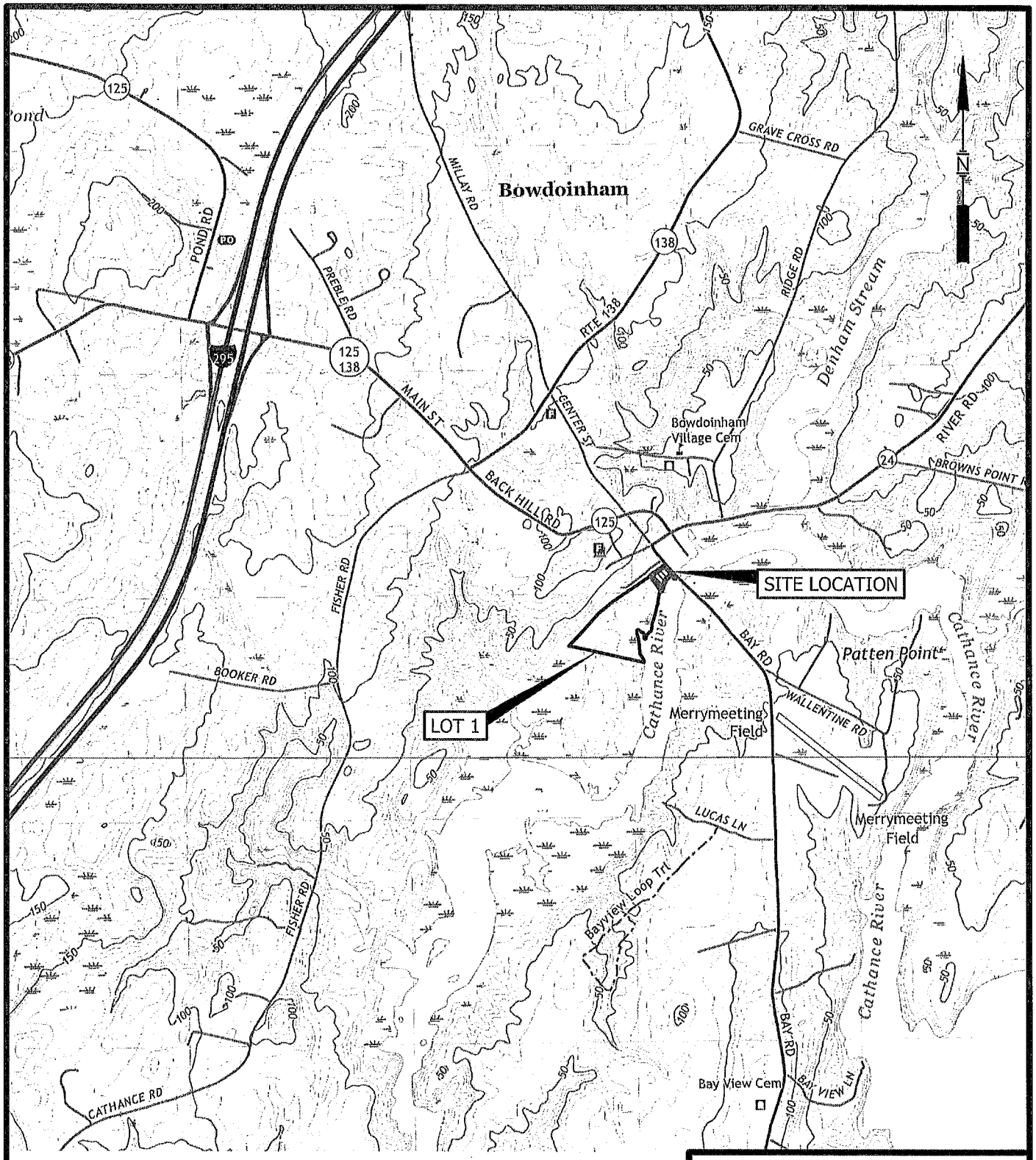
Aaron R. Martin, L.G.
Senior Geologist

Stephen J. Dyer, P.E.
Environmental Engineering Lead

Documentation of the qualifications of the Environmental Professionals are contained in Appendix F.

FIGURES

SME
SEVEE & MAHER
ENGINEERS



BASEMAP ADAPTED FROM 7.5 MIN USGS TOPO QUADS
BOWDOINHAM, ME - 2021
BRUNSWICK, ME - 2021

1000 0 2000 FEET

FIGURE 1
SITE LOCATION MAP
RIVERVIEW HOUSE
8 RIVER ROAD
BOWDOINHAM, MAINE

SME
SEVEE & MAHER
ENGINEERS

DWG: SITELOC LMN: NONE CTB: SME-STD.CTB JOB#: 251039.04 REV: 3/11/2026

C:\Users\bwb\OneDrive - SME_SharePoint\Brownfields - Clients\MCOGIT\04 8 River Rd Bowdoinham Ph 1\Phase I ESA\Acad\Figures\SITELOC.dwg, A_FIG 1, 3/11/2026 3:49:03 PM, bwb

NOTES:

1. AERIAL PHOTO FROM GOOGLE EARTH, DATED 10/21/2024.
2. PARCELS FROM MAINE GIS DATA CATALOG.

NOTES:

- LOT 1 BOUNDARY
- SITE BOUNDARY
- FORMER BUILDINGS (APPROXIMATE)
- ABUTTING PARCELS
- TEST PIT LOCATIONS (MEDEP, 2019)
- PORE WATER SAMPLE LOCATIONS (MEDEP, 2019)
- SOIL BORING LOCATIONS (HALEY WARD, 2021)

100 0 200 FEET

FIGURE 2
SITE PLAN
RIVERVIEW HOUSE
8 RIVER ROAD
BOWDOINHAM, MAINE

SME
SEVEE & MAHER ENGINEERS

DWG: SITEPLAN LMN: NONE CTB: SME-STD.CTB JOB#: 251039.04 REV: 3/13/2026

C:\Users\lwu\OneDrive - SMEL_SharePoint\Brownfields - Clients\MCOG\T04 8 River Rd Bowdoinham Ph 1\Phase I ESA\Acad\Figures\SITEPLAN.dwg, B_FIG 2, 3/13/2026 3:16:13 PM, lwu

Map Scale: 1:1,590 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 26, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 11, 2021—Oct 29, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BuB2	Lamoine-Buxton complex, 0 to 8 percent slopes	C/D	4.3	81.6%
Tn	Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes	A/D	0.1	2.6%
W	Water		0.8	15.8%
Totals for Area of Interest			**5.3**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher