

Richmond Town Center

Proposal/Qualifications for Architectural and Engineering Services

May 11, 2022



**BLACK
RIVER
DESIGN**
ARCHITECTS

73 Main Street, Suite 9
Montpelier, Vermont 05602
p: (802) 223-2044
w: www.blackriverdesign.com

[1. Cover Letter](#) 1

[2. Introduction to the Architect and Team](#)..... 3

[3. Qualifications and Experience of Key Staff](#)..... 17

[4. References](#)..... 29

[5. Rate Schedule](#) 30

APPENDIX:

[Additional Project Information](#) 31

[Additional Consultant Qualifications](#)..... 51

[back to table of contents](#)



May 11, 2022

Josh Arneson, Town Manager
203 Bridge Street
Richmond, VT 05477
email: jarneson@richmondvt.go

Dear Mr. Arneson and Members of the Selection Committee:

The Richmond Town Center Building Project is one that fits Black River Design's expertise and passions perfectly. Our resume of civic projects includes public safety, municipal offices, libraries, and schools. We love working with groups – school boards, committees, trustees, and engaged citizens – to lead a collaborative process that finds the sweet spot between needs, wishes and affordability.

Black River Design takes special pride in renovating, reviving, and rejuvenating valued buildings, giving them renewed life and purpose in a new century full of fast changing standards and expectations. We feel part of a town's history and heritage are lost when it loses an old building. We work hard to find a way to keep these old friends in use. Sometimes part or all of a building must be taken down, but it is a decision that cannot be taken lightly or without looking at all alternatives.

We believe this will be a very important part of this study. What is the best that can be done to improve the Town Center? Is that enough? How does it compare to a new facility? These are the most critical questions to ask and the most difficult answers to provide. Doing so while maintaining public interest and engagement in the process is key to the success of the project.

Our team has superior experience in public building design, energy retrofitting, historic preservation, sustainability, flood plains, accessibility, urban landscaping and the other "hard" components of your project. We possess without question the skills and experience you are looking for in these areas. Even more importantly, we have the "soft" skills needed to lead you through the process from vision to bond vote. I have led innumerable committees and boards through the pre-bond process. This requires experience and flexibility gained only by having been through it over and over again. I have been working on public projects for more than 35 years, 20 as a partner at Black River Design. I will be involved in your project from start to finish and live only ten minutes away in Williston.

Our consultants are valued teammates from past projects – many of them highlighted in the following pages. These pages speak for themselves to demonstrate the depth and breadth of our experience as relates to your project. Our references can speak to our ability to lead committees like yours through the bigger challenge of identifying the right project in the right place at the right cost. I hope you get a chance to talk to them.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Hemmelgarn". The signature is stylized with large loops and a long horizontal stroke extending to the right. Below the signature, the name "John Hemmelgarn" is printed in a small, black, sans-serif font.

SERVICES

Planning

- Feasibility Studies
- Space Planning
- Site Planning

Architecture

- Complete Design Services
- Facilities Analysis
- Schematic Design
- Contract Documents
- Historic Renovation

Energy Efficiency and Sustainability

- Design Consulting
- LEED Certification
- Living Building Challenge

Lighting Design

- Exterior
- Interior

Interiors

- Interior Space Planning and Design
- Furnishings Selection

PARTNERS

- Jim Drummond, AIA, NCARB
- John Hemmelgarn, Architect
- Mark Montminy, Architect
- Keith Robinson, Architect

CONTACT INFORMATION

John Hemmelgarn, Partner
e: johnh@blackriverdesign.com

Black River Design, Architects
73 Main Street, Suite 9
Montpelier, VT 05602
p: (802) 223-2044
w: blackriverdesign.com

CREATING COMMUNITY

We believe that buildings should bring a community together. On a small scale, we do this by designing spaces that encourage planned and unplanned interaction. On a larger scale, we do this by building consensus around creative and cost-effective solutions that will serve a community well for generations to come.

ENVIRONMENTAL RESPONSIBILITY

We believe that it is our responsibility to find the right balance between initial cost, operating cost, and long-term sustainability for our planet. We will help you maximize the energy efficiency opportunities within your budget.

COLLABORATIVE PROCESS

We believe that the end result is greater when everyone is working together for a common goal. We work hard to maintain a positive attitude and working relationship between all parties.

UNIQUENESS OF EACH PROJECT

We believe that each client and project is unique. We do not bring preconceived ideas of what is best for your site, building, or institution. Our process begins with understanding your values, your goals for the future, and what makes your project special.

RESPECTING BUDGETS

We believe that budgets are real and are committed to making the most of design opportunities. Our goal is to spend money where it will have the greatest impact on both functionality and aesthetics.



1) Experience in designing space for municipal services that is both functional and aesthetically pleasing;

Municipal buildings serve a key public need and have complex operational and space requirements. The building and site should be a welcoming, accessible, and vibrant hub for community activities such as public meetings, recreation, research, and other civic and social events. Brick buildings project a sense of permanence and importance. However, they can often be perceived as unwelcoming. Creating a high visibility entrance that is accessible and inviting will help visitors feel a sense of belonging to something of value in their community. The building also needs to be secure and protect the important documents housed inside. The ability to segregate public spaces from private as well as moisture control for archives are some of the things we will consider. Finally, the building needs to be a pleasant and safe place to work. Our prior experience with workplaces, schools, town offices, and police and fire stations has given us the ability to balance these complex program needs.



WATERBURY MUNICIPAL COMPLEX FEASIBILITY STUDY

Waterbury, VT

In the aftermath of Tropical Storm Irene, Black River Design helped the town of Waterbury develop plans for a municipal complex on a two acre site in the 100 year flood plain.

We worked with staff to identify space needs for a combined town office, public meeting room, public library, and police station. Concurrently, we evaluated and eliminated the possible reuse of the existing flood damaged buildings. Black River Design then led a series of public workshops, where we gathered community input and incorporated the preferred elements into a conceptual design for a new facility.

Careful consideration was given to resilient design, flood proofing strategies, the context and character of the village, and the unique combination of program elements. In the end, the town decided not to purchase the lot in favor of another centrally located site outside of the flood zone.



WOODSTOCK TOWN HALL THEATER RENOVATION

Woodstock, VT

Currently in the design phase, this addition/renovation will improve back stage flow and increase accessibility while replacing a failing stage addition. Structural issues due to floodplain proximity at the addition location will also be addressed. Proposed interior renovation of the theater includes a new accessible raked theater floor, seating reconfiguration, as well as new lighting, sound system, and acoustic panels. In addition, renovations to the front of house and town hall will make better use of the historic building. Town offices will be moved to the second floor, creating more efficient use of space. Mechanical and Electrical systems will also be replaced.



MONTPELIER FIRE STATION

Montpelier, VT

Extensive renovations were performed to the existing three-bay, historic station which houses the garage and maintenance areas. A two story addition was added at the rear of the tight municipal site, and houses administrative and public meeting spaces.

2) Experience designing buildings that house multiple programs that are independent, but inter-related;

Downtowns thrive on diversity and mixed use. We have worked on a variety of mixed use projects in downtown settings over the years. Each presents its own unique set of opportunities and challenges. Although there is often a clear direction of the planned building use, over time different opportunities or situations may arise that require flexibility of building organization. Spaces that support community use are a powerful tool for outreach and income. We look forward to exploring some of the ideas for community use that you may have. Building codes and functional needs, especially regarding the police station, will require physical separation of uses within the building. Black River Design understands the complex play of elements in a mixed use project.



BARRE PUBLIC SAFETY FACILITY

Barre, VT

For their new 25,000 SF public safety facility, Black River Design assisted the city of Barre in creating a fully equipped modern public safety complex. Outside, the choice of durable materials such as local granite and brick honors the past. Inside, we gave careful consideration to ways of encouraging community use while ensuring the highest level of security and protection.

Spaces open to the public are located on the first floor near the front entrance and separated from the administrative areas by controlled access corridors,



**BRIGHTON TOWN HALL PHASE I
RENOVATION AND PHASE II CONCEPTUAL
DESIGN**

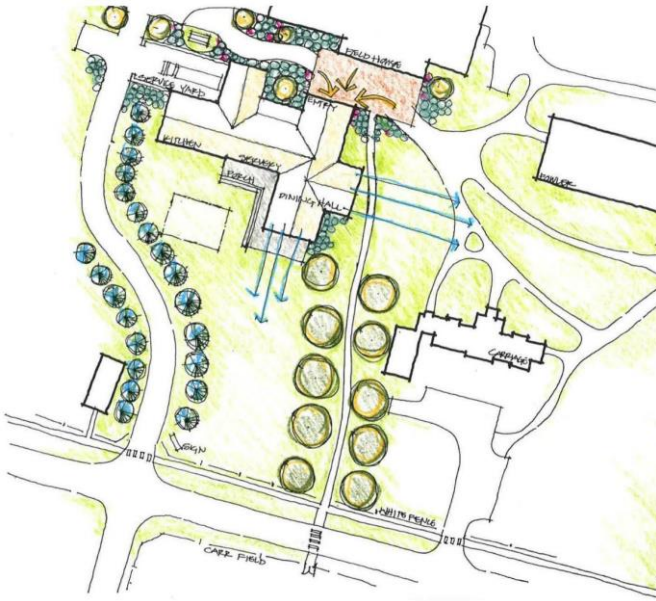
Island Pond, VT

Preservation Trust of Vermont Award Winner

The Brighton Town Hall began life as the Island Pond Opera Block in 1893. The building has been renovated many times since. BRD designed a deep energy retrofit and worked to bring the structure back to its original grandeur, which involved restoring the tall Palladian windows, the divided light store front and transom windows as well as restoring the wood pilasters, capitals, roof brackets and other ornate trim. Future phases include interior renovations of office space and the gymnasium. The building is a mixed use structure, including municipal offices, bank, and library. A next phase will include adding an elevator and second means of egress to the current vacant, but historic third floor.

3) Experience integrating building design within a 'campus' setting;

Designing within a campus context adds complexity to the building design process. Without diminishing the challenges of the building design itself, one needs to also consider the impact on the exterior spaces between the existing unaltered buildings and the new or renovated structure. The users experience begins not with the first glimpse of the building itself, but of the campus. The buildings become the "walls" or edges of the designed exterior space and the position, mass, scale, material and colors of the adjacent buildings become important factors.



DINING HALL SITE STUDY AND CONCEPTUAL DESIGN

Proctor Academy \ Andover, NH

Through this process, BRD helped PA to determine the preferred location for one of their most visited buildings on campus. An evaluation of the existing dining hall and a benchmarking exercise helped to establish pedestrian and vehicular circulation, campus views, impact zones, space needs, and massing and floor plan options.



ST. JOHNSBURY ACADEMY MASTER PLAN

St. Johnsbury, VT

Vermont ASLA Public Space Award Honorable Mention

Over the course of several building projects the Academy realized its overarching goal of a more pedestrian oriented campus. A parking lot formerly located in the center of the campus was relocated to the outskirts. The new art center and library along the primary pedestrian pathway frame the new central campus green. Students now gather on the green, in an outdoor amphitheater, and on sitting walls between the new arts center and athletic complex.

4) Experience with an extensive renovation project of historic brick and masonry properties and/or new buildings with an emphasis on:

** Cost effective and durable design*

Many of our publicly funded projects have had tight budgets. To succeed in that environment, we have developed the tools to stay within budget while maximizing the design opportunities. We look for solutions which are inexpensive and buildable through the innovative and careful use of natural and artificial lighting and interior colors, finishes and materials.

Public funding sources tend not to be supportive of grandiose designs. At the same time, we believe that municipal buildings should be a pleasant, exciting, safe and comfortable environment. Our goal is to spend money where it impacts functionality, durability and maintenance as well as aesthetics.



PEOPLES ACADEMY INFILL ADDITION

Morristown, VT

The infill addition at Peoples Academy involved demolition of a single story portion of the building and replacing it with a 3 story masonry addition surrounded partially on all four sides by existing structure. On two sides is the Historic Register listed original Academy Building. With this extremely tight budget, Black River Design worked with the local masonry supplier to find a unique over-sized brick which was available at a sizable discount but in a finite quantity. The building was designed to accommodate the amount of available brick, allowing the addition to project the solidity of masonry while not competing with the grandeur of the original structure and all at a considerable cost savings.



VERMONT HISTORY CENTER

Vermont Historical Society
Barre, VT

The renovation and adaptive reuse of Barre's historic Spaulding Graded School into the headquarters of the Vermont Historical Society preserved the character of this landmark building and restored original design details. Minimizing layout changes, existing rooms were transformed into modern and functional meeting spaces, offices, library, and archival storage under the review of the Division for Historic Preservation. The project involved window replacement, complete upgrades of the mechanical systems to provide climate controlled gallery and archival space, and the addition of ramps and elevators to make the entire 10-level facility accessible.

** Energy efficiency retrofitting or new construction*

Renovation of an existing structure is fundamentally an environmentally friendly building option. However, an essential component is the improvement of energy related systems. Necessary improvements to both the building envelope and mechanical systems need to be incorporated without changing the character of a structure. We are experienced in successfully integrating modern energy efficient technology in existing buildings of historic significance.

** “Green” building technology*

Our practice has always placed an emphasis on creating buildings which are durable, require few resources to maintain, and continue to be pleasant environments for living and working, long after they are completed and as technologies evolve and improve. We look at sustainability and efficiency issues with an eye towards what makes sense for you, your site and your circumstance. Our job is to identify the sustainable design opportunities early on in the project and examine rough initial costs along with the life span, complexity and projected savings over time. You can then most cost-effectively invest your money and maximize sustainability within your own budget.



LATTIE F. COOR HOUSE LEED GOLD
RENOVATION AND ADDITION

University of Vermont

Black River Design worked closely with the College of Arts and Sciences to accommodate their program and accommodate handicap accessibility while maintaining the historic appearance. Particular attention was paid to maintaining or restoring historic details and concealing ventilation and fire suppression systems to the greatest extent possible. In the final design very few original features were compromised. Original plaster and woodwork was maintained and restored. A rear addition was required to make the building accessible by including a ground level entry, an elevator, enclosed stair and accessible washrooms.



CLASS OF 1966 ENVIRONMENTAL CENTER
PETAL CERTIFIED RENOVATION AND
ADDITION

Williams College \ Williamstown, MA

Petal Certified - International Living Future Institute

This classroom and office building is designed to be Net Zero Energy and Water. With six of the seven criteria already satisfied, the Center is in the Performance Monitoring Phase of Living Building Challenge certification. Among many architectural and engineering challenges, the Center incorporates an historic house into a high performance building. The new facility houses faculty offices, classrooms, reading room, and a kitchen classroom. The design features an energy efficient building envelope, foam-flush composting toilets, balanced daylighting, solar PV panels, and no “red-list” materials.

** Historic preservation*

We take great pleasure in preserving the rich architectural fabric of Vermont's villages and downtowns. For over 40 years we have been restoring, renovating, and adaptively reusing historic buildings that matter. We have a passion for transforming beloved but often neglected buildings for vibrant community uses. Our team of twenty architects and designers incorporates energy efficiency, accessible design, and code compliance into a customer friendly experience to revitalize buildings and towns throughout Vermont. Historic buildings predate energy efficiency, accessibility and sometimes even building codes, presenting formidable challenges to modernization. We work tirelessly with code officials, preservation consultants and envelope specialists to make sure these buildings become a renewed contributor to the health of the communities they serve.

Many of Black River Design's historic projects have been renovations and additions to buildings like yours. Although many people think building new is the most efficient solution, wholesale replacement is usually not an option. In our experience, these buildings can be given new life by such fixes as energy efficiency retrofits, bringing daylight into sometimes dark interiors, moisture-proofing basements, and introducing natural materials to warm them up. A new, more welcoming and more visible entry can also improve how a building invites the community.

Black River Design enjoys positive working relationships with many of the state, federal, and private funding sources as well as local non-profit developers. The results are projects like the recently completed French Block in Montpelier and the Woolson Block in Springfield. Both projects restored decaying and abandoned structures in the heart of their communities to provide much needed affordable, accessible, and walkable housing options.

Our work also encompasses the essence of civic life in Vermont, including libraries in Washington and Bradford, schools in Johnson and Bellows Falls, theaters in Rockingham and Barre. Along with fire stations, churches, and town halls dotted throughout the state, our projects all have one thing in common – preserving both the built environment and the Vermont way of life embodied by the cities, towns, and villages of our special state.

We have successfully collaborated with the Vermont Division for Historic Preservation for over 20 years and have a good working relationship. Part of our success is due to our reaching out to the Division in the early stages of a project to discuss our approach before we are heavily invested in a direction that won't work. This approach gets buy-in from the Division and smooths the road ahead.



ST. JOHNSBURY RAILROAD STATION WELCOME CENTER AND NCIC OFFICES

St. Johnsbury, VT

Phase I of the building renovation transformed the first floor of the historic train station into a visitor and welcome center. Phase II provided new second floor offices for NCIC and a records vault addition. The slate roof and copper flashing was also restored as part of Phase II.



BELLOWS FALLS MIDDLE SCHOOL

Historic Renovation \ Bellows Falls, VT

Preservation Trust of Vermont Award Winner

This extensive renovation brought an aging architectural asset into 21st century educational use and helped preserve the vibrant density of the town's core. The new entry is not only a welcoming gathering place, but is also accessible and secure. Creative interior reconfiguration opened up circulation, increased community use space, allowed for the preservation of historic elements and uncovered a few hidden gems. The renovation also incorporated energy efficiency measures, including new energy recovery ventilators, photovoltaic panels, a solar hot water system, and a pellet boiler – all strategically hidden from view. An energy dashboard provides data and an interactive teaching opportunity.



BRANTVIEW

St. Johnsbury Academy, VT

National Register of Historic Places

This historic residence was completed in 1884 for the locally prominent Fairbanks family. The property was gifted in the 1930's to the Academy and has served as a dormitory since. Black River Design assisted with a multi-million dollar renovation, including critical updates such as a new elevator stair tower and lobby, new windows, interior restoration, structural improvements, new slate roof, insulation, and new MEP systems including a full sprinkler system. These updates will preserve and bring the building into modern use for generations of students to come.



SWANTON TOWN HALL FEASIBILITY STUDY

Swanton, VT

At the head of the Swanton Village green, the Town Hall helps define the heart of the community. Black River Design helped the Town of Swanton ensure the continued viability of the building by addressing modern requirements such as a second means of egress, fire safety, ventilation and air conditioning, wheelchair access, LED lighting, and energy conservation as part of a recent feasibility study.

5) Experience with flood proofing and flood-plane requirements;

With rising temperatures and an increase in average annual precipitation, flooding is and will continue to be a threat to properties such as yours in or near the floodplain. BRD has helped several clients in the past to floodproof their site and buildings, each with a location specific solution, including:

- Montpelier Police Station
- Woodstock Town Hall Theater
- 120 State Street, Montpelier
- 105 State Street, Montpelier
- Waterbury Municipal Complex
- French Block Elevator Addition
- Community National Bank in Barre



120 STATE STREET REAR ENTRY ADDITION
AND STAIR TOWER RECONSTRUCTION

State of Vermont Department of Motor Vehicles
Montpelier, VT

The additions at 120 State St adopted a wet floodproofing strategy for the stair tower and lobby additions while leaving the existing building alone. The additions were designed to be resilient by allowing floodwater to enter and pass through the structures without causing either structural damage or permanent damage to the finish materials. All new mechanical and electrical equipment is located above the Design Flood Elevation (DFE). The elevation of the new entry lobby is below the DFE as well as that of the existing building first floor and has no basement. The finishes are all resilient materials such as granite and glazed ceramic. The stair towers have exposed concrete and steel at or below the DFE.

6) Experience with access and egress for vehicles and pedestrian traffic;

The post card version of a New England village has main street buildings close to the sidewalk creating a nice, walkable, and human scaled, street that feels welcoming. This appealing vision puts the automobile's needs below those of the pedestrian. However, we recognize that convenient parking is required by zoning and frequently makes the difference for the success of a community building. Providing parking areas is an important consideration in site configuration. Richmond is an area in transition. Some stretches of the road maintain a rural feeling. However, many remaining fields and farmhouses are now interspersed with low rise commercial structures and their parking lots. Although the traditional New England landscape is still discernible, development has clearly begun to impact the area.



UNION BANK SITE REDEVELOPMENT STUDY

Stowe, VT

We all love the New England village but modern life has to incorporate space for vehicles. This study in the historic village center of Stowe that incorporates a bank with drive through in a multi use commercial redevelopment. The design reinforces the traditional village street architecture while providing efficient on site parking and vehicular movement.

7) Expertise with landscaping in downtown settings;

urban landscapes require special considerations to ensure that landscapes thrive and are easily maintained by often tight municipal budgets. All plant materials must be selected to be appropriate for their settings. Special attention should be given to use plants that can withstand drought, urban conditions, road salt and potential compaction from foot traffic. Trees must be given sufficient soil volume to be able to mature and contribute to stormwater run-off reduction and to reducing the urban heat island effect. Where trees are needed to be located in pavement, best practices such as utilization of soil cells or structural soils should be considered. Pavement and wall materials should be selected to be resilient to road de-icing solvents as well as potential damage from skateboarding. The use of permeable pavers may be advantageous if soils are amenable, the site is within a compromised watershed or if the local stormwater facility is easily overwhelmed.



MIDDLEBURY DOWNTOWN PARK

Middlebury, VT

Honor Award, Vermont Chapter of ASLA

Wagner Hodgson recently completed a 1.7 acre public park in downtown Middlebury, VT situated at the location of the former Town Municipal Office Building and Gymnasium at 94 Main Street. WHLA worked with the Town and Middlebury College to create a family-friendly, safe, and visually inviting space for residents, students and visitors to the Town of Middlebury.



BURLINGTON HIGH SCHOOL

Burlington, VT

Wagner Hodgson worked closely with Black River Design, Architects and the steering committee to explore ways to consolidate and improve the existing high school campus. An emphasis was placed upon improving vehicular and pedestrian circulation, accessibility, security, stormwater improvements and general consolidation of the sprawling campus.



The grade from the south up to the new entry was re-worked into an accessible grade. Parking islands break the parking up into different areas and trees are laid out to provide maximum shading mid-day. A pedestrian corridor was designed to accommodate students coming from the existing bus loop and drop-off was reconfigured to provide separation from parking. Stormwater is treated in a series of gravel wetlands planted with native riparian vegetation.

8) *Experience with publicly funded projects;*

The majority of Black River Design's projects have been publicly funded. There are two main avenues for this funding.

Bond Votes: Black River Design's resume of public school, public safety, and municipal offices are typically funded through a public bond campaign. As these projects require majority approval from voters, it is critical that public input be solicited early, the public be well-informed throughout the process, and the design is lean and cost effective. It also requires that the budget be monitored carefully throughout the design process and that cost increases during construction are kept to a minimum. This can be achieved by having a thorough and complete set of construction documents and nurturing a collaborative and fair working relationship with the building contractor – both historic strengths of Black River Design.

State/Federal Funding: We are familiar with the interests and special requirements that funding sources can bring to a project. We typically connect with funding agencies early on to learn about their opportunities and any program requirements which might impact the project. Funding may come in the form of grants, low interest loan or loan guarantees, percentage participation with direct funding, or tax credit use. Sources we have worked with include:

- Vermont Division for Historic Preservation Rehabilitation Investment Tax Credits (RITC)
- Vermont Division for Historic Preservation Certified Local Government (CLG) Grants
- Vermont Division for Historic Preservation Historic Preservation Grants
- Tax Increment Financing (TIF)
- State Funded Historic Preservation Grants
- Community Development Block Grants (CDBG) Accessibility and Modification Grants
- CDBG Implementation Grants
- CDBG Planning Grants
- USDA Rural Development Community Facility Loans and Grants
- USDA Rural Development Section 504 Home Repair program
- Vermont Department of Housing and Community Development Downtown and Village Center Tax Credits
- Agency of Transportation (AOT) Enhancement Grants
- Northern Community Investment Corporation Planning Grants
- Vermont Housing Conservation Board (VHCB) Planning and Implementation Grants
- Vermont Community Development Program (VCDP) Block Grants
- Federal Housing and urban Development (HUD) Grants and Guarantees
- Energy Efficiency programs such as those through Efficiency Vermont
- Private Foundations



WOOLSON BLOCK REDEVELOPMENT

Springfield, VT

Renovations to this prominent historic building have helped revitalize downtown Springfield. The layout includes 15 affordable rental apartments, 4 studios for at-risk youth, and 5,000 SF of street level commercial space. The project was developed by Housing Vermont and Springfield Housing authority, with funding from a variety of public and private sources.

9) *Experience with permitting with current building codes relating to renovation of municipal property and accessibility requirements under Section 504 of the Americans with Disabilities Act.*

Renovation and addition to a historic building often present conflicting preservation and accessibility requirements. Our goal is to find a cost effective solution that provides egalitarian access while maintaining historic integrity.

After an initial in-house review of code, preservation, and regulatory requirements, we typically initiate informal discussions with the appropriate regulators to ensure that they agree with our proposed solution. This helps us avoid costly changes in direction later. We continue to work with them as a project moves from preliminary reviews to final stages of permitting. Most of the regulatory agencies that will be involved are a few blocks away from our office in Montpelier, giving us a real advantage in responding effectively and quickly.



CALEF MEMORIAL LIBRARY
ADDITION AND RENOVATION

Washington, VT

Currently under construction, the project consists of a one-story addition and minor renovations. The addition contains a wheelchair lift, accessible restroom and space to accommodate book stacks with accessible clearances. Accessible parking spaces are also provided.



WOODS PUBLIC LIBRARY ADA RENOVATION

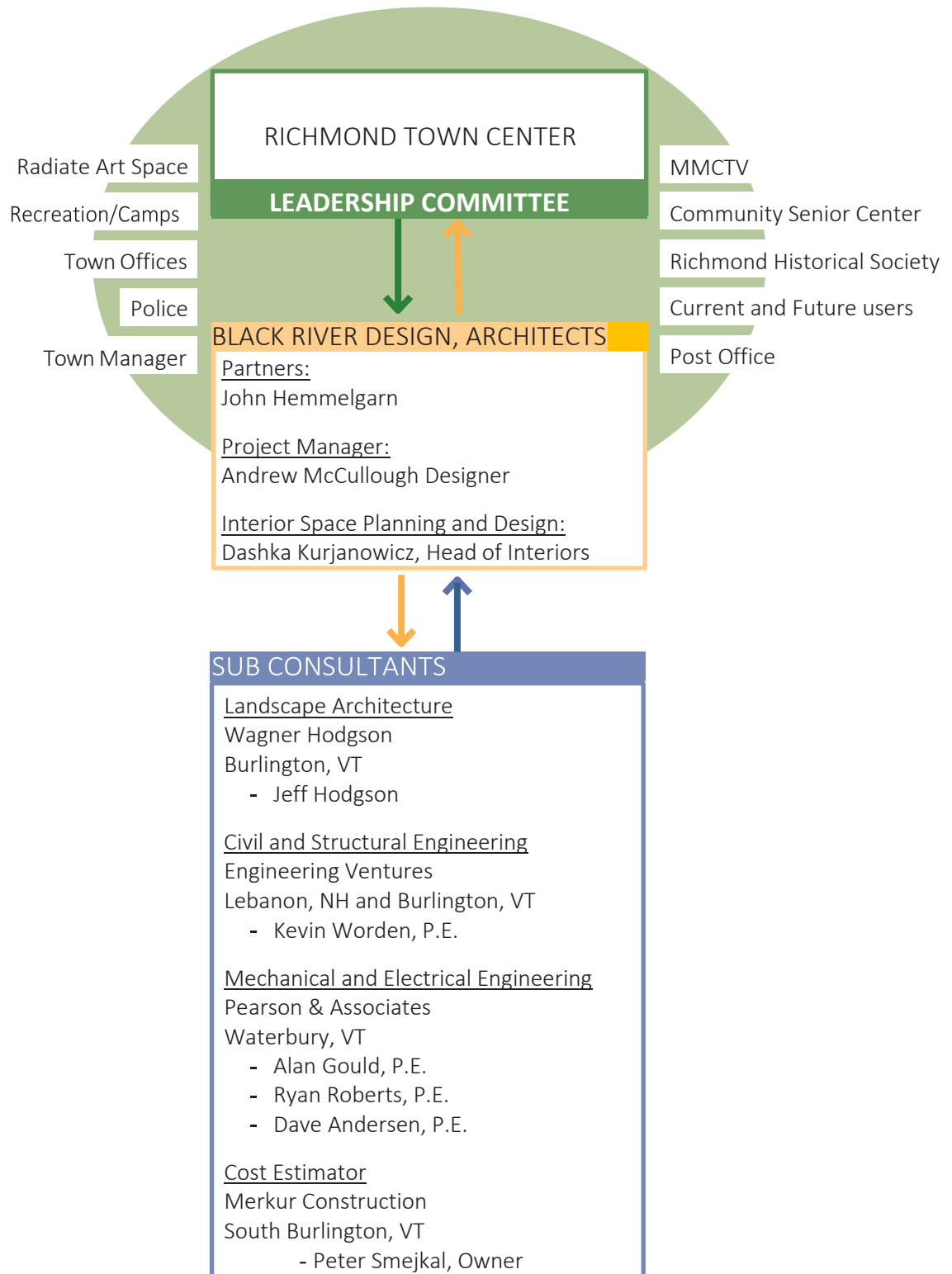
Bradford, VT

The Woods Library in Bradford was designed by the noted 19th century Vermont architect Lambert Packard. Sensitivity to the historic integrity of the building both inside and out was central to the design concept for bringing the library into ADA compliance. Working with the library the solution included a new single user restroom, an accessible kitchenette and a vertical platform lift to connect the main level with the children's room on the lower level, allowing internal accessibility. The solution worked with the tight site and integrated the defining elements and details of the historic building.

RELEVANT PROJECT SUMMARY MATRIX

	Historic Brick/Masonry	Municipal Services	Multi-use	Sustainable	Floodproofing	ADA Renovation	Site/Campus Considerations	Renovate vs. New Analysis	Publicly Funded
120 State Street	X	X			X	X	X		
Barre Public Safety Facility		X					X	X	X
Bellows Falls Middle School Historic Renovation	X			X					X
Brantview Historic Renovation						X			
Battleboro Police Station, Additions and Renovations (Study)	X	X					X		X
Brighton Town Hall Historic Renovation			X						X
Burlington High School ReEnvisioning				X		X	X	X	X
Cabot Town Hall	X	X	X						X
Calef Memorial Library ADA Renovation	X					X			X
Class of 1966 Environmental Center Petal Certified	X	X		X			X	X	
Gray School Building Historic Renovation	X	X	X						X
Lattie F. Coor House LEED Gold Historic Renovation	X			X					
Milton Public Library		X	X						X
Montpelier Fire Station	X	X							X
Montpelier Police Station		X							X
Munroe Hall Renovation	X								
Richmond (VT) Combined Emergency Services Facilities Study and Design		X					X		X
St. Johnsbury Academy Master Plan				X			X		
St. Johnsbury Elementary School	X			X					X
St. Johnsbury Welcome Center and Municipal Offices	X	X							X
Swanton Town Hall (Study)	X	X							X
Vermont History Center									X
Waterbury Municipal Complex (Study)	X	X	X		X		X		X
Williamstown Public Safety Building		X							X
Woods Public Library						X			X
Woodstock Town Hall Theater			X		X	X	X		X
Woodsville Cooperative School District							X	X	X

LANDSCAPE ARCHITECTURE	
Wagner Hodgson Burlington, VT - Jeffrey Hodgson, FASLA, Partner	Wagner Hodgson is an award winning professional landscape architecture and design studio founded in 1987 with offices in Burlington, Vermont and Hudson, New York. Wagner Hodgson offers expertise and services in landscape architecture, master planning, mixed use projects, and urban design. The firm has completed a diverse portfolio of projects across the United States that spans all scales and phases of work. The projects have been for a range of public and private clients, including corporate and university campuses, cultural institutions, federal and city public agencies, residential, and private development. BRD recently collaborated with Wagner Hodgson on the Burlington High School ReEnvisioning project, Proctor Academy Field House Renovation, Class of '66 Historic Environmental Center, and the St. Johnsbury Academy Brantview Historic Renovation.
CIVIL AND STRUCTURAL ENGINEERING	
Engineering Ventures Burlington, Vermont - Kevin Worden, P.E.	Engineering Ventures has served private and public clients for over 25 years. Their experienced staff is well suited for your project. Their office regularly designs and provides construction administration services for historic restoration and preservation projects, as well as high-performance building projects, and projects that encounter challenging structural and floodplain issues. EV has a wealth of experience upgrading existing buildings to suit their newfound needs and offer a skill set that will help the envisioned the Town Center's upgrades to fruition. Black River Design has collaborated with EV on numerous projects, most recently including Upper Valley Transit, Woolson Block Historic Renovation, Woodstock Town Hall Theater, and French Block Redevelopment.
MECHANICAL AND ELECTRICAL ENGINEERING	
Pearson and Associates (a division of DuBois & King) Stowe, VT - Alan Gould, P.E. - Ryan Roberts, P.E. (Electrical) - David Anderson, P.E. (Mechanical)	Pearson and Associates brings a practical and thorough approach to mechanical and electrical engineering. Their hands-on approach will provide a complete and appropriate solution to your challenges. Alan has designed many municipal projects over the recent years, including Burlington Department of Public Works Renovation, Kellogg-Hubbard Municipal Library, Stowe Police and Rescue, and Akeley Memorial Town Hall. Black River Design and Pearson and Associates have worked together on numerous projects, including the Ifshin Hall expansion project and others at UVM.
COST ESTIMATOR	
Merkur Construction South Burlington, Vermont - Peter Smejkal, Owner	Merkur Construction has been Black River Design's primary cost estimator for the past 20 years. His day-to-day involvement in the construction industry keeps him in touch with current pricing and trends.





Registration

- Vermont License #1780
- New Hampshire License #03888

Academic

- university of Cincinnati
Bachelor of Architecture,
1986

Employment History

- Black River Design, Architects
Montpelier, Vermont, 1985 -
present
- Lapicki-Smith Associates
Baltimore, Maryland, 1984-
1985
- Jorg Neumann - Dipl. Ing.
Hamburg, Federal Republic of
Germany,
1983-1984
- Everett I. Brown Co.
Indianapolis, Indiana, 1982-
1983

PARTNER: JOHN L. HEMMELGARN, ARCHITECT

John has been a partner at Black River Design since 1999 and has over three decades of experience collaborating with volunteer school boards to create custom and cost-effective solutions for each community. He is a skilled facilitator in managing the challenges, opportunities, and personalities that a public process brings.

Areas of Expertise

- Public Process
- School Bond Proposals
- Project Management
- Educational Programming
- Conceptual Planning
- Construction Phasing
- Project Budgeting

Project Experience

- Arlington High School and Fisher Elementary School Renovations (Arlington, VT)
- Bellows Falls Middle School Historic Renovation (Bellows Falls, VT)
- Dartmouth College Tuck School Shop (Hanover, NH)
- Energy Star School Certifications (throughout Vermont)
- Enosburg Falls Middle and High School Renovation (Enosburgh, VT)
- Fair Haven Union High School Renovation (Fair Haven, VT)
- Lyme Inn Renovation (Lyme, NH)
- Montpelier Schools Renovations (Montpelier, VT)
- Newark Elementary School Renovation (Newark, VT)
- Orwell Town Hall Building (Orwell, VT)
- Proctor Academy Sally B. Dormitory New Construction (Andover, NH)
- Proctor Academy Woodlands Center (Andover, NH)
- Twin Farms Treehouses (Barnard, VT)
- university of Vermont Terrill Hall Renovation (Burlington, VT)
- Wake Robin Environmental Services Renovation (Shelburne, VT)
- Woodstock Town Hall Theater Renovation (Woodstock, VT) Colchester Early Education Center Conceptual Design (Colchester, VT)
- Colchester High School Auditorium Renovation (Colchester, VT)
- Lamoille South Supervisory Union Facilities and Functional Analysis (Morrisville, VT)
- Energy Star School Certifications (throughout Vermont)
- Berkshire Elementary School Gym Renovation (Berkshire, VT)
- Colchester High School Science Labs Renovation (Colchester, VT)
- Lyme Inn Renovation (Lyme, NH)
- Proctor Academy Sally B. Dormitory New Construction (Andover, NH)
- Wake Robin Environmental Services Renovation (Shelburne, VT)



Academic

- Connecticut College
B.A. Architectural History
and Italian, 2007

Employment History

- Black River Design,
Architects
Montpelier, Vermont, 2007
- present
- Andrea Ponsi, Architetto
Florence, Italy, 2006

DESIGNER: ANDREW MCCULLOUGH

Andrew has a strong appreciation for the balance between the natural and built environment. He enjoys working on projects ranging from private residences to large institutional and community buildings. Andrew is an devoted cyclist and coaches running for Craftsbury Outdoor Center and Peoples Academy.

Areas of Expertise

- 3D Revit Modeling
- Rendering
- Presentation graphics
- Design Development
- Construction Documents
- Photography

Project Experience

- Fair Haven union High School and Middle School Renovations
- Proctor Academy Field House Renovation (Andover, NH)
- Washington Central Supervisory Union Offices (East Montpelier, VT)
- Woolson Block Renovation (Springfield, VT)
- St. Johnsbury Academy Brantview Dormitory Historic Renovation and Elevator Addition (St. Johnsbury, VT)
- Jay Peak Resort Hotel Jay (Jay, VT)
- 105 State Street Study (Montpelier, VT)
- Center Rutland Fire Station New Construction (Rutland, VT)
- Private Residence Renovation (Montpelier, VT)
- Vacation Camp New Construction (South Hero, VT)



Academic

- Academy of Fine Arts, Krakow, Poland
Master of Interior Architecture Design,
Master of Fine Arts, 1983

Employment History

- Black River Design, Architects
Montpelier, Vermont 1984 - present
- Communal Design Bureau
Krakow, Poland 1981-1982
- Museum of Historical Interiors
Lancut, Poland 1980
- Krakow Renewal Center
Krakow, Poland 1979

SPACE PLANNING AND INTERIOR DESIGN: GRAZYNA GORZYNSKA-KURJANOWICZ (DASHKA)

Dashka creates interiors that energize and inspire. She facilitates the integration of interior design issues (room proportions and configurations, windows, lighting, colors, fabrics, scale and placement of art, continuity of design aesthetics and daylighting) from the start of the process so that they are fully in harmony with the building design.

Areas of Expertise

- Conceptual Design
- Space Planning
- Hand-rendered presentation Graphics
- Lighting Design
- FF&E Packaging and Bidding

Project Experience

- Proctor Academy Sally B. Dormitory (Andover, NH)
- Williams College Class of 1966 Environmental Center (Williamstown, MA)
- Harvey's Lake Private Residence (West Barnet, VT)
- Vermont College of Fine Arts Alumni Hall, Faculty Dorms, and Schulmaier Hall (Montpelier, VT)
- French Block Housing Redevelopment Feasibility (Montpelier, VT)
- Bear Path Single Family Residences (Burke, VT)
- St. Johnsbury Academy Green Dormitory (St. Johnsbury, VT)
- Jay Peak Resort Tram House Lodge Tower Bar, Hotel Jay and Pumphouse Waterpark, and Golf Clubhouse and Nordic Center (Jay, VT)
- Bear Path Townhomes (Burke, VT)
- Sally B. New Dormitory at Proctor Academy (Andover, NH)
- Opera Block Renovation for AHEAD Inc. (Woodsville, NH)
- McKee Inn Renovation for AHEAD Inc. (Lancaster, NH)
- Lisbon Inn Renovation for AHEAD Inc. (Lisbon, NH)
- Salisbury Square Addition and Renovation for RACDC (Randolph, VT)
- Riverbend Apartments Renovation (Enosburg Falls, VT)
- Irasburg Senior Housing for Gilman Housing Trust (Irasburg, VT)
- Newport Elderly Housing for Gilman Housing Trust (Newport, VT)
- Center for Emerging Technologies at UVM (Burlington, VT)
- Community National Bank Interiors (Barre, VT)
- Community National Bank Headquarters (Derby, VT)
- Williams College Prospect House Dormitory (Williamstown, MA)
- Williams College Morgan Hall Dormitory (Williamstown, MA)
- Williams College Greylock Dormitories (Williamstown, MA)

WAGNERHODGSON
LANDSCAPE ARCHITECTURE



JEFFREY HODGSON
FASLA Partner

Jeff Hodgson’s design leadership at Wagner Hodgson integrates contemporary design expression along with a deep understanding of landscape systems for a project’s long-term beauty and health. His expertise in all phases of landscape architectural project development is evident in all of his work. A critical thread to Jeff’s work is creating spaces that integrate aesthetics, programmatic issues and ecologically responsible design. As reflection of this focus, the firm has received numerous design awards from the American Institute of Architects and the American Society of Landscape Architects. Jeff has been a visiting professor at Miami University, Oxford OH, is a frequent design juror at universities. He is currently a past President of the Vermont Chapter of the American Society of Landscape Architects. In 2015 Jeff was elected to the Council of Fellows of the American Society of Landscape Architects.

