Brownfield Remedial Planning and Implementation for the Former Fellows Gear Shaper Facility, Springfield, Vermont

STONE ENVIRONMENTAL

Services / Expertise
EPA-Funded Brownfield Redevelopment
Brownfield Economic Revitalization Alliance
Site-Specific Quality Assurance Project Plan
Remedial Site Investigation / Phase III ESA
Corrective Action Planning & Implementation
Groundwater and Soil Sampling
High Resolution Site Characterization
Asbestos and Building Material Abatement
Ongoing Monitoring and Maintenance Plan
New Market Tax Credits
US EPA Revolving Loan Fund
TSCA and RCRA Compliance
VT DOH Asbestos Program

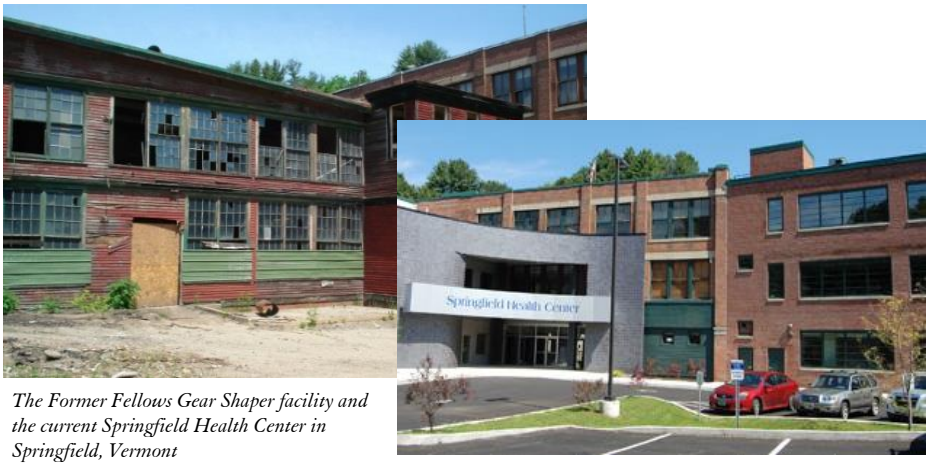
Markets
Private Property/Site Owner
Commercial Redevelopment
Local and Regional Government

Project Location
Springfield, Vermont

Date Completed
2010 - Present

Project Team
Dan Voisin (Project Manager)
Lee Rosberg
David Abrahamson, PE PMP
Katrina Mattice, PE
Dan Curran
Peter Lazorchak, PE, LEED AP
Barb Patterson
Warren Rich

Subcontractors/Consultants
Clay Point Associates, Con-Test Lab, Vermont Underground Locators, Elisa Papazian – Historical Resource Consulting



The Former Fellows Gear Shaper facility and the current Springfield Health Center in Springfield, Vermont

In 2010, One Hundred River Street, LLC retained Stone to serve as the Qualified Environmental Professional during the implementation of a Vermont DEC approved Corrective Action Plan and a EPA TSCA Division Risk-Based Cleanup Plan in accordance with 40 CFR 761.61(b) at the former Fellows Gear Shaper facility located in Springfield, Vermont. Fellows Gear Shaper operated a machine manufacturing facility within the 200,000 square foot facility from 1896 to 1970. Historical uses at the Site had resulted in the release of chlorinated solvents, petroleum, and polychlorinated biphenyl contaminated cutting oils at the site. The owners began redevelopment of the site for commercial use in early 2011 for reuse as an approximately 60,000 square foot health care facility with retail, dining, light manufacturing, and structured parking.

Stone performed additional assessment to support requests for bids, prepared addendums to the remedial planning documents, and oversaw implementation of remedial activities, including the installation of remedial barriers and a sub-slab depressurization system, underground storage tank closures, production well closures, and demolition and excavation of select portions of the site building.

Stone deemed remedial actions necessary prior to redevelopment due to the presence of polychlorinated biphenyls (PCBs) within building materials and petroleum and chlorinated solvents within site groundwater and soil gas from past use as a machine shop. Implementation of the risk-based clean-up plan required close communication with all project stakeholders, including weekly meetings at the site with the site owners, anchor tenant and their respective contractors, and local authorities.

Stone performed verification sampling of indoor air and wipe samples from barriers following completion of each stage of remediation to ensure future users were not at risk of exposure contaminants. Stone documented cleanup activities with Vermont DEC and EPA TSCA. Commensurate with the remedial implementation, Stone prepared an ongoing monitoring and maintenance implementation plan (MMIP).