Partner - in - charge

Education	Kansas State University College of Architecture & Design Bachelor of Landscape Architecture, 1986	Washington University College of Architecture 1982
	University of Tulsa College of Business Administration 1980 –1982	
Professional Experience	Wagner Hodgson (Formerly H. Keith Wagner Partnership) Burlington, VT Partner / Designer 2003-Present	Beckwith Chapman Associates Oxford, OH Associate / Designer 1997 - 2003
	Patricia O’Brien LA San Francisco, CA Project Designer 1994 - 1996	Hargeaves Associates San Francisco, CA Senior Landscape Architect 1990 - 1994
	Johnson, Johnson and Roy, Inc. Ann Arbor, MI Senior Landscape Architect	
Applicable Experience	Burlington City Hall Park Renovation Burlington, Vermont	
	Burlington High School / Renovation & Addition Burlington, Vermont	
	Burlington Fletcher Free Library Renovation Burlington, Vermont	
	Middlebury Downtown Park Middlebury, Vermont	



KEVIN P. WORDEN, P.E., LEED AP

Vice President

Education

University of Vermont –
*Professional Certificate in
Leadership & Management*
Worcester Polytechnic
Institute
*Bachelor of Science in
Humanities*
*Bachelor of Science in Civil
Engineering*

Professional Registrations

Vermont
New Hampshire

Professional Societies

American Society of Civil
Engineers (ASCE) – Past Vice
President, Treasurer
Tau Beta Pi – National
Engineering Society
Chi Epsilon – National Civil
Engineering Society

Kevin Worden, Vice President, is a graduate of Worcester Polytechnic Institute, with Bachelor of Science degrees in both Civil Engineering and Humanities. He was named the 2001 Vermont Young Engineer of the Year. Kevin is a LEED and Sustainability Specialist at Engineering Ventures, contributing more than 20 years of experience in permitting, civil and structural engineering design. He takes a holistic and innovative approach to projects, grounded in the fundamentals of engineering. Fostering long lasting connections through project collaboration is important to Kevin.

Some of Kevin's recent projects with innovative stormwater systems include Burlington Co-housing (Centennial Brook Watershed), the Champlain College Stormwater Master Plan and the Dartmouth College Class of 1978 Life Science Center which will store and reuse roof water.

**Alan Gould, PE**

Senior Electrical Engineer

EDUCATION

B.S., Electrical Engineering, University of Vermont, 1989

REGISTRATIONS

Professional Engineer: VT 100299; NH 14844

Mr. Gould is the Director of the D&K's Building Services Department and manages Pearson & Associates, a division of D&K. Alan has 30 years of electrical engineering experience performing and supervising the design of electrical systems for a variety of applications, including commercial, industrial and institutional clients. He owned and operated a mid-sized electrical contracting firm for ten years, managing up to 20 employees. Alan has performed LEED design from Silver through Platinum along with dozens of PV solar designs from 5kVA to 2MW throughout Vermont, New York, and Massachusetts. His experience includes commercial electrical design and installation, utility infrastructure design and installation, residential, healthcare, institutional, and industrial electrical installations.

Department of Public Works Renovation project, 645 Pine Street, Burlington, VT. Project Manager overseeing the MEP renovation of the Public Works Department and Senior Electrical Engineer for the electrical systems. Renovation included new lighting, lighting controls, HVAC, electrical distribution and emergency power, new fire alarm and telephone/data communication systems.

Kellogg-Hubbard Municipal Library in Montpelier, VT. Complete Electrical renovation of the historic library. Served as the project manager and electrical engineer for the project which included new lighting, new power and distribution to replace the existing systems. The project also included new security systems, fire alarm, and telecommunications.

Pope Memorial Library, Danville, VT. Project Manager for the phased renovation of a historic building, originally chartered as a state bank in 1825. Services included an MEP study and schematic design, then progressed through design and construction administration. Responsible for design for new lighting, new power design, emergency lighting, and fire alarm.

Historic Theater Assessment and Renovation, Woodstock, VT. Senior Electrical Engineer responsible for providing a building-wide electrical systems assessment with a report identifying the code required upgrades and recommended electrical upgrades with estimated costs.

St. Johnsbury Academy, St. Johnsbury, VT. Project Manager for electrical design for the renovation of the historic Thaddeus Fairbanks Homestead into the Brantview House (dormitory). Provided design for new lighting, new power design, emergency lighting, communications, fire alarm and security.

New Construction, Police and Rescue Facility, Stowe, VT. Senior Electrical Engineer for a new public safety facility.

UVM Billings Library, University of Vermont, Burlington, VT. Project Manager responsible for the major renovation of the historic Billings Library. Renovations consisted of new special collections closed stacks, special collections reading room, offices, seminar rooms, project rooms, library processing space, reading rooms, and study spaces. Services included schematic design, then progressed through design and construction administration. Provided design for electrical demolition, new lighting, new power, new tel/data, new distribution, emergency lighting, and fire alarm.

Municipal Facility Assessments, Various Locations. Senior Electrical engineer responsible for assessing facilities in the following locations: (8) Addison, VT, school buildings; Danville, VT, Middle and High School; (7) Lebanon, NH, municipal buildings including library, recreation center, and airport terminal; Hardwick, VT, Historic Judevine Library.

Town Hall, Akeley Memorial Building, Stowe, VT. Senior Electrical Engineer for various renovations, including new elevator and vault, heating and cooling system, as well as lighting revisions and upgrades for the facility.

Middlebury Superior Courthouse Fire Alarm, Middlebury, VT. Served as Project Manager and designer for a significant renovation and replacement of the fire alarm system throughout the historic 3-level courthouse. Responsible for design and management of the consultant team through the construction phase.





Ryan Roberts , PE

Electrical Project Engineer

EDUCATION

B.S., Electromechanical Engineering, Vermont Technical College, 2015

A.S., Electrical Engineering, Vermont Technical College, 2013

REGISTRATIONS

Professional Engineer: ME 16004

Engineering Intern: VT 100425

Mr. Roberts is an electrical engineer with five years of experience. His role as an electrical engineer consists of arc flash and short circuit analysis, electrical system and equipment assessments, field surveys, and design of electrical systems for all types of applications. He frequently utilizes Revit and AutoCAD software for healthcare (UVM Medical Center), educational (UVM), and industrial (Keurig) projects. He has also been working on solar designs, and assisted with the solar panels on top of the Stowe office building.

AOT Dill Building, Berlin, VT. Electrical Engineer for addition of generator for complete building backup.

AOT Garage, White River Junction, VT. Electrical Engineer for new 15,000 square-foot maintenance garage.

Pope Memorial Library, Danville, VT. Electrical Engineer for the phased renovation of a historic building, originally chartered as a state bank in 1825. Services included an MEP study and schematic design, then progressed through design and construction administration. Responsible for design for new lighting, new power design, emergency lighting, and fire alarm.

Bailey-Howe Facility Renovation, University of Vermont, Burlington, VT. Electrical Engineer for upgrades/additions to the lighting, power and fire alarm systems. This project received a LEED certification. Used Revit for the design.

UVM Rescue Building Design, Burlington, VT. Electrical Engineer for complete design of the Rescue headquarters and Ambulance Bay. This project received a LEED certification.

Georgia Town Garage, Georgia, VT. Electrical Engineer for new 14,000 square-foot maintenance garage. This project is currently in design.

St. Albans Town Offices, St. Albans, VT. Electrical Engineer for new 13,000 square-foot town office building. This project is currently in design.

Burlington DPW 645 Pine St, Burlington, VT. Electrical Engineer for interior office renovation project and complete building lighting replacement project.

Ambulance Bay Addition, North Country Hospital Emergency Department, Newport, VT. Electrical Engineer for the design of a new ambulance bay and emergency department addition.

UVM Medical Center Angio Suite 26, Burlington, VT. Electrical Engineer for replacement of existing angio imaging equipment.

UVM Billings Library, University of Vermont, Burlington, VT. Electrical Engineer responsible for the major renovation of the historic Billings Library. Renovations consisted of new special collections closed stacks, special collections reading room, offices, seminar rooms, project rooms, library processing space, reading rooms, and study spaces. Services included schematic design, then progressed through design and construction administration. Provided design for electrical demolition, new lighting, new power, new tel/data, new distribution, emergency lighting, and fire alarm.

UVM Kalkin Hall Addition and Renovation, Grossman School of Business, Burlington, VT. Electrical Engineer for upgrades/additions to the lighting, power and fire alarm systems. This project received a LEED certification.

St. Albans Town Garage, St. Albans, VT. Electrical Engineer for new 18,000 square-foot maintenance garage and 6,000 square-foot sand and salt shed.





David Anderson

Senior Mechanical Designer

EDUCATION

B.S., Architectural Engineering Technology,
Vermont Technical College, 1996

A.S., Architectural Building Engineering
Technology, Vermont Technical College, 1988

Mr. Anderson is a senior mechanical designer with over 20 years of experience providing HVAC, energy, and plumbing services for commercial, resort, medical, industrial, high-end residential and low-income residential facilities projects. He has been directly involved in all areas of project administration: initial client need definition, proposal, basis of design definition, design development and construction administration. He is knowledgeable in all aspects of MEP design, including HVAC, plumbing, piping, and controls. David was responsible for facility and infrastructure projects at the seven Keurig Dr. Pepper Coffee Facility locations across the country. Projects included compressed air and nitrogen systems, specialty exhaust system, HVAC and electrical.

Burlington Public Works Offices, Burlington, VT. Senior Mechanical Designer for HVAC and Plumbing design for renovation of existing department of public works office facility. Project replaced existing rooftop VAV units. Relocated and added VAVs as needed to meet the new space requirements.

Burlington Fire Station #2, Burlington, VT. Senior Mechanical Designer for HVAC and plumbing design for renovation of sleeping quarters and shower/toilet room. New ventilation system, new roof top unit for meeting space.

Burlington Fire Station #1, Burlington, VT. Senior Plumbing Designer. Completed study of existing plumbing system to review issues with air in system and water back-up during storms. Worked with Owner and Architect to provide design for revised sanitary and storm systems within the building to alleviate issues.

Vermont Fire Academy, East Cottage Renovation, Pittsford, VT. Senior Mechanical Engineer for the design of HVAC and plumbing systems for the renovation of an existing building into a dorm for fire academy students. HVAC system was a two pipe changeover system utilizing low temperature heating and chilled water systems that would allow the campus to go to a heat pump system in the future. Controls incorporated the building in with the existing campus building management system.

Advance Transit, Hartford, VT. Mechanical Engineer for HVAC and plumbing design for addition and renovation of bus storage and maintenance facility along with office HVAC upgrades.

Chittenden Correctional Facility, So. Burlington, VT. Senior Mechanical Engineer on the HVAC and plumbing design and renovation of the holding cell area.

Georgia Highway Garage, Georgia, VT. Senior Mechanical Designer/Project Manager for HVAC and Plumbing design of a new facility with 5 bays of equipment storage, maintenance area, wash bay and supporting office area. Managed MEP design effort.

Grand Isle Town Garage, Grand Isle, VT. Project Manager for HVAC and Plumbing design of a new facility with 5 bays of equipment storage, wash bay and supporting office area.

Advanced Transit, Hartford, VT. Senior Mechanical Designer for HVAC and plumbing design for addition and renovation of bus storage and maintenance facility along with office HVAC upgrades.

CCTA, Burlington, VT. Senior Mechanical Designer for HVAC and Plumbing design for bus storage facility addition including bus storage area, bus maintenance and washing and paint booth.

GMT Bus Storage, Burlington, VT. Senior Mechanical Designer for HVAC and Plumbing for design development for renovation of existing facility to bus storage to GMT

Timberlane Dental Group, Burlington, VT. Project Manager for renovation of an existing space to convert to a dental facility. Work included the design of a new HVAC system taking into account COVID requirements. New plumbing system with coordination with Patterson Dental and their system requirements.



Peter Smejkal

Telephone 802.238.7500

Professional Experience

1989-Present *Merkur Construction, LLC* South Burlington, VT

Owner

Established in 1989 as sole proprietorship for consulting services and small projects; LLC in 2003 – 2-3 million/yr general contracting/construction management work volume, construction consulting and estimating

1993-2003 *J.A. Morrissey, Inc.* South Burlington, VT

Project Manager/Estimator/Vice President

Responsible for project management activities including estimation bids and professional services, scheduling, and subcontract relations.

1990-1993 *Wright & Morrissey, Inc.* South Burlington, VT

Project Manager/Estimator

Responsible for project management activities including estimation, scheduling, subcontract relations, architect and owner relations and overall contract compliance.

1989-1990 *CS Architecture & Construction* Burlington, VT

Project Manager/Estimator

Computer estimating, capable to create databases, Timberline estimating software, design build process in all stages, scheduling and planning, Harvard Project Manager.

1988 *APC Construction* Williston, VT

Construction Estimator

1987 *RJR Company* South Burlington, VT

Construction Estimator

1983-1986 *S.S. Construction Company* Czech Republic

Project Manager

1979-1982 *Security Build Construction Co.* Czech Republic

Construction Estimator

Education

M.S. Degree, Construction Engineering Czech Republic
Technical University CVUT, Faculty of Building Industries

Associates Degree, Civil Engineering Czech Republic
Industrial School of Building Industries

Merkur Construction, LLC – Construction Estimating Services

Merkur Construction, LLC is providing independent construction estimating services and construction and related costs assessment. All estimates are originated by Peter Smejkal - the owner of Merkur Construction. Peter has provided the estimating services since January 1989 (Merkur Construction established) and continued providing this service also while working under different employers.