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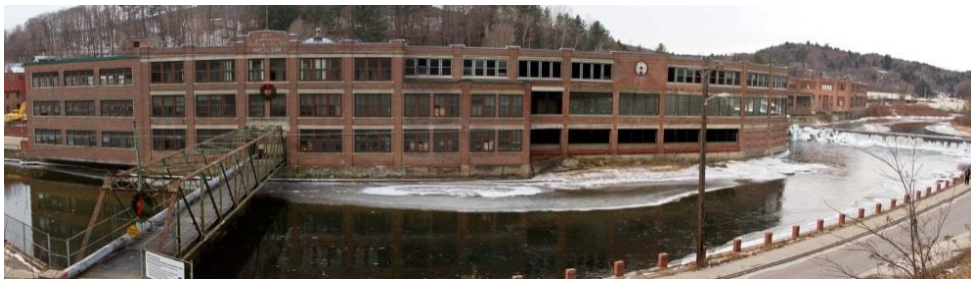
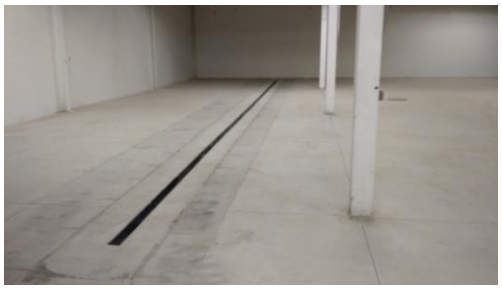
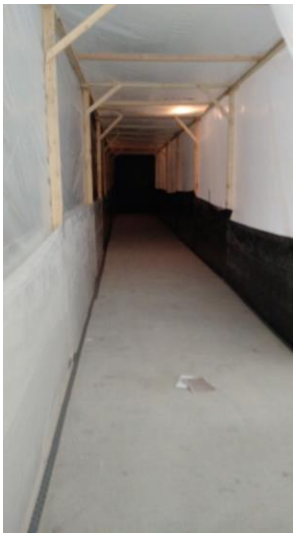
Remedial activities utilized a Brownfield Technical Assessment Grant, New Market Tax Credits, an EPA Cleanup Grant, and private investment.

The property has been partially redeveloped and is leased by several tenants, with Springfield Medical Care Systems, the anchor tenant, leasing a large portion of the building for doctor offices and physical therapy; the clinic is currently seeing patients with a daily traffic of approximately 300 visitors to the site. Over $12 million has been invested in the redevelopment of the site.



100 River Street building.





Right: The containment structure minimized contamination during concrete cutting. Above: The completed trench drain.

In 2016, Vermont Beer Shapers (formerly Trout River Brewery) needed up to 14,000 square feet of space within the site building for use as a new brewery. Using funds available through the Vermont Economic Development Authority (VEDA) and the Agency of Commerce and Community Development (ACCD), Stone worked with contractors to install a trench floor drain and retrofit an existing wastewater line, requiring cutting through the concrete cap into PCB-contaminated concrete and soil in one area of the Site building. Stone provided technical advice on minimizing the potential for contamination of the clean workspace to the construction contractor hired by the tenant, and performed post-construction PCB wipe testing to confirm that the workspace remained PCB-free in accordance with the Ongoing Monitoring Maintenance Implementation Plan, Site Specific Protocols, and CAPs and, as well as collecting waste characterization samples for concrete and waste cutting and decontamination fluids.

In 2019, Stone was retained by a new prospective purchaser development group to perform environmental due diligence of the property and adjoining properties located at 5 and 65 Pearl Street to support redevelopment of unoccupied portions of the 100 River Street parcel and the two adjacent parcels as a senior residential care facility. Five Pearl Street contains a vacant lot formerly owned by Parks & Woolson and was used to manufacture fiberglass panels. Sixty-five Pearl Street was formerly owned by Fellows Gear Shaper and later Vermont Machine Tool Company and was originally part of the Fellows Gear Shapers Complex and has a long history of machine manufacturing. Based on the findings of the Phase I/II Environmental Site Assessments, we anticipate support remedial planning in accordance with I-Rule and TSCA regulations for the remediation of PCBs in building materials and other contaminants identified during the due diligence phase.