Over the last 23 years Peter had developed many estimates for architects, engineers, owners, owner's representatives and consultations in legal cases for a wide variety of project types across the state of VT and other states. Estimated projects ranged from small restorations to multi-million dollar buildings and site work of all spectrum types.

Peter has close to 30 years of construction experience as a project manager and estimator. His educational background is in civil engineering, construction engineering, project management and economics of construction industry. He can identify areas of technical concern. Besides of extensive experience and good judgment he also could apply the knowledge and a sense of potential savings, when needed.

Historically Peter's estimates showed consistence with the actual outcome of the project at the bidding environment and the actual job cost due to his knowledge of current market pricing of construction industry and being a construction manager and contractor at the same time. The estimates provided have very detailed breakdown in every stage – from schematic plans through final construction documents.

Estimating services for architects:

Black River Design Architects
TruexCullins Architecture
William Maclay Architects and Planners
John Anderson Studio
Duncan Wisniewski Architecture
Cushman and Beckstrom Architects
Engineering Ventures
Gossens Bachman Architects
Northern Architects
Scott & Partners
Smith Alvarez Sienkiewicz Architects
and others

Estimating Services for owners:

UVM (University of Vermont)
City of Burlington
State of Vermont
NECI (New England Culinary Institute)
AFB (American Flat Bread)
McDonald's Corporation and local operator
Various organizations – Churches, Non-profit organizations, Housing developers, School Districts and others

REFERENCES

Jill Davies, Former Selectboard and Chair of the Building Committee
Woodstock Town Hall Theater Rejuvenation Project
Email: jill@jillmdavies.com
Phone: (802) 457-7118

Wendy Spector, Board Member Pentangle Arts
Woodstock Town Hall Theater Rejuvenation Project
Email: wendy.spector@gmail.com

Joel Cope, City Manager
Town of Brighton Vermont
Island Pond, VT
Email: joeltcope@comcast.net
Phone: (802) 723-4753

Kate Stein, ReEnvisioning Committee Chair
Burlington High School
(802) 864-8411 x 22004
kstein@bsdvt.org

Carol Lyon, Assistant Headmaster for Business Services
St. Johnsbury Academy
(802) 748-7703
clyon@stjacademy.org

Chris Cole, Director of Operations
Slate Valley Unified School District
(802) 265-4905
ccole@svuvt.org

Mike Welch, Senior Project Manager
NCIC
(802) 748-5101 ext. 2025
mwelch@ncic.org

Andrew Lundeen, Director of Finance and Operations
Lamoille South Supervisory Union
(802) 888-4541 x5485

HOURLY RATES

Black River Design, Architects

Partner	\$140
Architect.....	\$90-\$120
Project Manager	\$81.75-\$102.75
Draftsperson	\$75
Head of Interiors	\$123.75
Administrative	\$84.75-\$87

Wagner Hodgson (Landscape Architecture)

Partner	\$175
Principal	\$130
Associate	\$110
Landscape Architect.....	\$95
Landscape Designer	\$85
Support Staff	\$55

Engineering Ventures

(Civil and Structural Engineering)

Officer/Principal	\$130 – 160
Senior Project Manager/Engineer	\$125 – 150
Project Managers.....	\$105 – 125
Project Engineers	\$95 – 110
Staff Engineers	\$85 – 105
Engineering Technicians/Designers	\$85 – 105
Administrative	\$60 – 80

Pearson and Associates

(Mechanical and Electrical Engineering)

Principal	\$130-150
Senior Project Engineer	\$120
Design/BIM Technicians.....	\$85-90
Administrative	\$65

Merkur Construction (Cost Estimating) \$70

EXCLUSIONS

Black River Design and our proposed team do not provide the following services. They are typically contracted or paid directly by the Owner. We can assist with recommending firms if any of these services should be required, and we can help you with budgeting for those services which become necessary.

- Destructive investigation
- Building air testing
- Hazardous material testing
- Quality control testing
- Commissioning
- Printing of estimating and construction documents
- Permit fees
- Section 106 Review
- Mass printing or mailing of promotional materials

REIMBURSABLE EXPENSES

The following are customary reimbursables billed to you as they are incurred.

- Mileage rate: Current IRS rate
- Postage: At cost
- Telephone (based on construction cost)
 - < 1 million: \$6 per/month
 - > 1 and < 3 million: \$12 per/month
 - > 3 million: \$18 per/month
- Video conferencing: At cost
- Out-of-house scanning/printing: At cost
- In-house printing
 - Documents up to 12"x18"
 - B&W: \$0.07 per page
 - Color: \$0.40 per page
 - Large format: \$0.50 per sf
- Meals and lodging: At cost



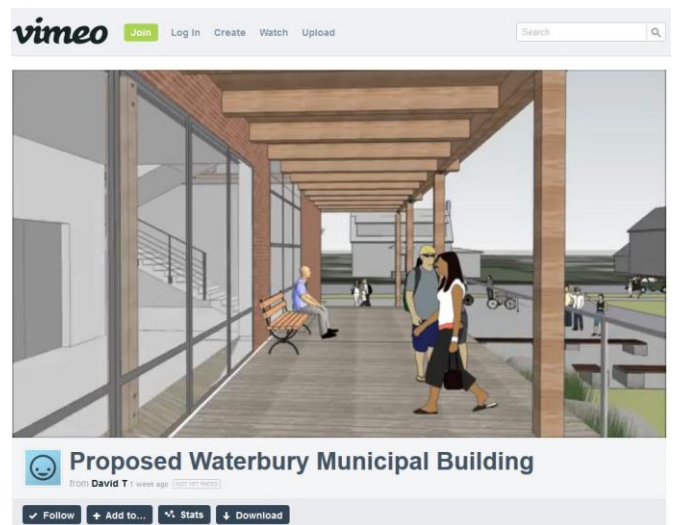
WATERBURY MUNICIPAL COMPLEX FEASIBILITY STUDY

Waterbury, VT

In the aftermath of Tropical Storm Irene, Black River Design helped the town of Waterbury develop plans for a municipal complex on a two acre site in the 100 year flood plain.

We worked with staff to identify space needs for a combined town office, public meeting room, public library, and police station. Concurrently, we evaluated and eliminated the possible reuse of the existing flood damaged buildings. Black River Design then led a series of public workshops, where we gathered community input and incorporated the preferred elements into a conceptual design for a new facility.

Careful consideration was given to resilient design, flood proofing strategies, the context and character of the village, and the unique combination of program elements. In the end, the town decided not to purchase the lot in favor of another centrally located site outside of the flood zone.



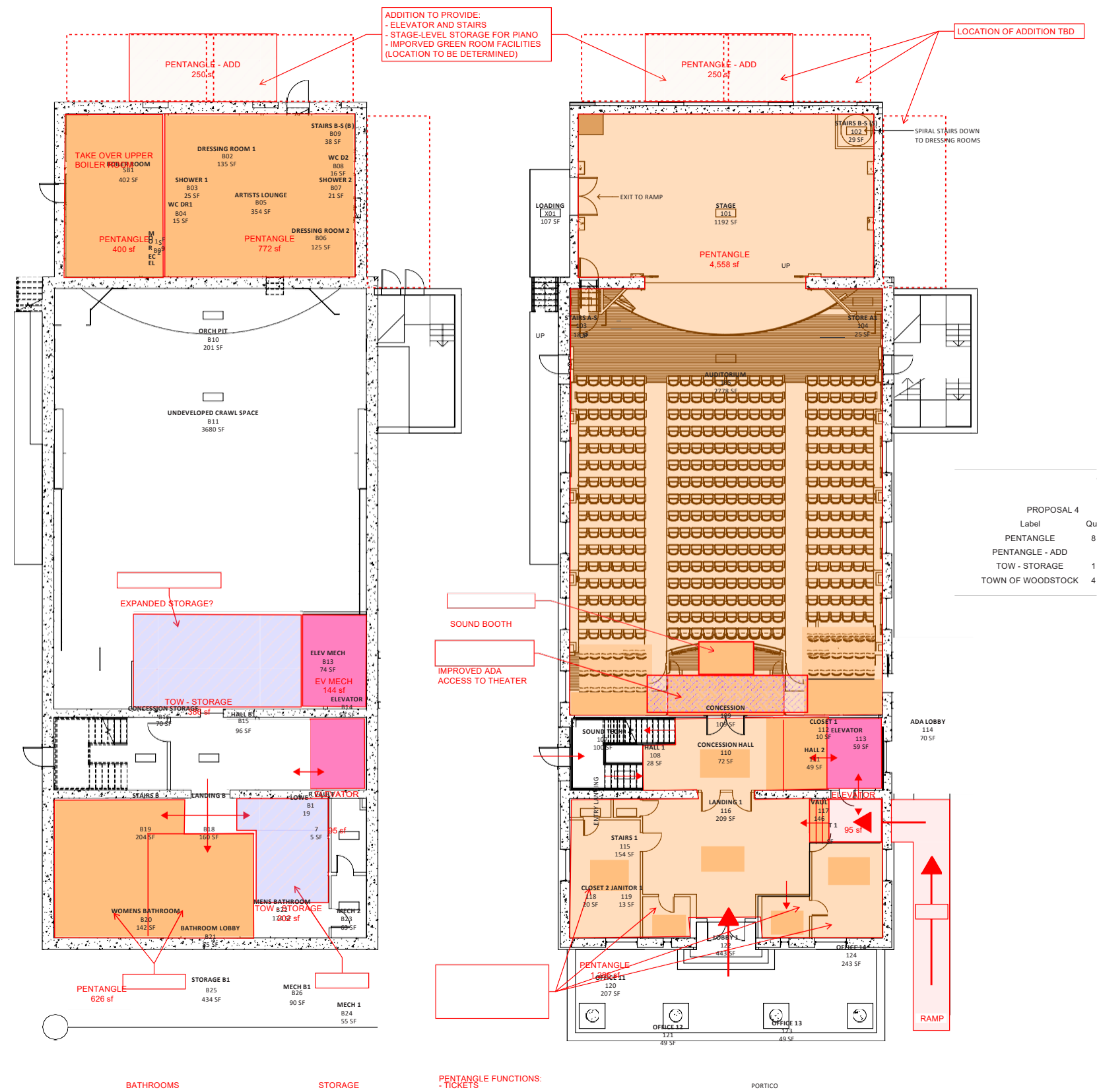
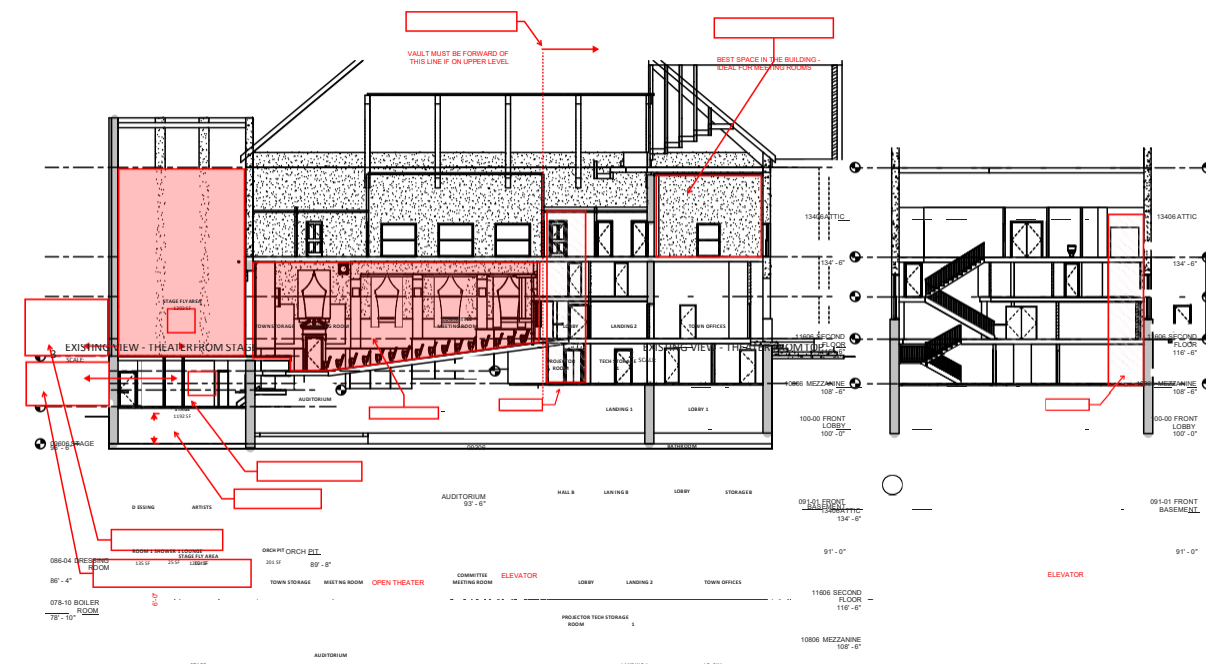
The Municipal Complex site was on the edge of the state office campus. The design responded to the village character of Waterbury to distinguish itself from the state buildings and present a welcoming face to the town.



WOODSTOCK TOWN HALL THEATER RENOVATION

Woodstock, VT

Currently in the design phase, this addition/renovation will improve back stage flow and increase accessibility while replacing a failing stage addition. Structural issues due to floodplain proximity at the addition location will also be addressed. Proposed interior renovation of the theater includes a new accessible raked theater floor, seating reconfiguration, as well as new lighting, sound system, and acoustic panels. In addition, renovations to the front of house and town hall will make better use of the historic building. Town offices will be moved to the second floor, creating more efficient use of space. Mechanical and Electrical systems will also be replaced.





MONTPELIER FIRE STATION

Montpelier, VT

Extensive renovations were performed to the existing three-bay, historic station which houses the garage and maintenance areas. A two story addition was added at the rear of the tight municipal site and houses administrative and public meeting spaces.



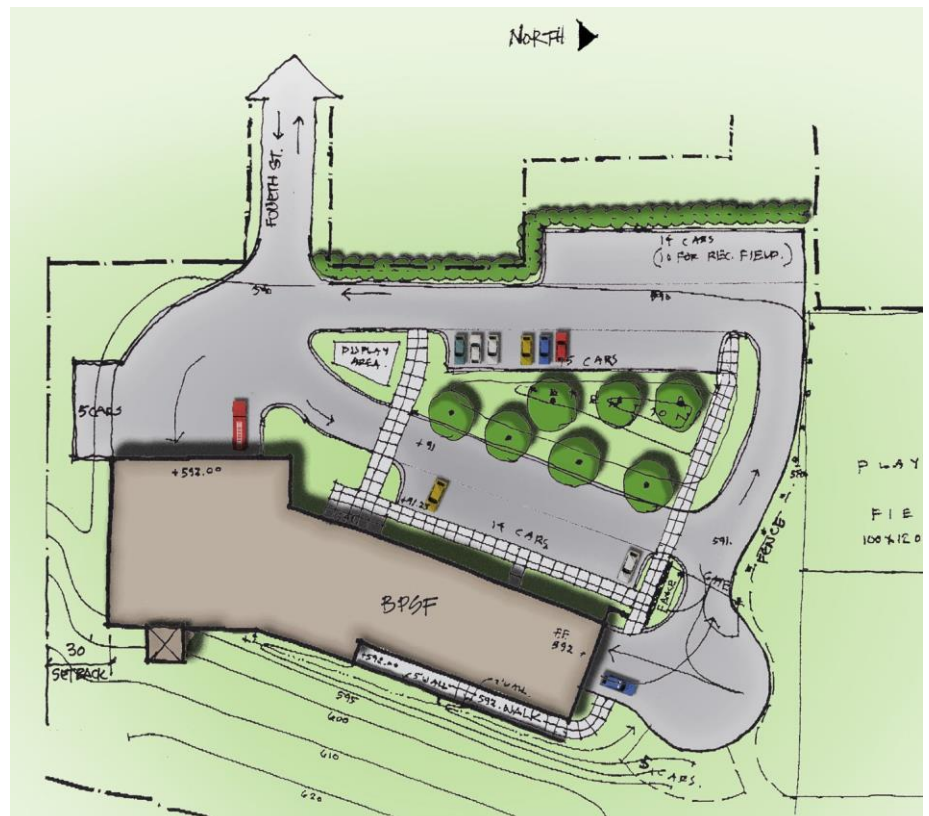


BARRE PUBLIC SAFETY FACILITY

Barre, VT

For their new 25,000 SF public safety facility, Black River Design assisted the city of Barre in creating a fully equipped modern public safety complex. Outside, the choice of durable materials such as local granite and brick honors the past. Inside, we gave careful consideration to ways of encouraging community use while ensuring the highest level of security and protection.

Spaces open to the public are located on the first floor near the front entrance and separated from the administrative areas by controlled access corridors,







BRIGHTON TOWN HALL PHASE I RENOVATION AND PHASE II CONCEPTUAL DESIGN

Island Pond, VT

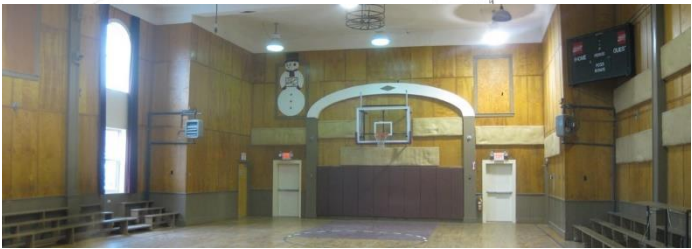
Preservation Trust of Vermont Award Winner

The Brighton Town Hall began life as the Island Pond Opera Block in 1893. The building has been renovated many times since. BRD designed a deep energy retrofit and worked to bring the structure back to its original grandeur, which involved restoring the tall Palladian windows, the divided light store front and transom windows as well as restoring the wood pilasters, capitals, roof brackets and other ornate trim. Future phases include interior renovations of office space and the gymnasium. The building is a mixed use structure, including municipal offices, bank, and library. A next phase will include adding an elevator and second means of egress to the current vacant, but historic third floor.





BRIGHTON TOWN HALL
PHASE II
CONCEPT SKETCHES





ST. JOHNSBURY ACADEMY MASTER PLAN

St. Johnsbury, VT

Vermont ASLA Public Space Award Honorable Mention

Over the course of several building projects the Academy realized its overarching goal of a more pedestrian oriented campus. A parking lot formerly located in the center of the campus was relocated to the outskirts. The new art center and library along the primary pedestrian pathway frame the new central campus green. Students now gather on the green, in an outdoor amphitheater, and on sitting walls between the new arts center and athletic complex.



VERMONT HISTORY CENTER

Vermont Historical Society
Barre, VT



The renovation and adaptive reuse of Barre's historic Spaulding Graded School into the headquarters of the Vermont Historical Society preserved the character of this landmark building and restored original design details. Minimizing layout changes, existing rooms were transformed into modern and functional meeting spaces, offices, library, and archival storage under the review of the Division for Historic Preservation. The project involved window replacement, complete upgrades of the mechanical systems to provide climate controlled gallery and archival space, and the addition of ramps and elevators to make the entire 10-level facility accessible.



LATTIE F. COOR HOUSE LEED GOLD RENOVATION AND ADDITION

University of Vermont

Black River Design worked closely with the College of Arts and Sciences to accommodate their program and accommodate handicap accessibility while maintaining the historic appearance. Particular attention was paid to maintaining or restoring historic details and concealing ventilation and fire suppression systems to the greatest extent possible. In the final design very few original features were compromised. Original plaster and woodwork was maintained and restored. A rear addition was required to make the building accessible by including a ground level entry, an elevator, enclosed stair and accessible washrooms.



CLASS OF 1966 ENVIRONMENTAL CENTER
PETAL CERTIFIED RENOVATION AND
ADDITION

Williams College \ Williamstown, MA

Petal Certified - International Living Future Institute

This classroom and office building is designed to be Net Zero Energy and Water. With six of the seven criteria already satisfied, the Center is in the Performance Monitoring Phase of Living Building Challenge certification. Among many architectural and engineering challenges, the Center incorporates an historic house into a high performance building. The new facility houses faculty offices, classrooms, reading room, and a kitchen classroom. The design features an energy efficient building envelope, foam-flush composting toilets, balanced daylighting, solar PV panels, and no “red-list” materials.





ST. JOHNSBURY RAILROAD STATION WELCOME CENTER AND NCIC OFFICES

St. Johnsbury, VT

Phase I of the building renovation transformed the first floor of the historic train station into a visitor and welcome center. Phase II provided new second floor offices for NCIC and a records vault addition. The slate roof and copper flashing was also restored as part of Phase II.





BELLOWS FALLS MIDDLE SCHOOL

Historic Renovation \ Bellows Falls, VT

Preservation Trust of Vermont Award Winner

This extensive renovation brought an aging architectural asset into 21st century educational use and helped preserve the vibrant density of the town's core. The new entry is not only a welcoming gathering place, but is also accessible and secure. Creative interior reconfiguration opened up circulation, increased community use space, allowed for the preservation of historic elements and uncovered a few hidden gems. The renovation also incorporated energy efficiency measures, including new energy recovery ventilators, photovoltaic panels, a solar hot water system, and a pellet boiler – all strategically hidden from view. An energy dashboard provides data and an interactive teaching opportunity.



BRANTVIEW

St. Johnsbury Academy, VT

National Register of Historic Places

This historic residence was completed in 1884 for the locally prominent Fairbanks family. The property was gifted in the 1930's to the Academy and has served as a dormitory since. Black River Design assisted with a multi-million dollar renovation, including critical updates such as a new elevator stair tower and lobby, new windows, interior restoration, structural improvements, new slate roof, insulation, and new MEP systems including a full sprinkler system. These updates will preserve and bring the building into modern use for generations of students to come.





SWANTON TOWN HALL FEASIBILITY STUDY

Swanton, VT

At the head of the Swanton Village green, the town hall helps define the heart of the community. Black River Design helped the Town of Swanton ensure the continued viability of the building by addressing modern requirements such as a second means of egress, fire safety, ventilation and air conditioning, wheelchair access, LED lighting, and energy conservation as part of a recent feasibility study.

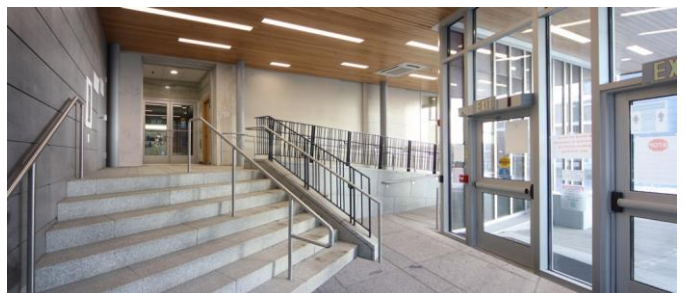




120 STATE STREET REAR ENTRY ADDITION AND STAIR TOWER RECONSTRUCTION

State of Vermont Department of Motor Vehicles
Montpelier, VT

In the years since the State Office building was designed, society has changed its thinking about accessibility and inclusivity. The new accessible lobby is designed to be as enduring and polished in its construction as the original WPA modern building, employing a palette of materials including local Barre granite and glazed terracotta panels. In contrast to the existing, the addition is transparent and welcoming to all.



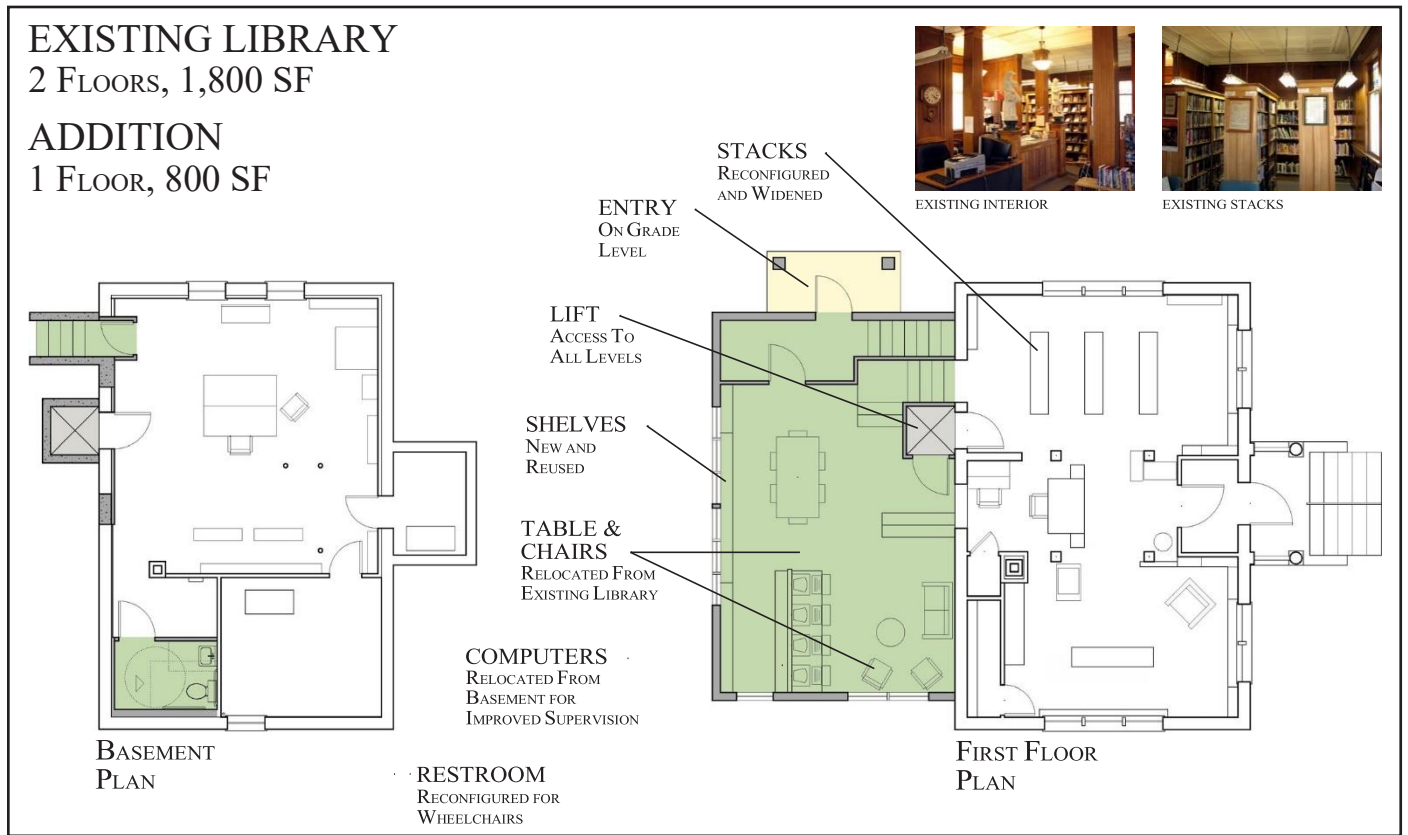


WOOLSON BLOCK REDEVELOPMENT

Springfield, VT

Renovations to this prominent historic building have helped revitalize downtown Springfield. The layout includes 15 affordable rental apartments, 4 studios for at-risk youth, and 5,000 SF of street level commercial space. The project was developed by Housing Vermont and Springfield Housing authority, with funding from a variety of public and private sources.





CALEF MEMORIAL LIBRARY ADDITION AND RENOVATION

Washington, VT

Currently under construction, the project consists of a one-story addition and minor renovations. The addition contains a wheelchair lift, accessible restroom and space to accommodate book stacks with accessible clearances. Accessible parking spaces are also provided.





WOODS PUBLIC LIBRARY ADA RENOVATION

Bradford, VT

The Woods Library in Bradford was designed by the noted 19th century Vermont architect Lambert Packard. Sensitivity to the historic integrity of the building both inside and out was central to the design concept for bringing the library into ADA compliance. Working with the library the solution included a new single user restroom, an accessible kitchenette and a vertical platform lift to connect the main level with the children's room on the lower level, allowing internal accessibility. The solution worked with the tight site and integrated the defining elements and details of the historic building.



The vertical platform lift for accessibility used an existing door to minimize its visual impact on the historic interior.

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

Wagner Hodgson Landscape Architecture is a eighteen person, professional landscape architecture and planning studio founded in 1987. With offices in Burlington, Vermont and Hudson, New York, our firm offers expertise and services for landscape architecture, land use, site planning and urban planning. The process of uniting context, form and materials provides the basis for Wagner Hodgson Landscape Architecture's approach, crafting modern sculptural landscapes expressing the essential inherent beauty of natural materials.

The firm's partners, H. Keith Wagner, FASLA, Jeffrey Hodgson, FASLA, and Dale Schafer, ASLA lead the studio's commitment to excellence in design and respect for the diversity of our client's needs and project settings. The partners and staff contribute a vigorous knowledge of landscape architecture, construction, and a conscientious execution and delivery of projects. Structured in the tradition of the open design studio, Wagner Hodgson encourages and fosters interaction and collaboration throughout the design process. This collaborative environment cultivates a philosophy for shared commitment to creative application of design, technology, and social responsibility in the making of new landscapes. Our reputation comes from designing modern, sustainable environments in a wide variety of institutional, campus, corporate, residential, resort and urban design, and planning projects. Geographically, these projects range from New England and Canada to Hawaii and the Bahamas. We are honored to have been recognized with numerous awards from the American Society of Landscape Architects at both the national and state level.

Jeff Hodgson, FASLA, is a licensed landscape architect, is registered with the Council of Landscape Architectural Registration Board (CLARB), is a Fellow of the American Society of Landscape Architects, is a former President of the Vermont Chapter of the American Society of Landscape Architects and is a member of the Vermont Green Building Network.

Wagner Hodgson, Inc. is an S-Corporation licensed to practice landscape architecture in Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island and Vermont.

WAGNERHODGSON
LANDSCAPE ARCHITECTURE



City Hall Park Redevelopment
Burlington, Vermont



Middlebury Downtown Park
Middlebury, Vermont



Burlington Fletcher Free Library Renovation
Burlington, Vermont



Burlington High School Renovation
Burlington, Vermont



Taylor Park Master Plan
St. Albans, Vermont



Oakledge Park Master Plan
Burlington, Vermont



Hoosac Valley Park
North Adams, Massachusetts

Middlebury College Tennis Facility
Middlebury, Vermont

Manville Road Civic Space
Pleasantville, New York

Bennington Welcome Center
Bennington, Vermont

Downtown Winooski Park
Winooski, Vermont

ECHO Center for Lake Champlain
Burlington, Vermont

I-89 Rest Areas
Williston, Vermont

Vermont Arts Council Sculpture Garden
Montpelier, Vermont

Winooski River Greenway Master Plan
Montpelier, Vermont

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

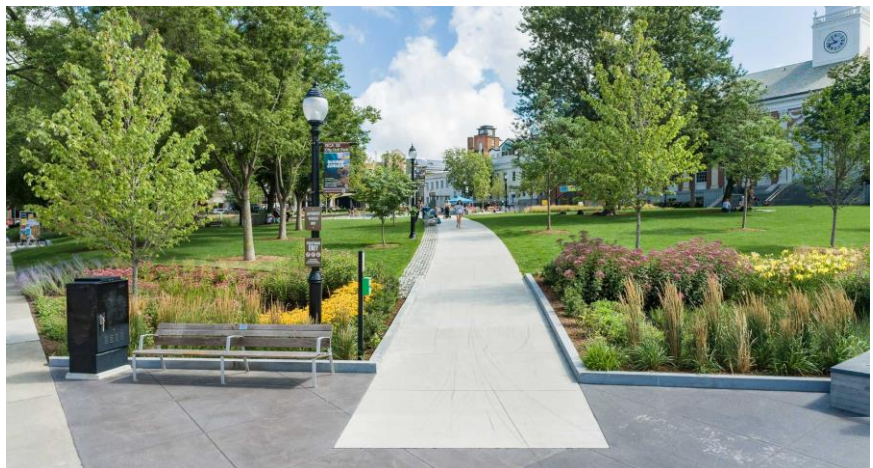
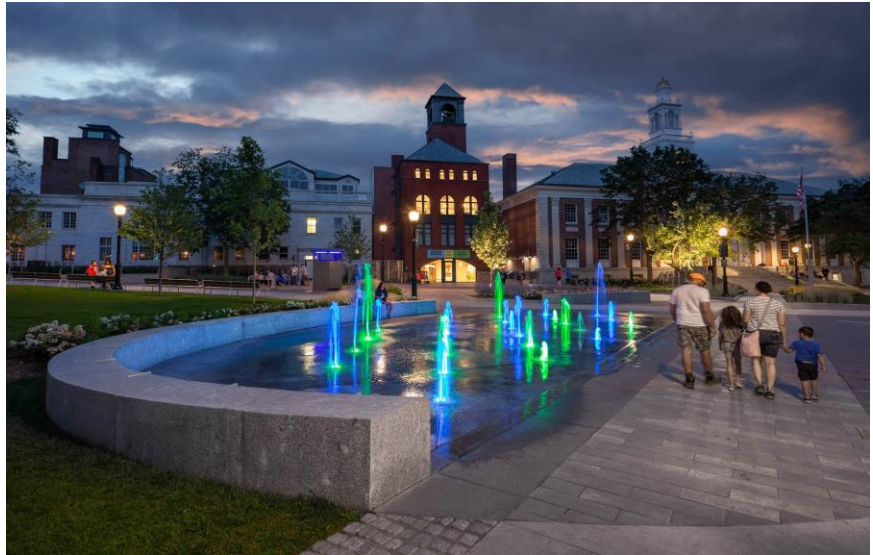
**BURLINGTON GREAT STREETS
CITY HALL PARK**
Burlington, Vermont

In 2017 the project became a part of the Great Streets Initiative. The Great Streets Initiative is a culmination of many years of planning and project development, including the public vote in March of 2015 to use the City's downtown TIF district to make new investments in the downtown's public infrastructure, to ensure that Burlington residents have a downtown that is a vibrant, walkable and sustainable urban center. Through this initiative, the City will be advancing several key projects envisioned by plans such as Imagine City Hall Park, planBTV Downtown and Waterfront Master Plan, and the Transportation Plan.

For City Hall Park this meant advancing the 2012 Imagine City Hall Park Plan through additional public meetings and the permitting process including review by local and state historic boards. It also meant that the project could be viewed in the larger context of other improvements happening in the downtown district. As a result of this process, changes have been made to the Park design to meet a greater level of consensus among the various public stakeholders.

2015 Vermont Public Spaces Award - Honor Award Vermont Chapter of ASLA

2021 Vermont Public Spaces Award - Honor Award Vermont Chapter of ASLA



WAGNERHODGSON
LANDSCAPE ARCHITECTURE

BURLINGTON GREAT STREETS
CITY HALL PARK
Burlington, Vermont



WAGNERHODGSON
LANDSCAPE ARCHITECTURE

BURLINGTON HIGH SCHOOL
Burlington, Vermont

Wagner Hodgson worked closely with the design team and steering committee to explore ways to consolidate and improve the existing high school campus. An emphasis was placed upon improving vehicular and pedestrian circulation, accessibility, security, stormwater improvements and general consolidation of the sprawling campus.

The grade from the south up to the new entry was re-worked into an accessible grade. Parking islands break the parking up into different areas and trees are laid out to provide maximum shading mid-day. A pedestrian corridor was designed to accommodate students coming from the existing bus loop and drop-off was reconfigured to provide separation from parking. Stormwater is treated in a series of gravel wetlands planted with native riparian vegetation.



Perspective view



Proposed Master Plan

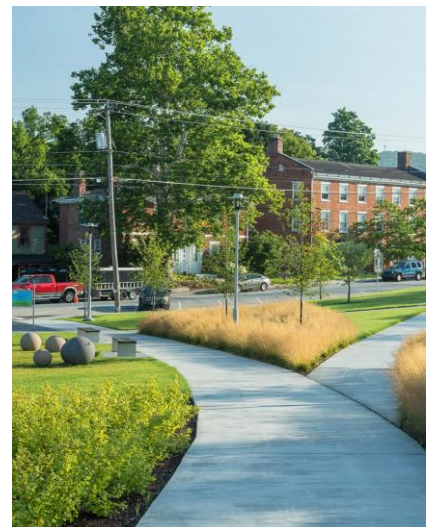
WAGNERHODGSON
LANDSCAPE ARCHITECTURE

MIDDLEBURY
NEW DOWNTOWN PARK
Middlebury, Vermont

Wagner Hodgson recently completed a 1.7 acre public park in downtown Middlebury, VT situated at the location of the former Town Municipal Office Building and Gymnasium at 94 Main Street. WHLA worked with the Town and Middlebury College to create a family-friendly, safe, and visually inviting space for residents, students and visitors to the Town of Middlebury.

The park incorporates a large play lawn, a variety of seating, picnic tables, interactive and natural play elements, historic markers, and public art. A mix of both passive and active recreational areas are unified by accessible walks, sustainable LED lighting, and native planting. Planting design utilizes a variety of native trees and plants to define spaces and ensure both color and texture throughout the seasons. Stormwater is directed to a series of rain gardens along the lower edge of the Park. The goal was to create a park of lasting quality and unique character for the enjoyment of the community.

2019 Honor Award, Vermont Chapter of ASLA





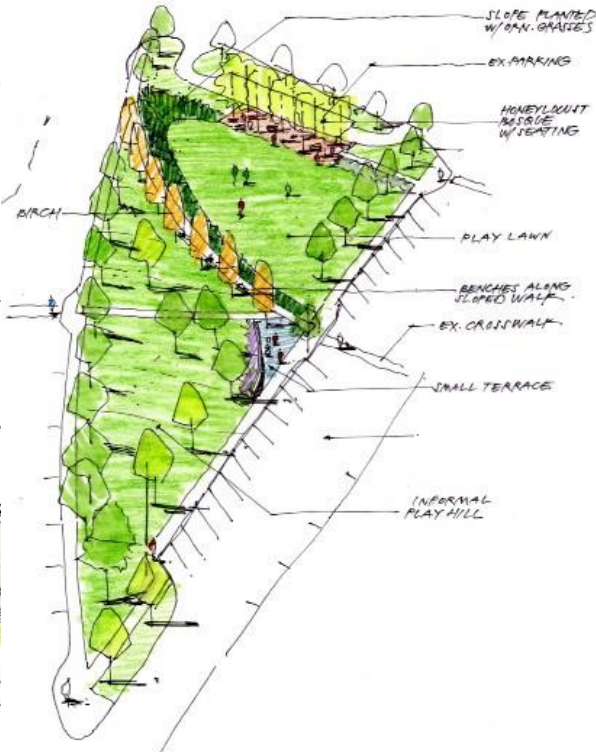
MIDDLEBURY
NEW DOWNTOWN PARK
Middlebury, Vermont



Final Site Plan



Concept Sketches



WAGNERHODGSON
LANDSCAPE ARCHITECTURE

**WINOOSKI DOWNTOWN
DEVELOPMENT MASTER PLAN**
Winooski, Vermont

The Winooski Downtown Redevelopment Project is an ambitious \$175 Million Dollar project to revitalize downtown Winooski. Wagner Hodgson developed a Landscape Master Plan as well as site designs for a series of prominent open spaces and streetscapes. The planning and design goals were to restructure and revitalize the existing fragmented elements of the central business district knitting them together with a compliment of new commercial/retail facilities, high density housing, and a 1200-car parking structure within a re-engineered traffic pattern. Two prominent open spaces are created - a centrally located public park and a civic plaza flanking the Historic Champlain Mill to the Winooski River.

The project received a 2006 Smart Growth Award from the Vermont Forum on Sprawl.



Project site - before



© Westphalen Photography





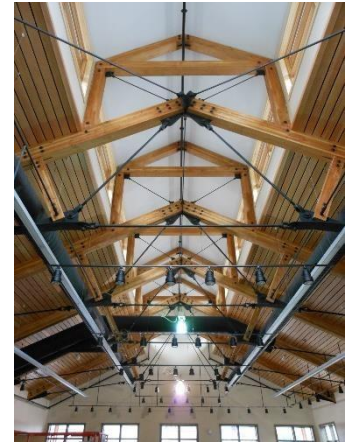
About Us

Engineering Ventures, PC (EV) is an experienced structural and civil consulting engineering firm established in 1994, with offices in Burlington, VT, Lebanon, NH, and Schenectady, NY. Our team of qualified professionals and technicians provide a broad range of services to meet the needs of our private and public clients in the northeastern US and beyond.

We strive to create sustainably built environments for our communities. This means implementing environmentally friendly design practices and pursuing projects that nurture the public. We pride ourselves on recognizing community needs and enabling stakeholders to achieve their vision.

Structural Engineering

Engineering Ventures structural team collaborates with their clients to ensure that structural considerations are incorporated into designs at the beginning of the project. This close cooperation translates into buildings that are efficient, effectively coordinated and cost effective. Services offered include building code compliance, new building system structural design, historic building evaluation and restoration, load analysis and design, rigid and braced frames for earthquake and wind, retaining walls, fire walls, trusses, foundations, composite systems, and roofs. The professionals at Engineering Ventures are well versed in heavy timber, lumber and manufactured wood, structural steel, light gauge steel, reinforced concrete (placed, precast, and fabric formed), and masonry.



Civil Engineering and Permitting

Our civil team provides every project with an exceptional depth and breadth of engineering knowledge and experience, as well as the ability to staff projects according to each client's requirements. We have experience using the newest methodologies, technologies, and work practices. We have a significant record of solving challenges. We offer skill and experience in buried utilities, local roads and bridges, parks and recreation facilities, master planning, stormwater management, sanitary sewer, water supply and distribution, erosion and sediment control, grading and earthwork, storage and fire protection, marine and waterfront development, wetlands, and other environmentally sensitive habitat areas. We execute all our projects with paramount consideration for the health, safety, and environmental well-being of all current and future project participants and stakeholders.



Historic Preservation

Preserving historic structural building systems is a specialty of Engineering Ventures. We have developed a strong reputation for the evaluation and restoration or rehabilitation of many public and private structures. When developing remedial plans or renovation designs, we are sensitive to the historic fabric of a building and focus on minimizing remedial work. The firm is knowledgeable of the Secretary of the Interior's Standards for Rehabilitation and Tax Credits and has worked on many Tax Credit Projects.





Springfield Foundry/Southern VT Community Recreation Center, Springfield, VT – Recommendations were made for reinforcing certain truss web members and a structural insulated panel (SIP) system was designed to simultaneously incorporate the insulation and carry the load of the solar cells while minimizing the impact to the roof structure.



Danville Town Hall, Danville, VT – A review was performed of construction for the Preservation Trust of Vermont to best meet the intent of the Secretary of the Interior's Standards for Rehabilitation. Repairs were designed and implemented to stabilize the roof, structural deterioration and deficiencies. Design was also provided to allow implementation of floor improvements to allow public use of the second floor and handicap access. Current work involves repairs to the front porch.



Pierce Hall Community Center, Rochester, VT – Structural services are being provided for on the restoration of the historic Pierce Hall Community Center in Rochester. Work includes the evaluation of the existing floor, balcony, and roof members along with the design and analysis for the addition of a new tower on the existing roof structure.



Masonic Temple, Middlebury, VT – Civil and structural services were provided for a top to bottom rehabilitation of an historic structure on Route 7. Work included reinforcing the roof and attic trusses, floor stabilization, a concrete vault was removed, new stairways and an elevator were added. Civil work included site design, parking and utilities.



Firehouse Center for the Visual Arts, Burlington, VT – Structural services were provided for the renovation of this historic firehouse, next to city hall, in downtown Burlington. A new internal braced steel frame and bell support were designed as well as a temporary monorail for the restoration of the bell, and temporary and permanent tie-down rods for the cupola. Winner of an ACEC Excellence in Engineering award. Civil work included stainless steel-edged concrete paving sections, and grading to blend in with the Church Street Pedestrian Mall. The project included expert services by Engineering Ventures to address building movement that had been taking place during construction while excavation was occurring around the historic building foundations.



Vermont Granite Museum of Barre, Barre, VT – Structural and permitting services were provided for this historic granite manufacturing shed. Structural Insulated Panels (SIPS) were used to avoid rafter reinforcing and to keep the interior framing exposed. The foundation was replaced allowing the building to be raised above the flood plain. Winner of ACEC Excellence in Engineering award.





Addison County Sheriff's Office, Middlebury, VT – Renovations were made to this 5,000 sf, 1800's original jail house. An addition was created to provide new office space, a drive through bay for loading and unloading prisoners, and a concrete exterior exercise yard with a steel framed safety enclosure.



Mathewson Block, Lyndonville, VT – Emergency stabilization and rehabilitation design was provided for this 1869 brick building heavily damaged by fire. Full structural rehabilitation of the building was provided, including small additions for stairwells, elevators and ramps. Winner of an ACEC Grand Award for Engineering Excellence.



Enosburg Opera House, Enosburg, VT – Structural services provided for this historic building include; renovation and code compliance, reinforcing of heavy timber trusses, reinforcing of the main floor for large assembly performances, and the installation of an elevator which required extensive building shoring and foundation underpinning.



United Church of Northfield, Northfield, VT – A full structural analysis was completed on this 1836 building in order for it to meet the current Code required loads. Work included review and upgrades to the steeple, roof, main sanctuary floor, lower-level floor and foundations. Exterior drainage work around the building foundation was also included due to water infiltrating into the lower level.



Granville Town Hall Assessment, Granville, VT – Structural engineering services were provided to determine live load capacity of the existing framing, and provide schematic upgrades to meet the Code required loads for the floor's intended use.



Bristol Holley Hall, Bristol, VT – A structural conditions assessment and upgrades were performed on the entire building from the bell tower, roof, overhanging balcony, main floor and foundations. Work to the roof framing included upgrades to the heavy timber trusses and purlins. The main floor was upgraded to meet current Code requirements to hold public events. Three new additions were added to create handicap access to the lower Municipal offices and main level Town Hall.



Akeley Memorial Building Cupola Rehabilitation, Stowe, VT – Structural engineering services are being provided for renovations including a two-story vault addition, entry canopy projects, design of the existing flag pole support, replacement of the existing support columns and anchorage of the cupola to the existing roof structure.





Middlebury Town Hall Theater, Middlebury, VT – Structural analysis and design was performed for this former Knights of Columbus building for adaptive reuse as the Town Hall Theater. Work included upgrades to the main roof, theater floor, support for a new three-story elevator and a new central stair case. A new addition houses administration and storage space for performances.



Stowe Municipal Building, Stowe, VT – A preliminary structural review was performed on this 1800's building to determine the priorities for immediate structural stabilization and structural code compliance for a renovation project. Recommendations were made for immediate repairs.



Freeman Hall, Champlain College, Burlington, VT – This historic multiuse building was experiencing drainage issues at the foundation and under the footings. Civil services provided included proper drainage and free draining backfill.



Barre Old Labor Hall, Barre, VT – This project includes floodproofing, for wet and dry, in an historic building in Barre. A structural assessment of the interior and exterior conditions, foundation, exterior fire escape, porches, entrances, and exits was performed for remediation. A study is underway to acquire funding for the rehabilitation in zone A for FEMA.



Flynn Theatre, Burlington, VT – Structural renovations were designed for the 70-year-old theater including steel mezzanines to support the lighting. Civil services were provided for improvements to the stormwater and sewer drainage. The existing structure was evaluated and discussions with building code officials were held to determine the best method to accommodate present code requirements.



The Grand Isle Lake House, Grand Isle, VT – Several projects over the last 5 years including: foundation and drainage assessment structural evaluation and design of repair/reinforcing for public use.





Barnes Camp Visitor's Center, Stowe, VT – EV produced a feasibility study for the Barnes Camp in Stowe. This building was constructed in 1927, and is part of Vermont's recreational history. The goal of this project is to repair this building and create a visitor's center for travelers visiting Smuggler's Notch.



Enright Block, Windsor, VT – Extensive renovation was performed on this dilapidated 150-year-old brick building, for reuse as a mix of office space, retail and residential space.



Haskell Library and Opera House, Derby Line, VT – Evaluation of miscellaneous issues and renovations at this historic multi-use, public facility straddling the US and Canadian border used for local events and international meetings.



Perry Hall, Champlain College, Burlington, VT – Civil and structural engineering services were provided for an addition and restoration of this 150-year-old, Italianate-style brick building for reuse as the campus Welcome Center. The ground floor rooms have been preserved and will function as reception and conference spaces. The project included an innovative wetland garden on the lower edge of the property designed to absorb storm water runoff, as well as a Geothermal pump, and was awarded LEED Platinum.





Waterbury State Office Complex, Waterbury, VT

EV advised and assisted the state with the evaluation of options for the State of Vermont Waterbury Complex after it was damaged by tropical storm Irene. The options included reoccupation or replacement, and upon the results of structural integrity evaluation, condition and vulnerability of utilities, and permit implications, the State decided to revitalize the site.

This plan included the removal of 22 buildings deemed most susceptible and least historically valuable. It also included the implementation of an entirely new Central Plant and office building, a reconfiguration of site layout and parking, and the rebuild of utilities. EV also guided the project through ANR and ACT 250 permit processes.

In addition, the remaining core buildings were dry flood proofed against damage from a 500-year flood event.

Reference

Name: John Ostrum, State of Vermont Department of Buildings and General Services

Phone: 802-828-5652





Woolson Block Redevelopment, Springfield, VT

Civil and structural engineering and permitting services for the renovation of this 18,442-sf, historic, 1860's Woolson Block building in collaboration with the Springfield Housing Authority and Housing VT. This project includes 20 redesigned living units and 4 commercial units with associated improvements including ADA access, removal of rear addition, improvements to north lower area, and stabilization of the rear river bank.

Reference

Name: Mike Hulbert, H.P. Cummings Construction, Principal & Senior Project Manager

Phone: 603-747-3303





Service Areas

Transportation & Traffic
Municipal & Regional Planning
Airport Planning & Engineering
Civil/Site Engineering
Survey
Landscape Architecture
Facilities Planning & Design
Mechanical
Electrical
Structural
Dams
Water Resources
Environmental Documentation/Permitting
Natural Resources Management
Water/Wastewater
Environmental Services
Hazardous Materials/Brownfields
Construction Phase Services

**DuBois
& King**
inc.

www.dubois-king.com

Firm Overview

DuBois & King, founded in 1962, is a multidisciplinary, professional consulting firm providing planning, engineering, and construction phase services to federal, state, municipal, institutional, and private sector clients. With offices in Vermont, New Hampshire, Maine, and New York, DuBois & King provides professional services in civil engineering, site development, water resources, survey, water/wastewater engineering, environmental documentation, and mechanical, electrical, and structural engineering. The firm employs engineers, planners, designers, surveyors, technicians, environmental and permitting specialists, wetland scientists, and support personnel.

DuBois & King is positioned to provide professional services to support a wide variety of projects utilizing a full range of in-house technical disciplines, and we tailor teams to the particular needs of each project. DuBois & King licensed professionals and technical staff support projects associated with:

- Transportation
- Water Resources
- Public Infrastructure
- Facilities
- Site Development
- Environmental Documentation & Permitting



Service Areas

Facility Assessments/Audits
Code Reviews
Energy Audits/Energy Conservation
Sustainable Design/Net Zero
Commissioning
Water Conservation
Historical Buildings
Heating and Cooling Systems
Steam & Water Boilers
Chilled Water Systems
Air Handling Systems
Ventilation Systems
Process Piping Systems
Plumbing Systems
Medical Gas Systems
Solar Domestic Hot Water
Snowmelt Systems
Lab Systems

**DuBois
& King** inc.

www.dubois-king.com

Mechanical Engineering

DuBois & King mechanical engineers specialize in the design of building heating, cooling, ventilation, and plumbing systems. D&K mechanical professionals understand the special considerations and challenges inherent to building systems, including environmental controls, physical limitations imposed by building configurations, process details and code requirements, the safeguard of building occupants and equipment, energy efficiency, and the cost-effectiveness of design alternatives.

Firm professionals are experienced problem solvers who have earned a reputation for being responsive to clients and creative in their approach to the design and upgrade of mechanical and plumbing systems. They balance capital costs with future returns from energy efficient design. Their expertise encompasses new construction, as well as facility renovations and rehabilitation.

Assignments include single discipline through full service multidiscipline design and construction administration. The firm is committed to integrated design of high performance buildings. Staff includes Leadership in Energy & Environmental Design (LEED) Accredited Professionals and ASHRAE Certified Commissioning Process Management Professionals.



Service Areas

Facility Assessments/Audits
Code Reviews
Sustainable Design/Net Zero
Lighting Controls
Evaluation of Power Supplies
Grounding and Lightning Protection
Cogeneration Studies
Load and Short Circuit Analyses
Emergency Power Systems
Power Distribution
On-Site Generation
Telephone/Intercommunications Systems
Interior, Exterior Lighting
Closed Circuit Television
Security and Access Control
Paging and Clock Systems
Fire Alarm Systems
Arc Flash Analysis

**DuBois
& King** inc.

www.dubois-king.com

Electrical Engineering

DuBois & King's electrical engineering group consists of experienced project managers, engineers, designers, and technical staff capable of providing comprehensive services necessary for the design of electrical systems for governmental, institutional, commercial, and residential buildings.

Firm professionals perform field investigations, evaluations, and system condition assessments needed to design power, lighting, communications, and instrumentation systems. Firm engineers provide studies, computer modeling analyses, bid and construction documents, and cost estimates for a wide range of projects.

D&K electrical engineers work closely with owners, architects, and other professionals to develop assessments, recommendations, and energy efficient designs for new construction and renovation projects. With a focus on thorough assessment of electrical and communication system needs, decades of practical electrical engineering design expertise, and an emphasis on reduction of energy usage, D&K engineers develop electrical infrastructure that contribute to successful building projects.



Randolph Municipal Building Randolph, Vermont

The Town of Randolph had outgrown their thirty-two year old municipal building. The town's Building Committee struggled for nearly five years to develop a design utilizing the existing building, provide new expansion space, fit site limitations, and adhere to the budget set by a public bond vote.

DuBois & King provided engineering services for renovations to an existing 2,200 SF building, and for a 3,200 SF expansion, providing ADA accessibility (including an elevator). A detailed phased construction plan was developed to enable the Town offices to function during construction. The design and construction was completed within twelve months.

DuBois & King provided civil/site, structural, mechanical, electrical, plumbing, and landscape architecture. Energy modeling was used to develop a highly efficient HVAC system. DuBois & King assisted the owner in receiving energy incentives and accessibility grant money for the project.

**DuBois
& King**
inc.

www.dubois-king.com



Images show conditions during construction



Town Offices Addition Essex, Vermont

D&K provided Structural and MEP design for a \$1.7M addition to an existing municipal office building. Improvements include interior renovations, a 6-hour records vault, two-story wood-framed stair/elevator/entry, and a single-story entry vestibule. Staff completed preliminary through final mechanical-HVAC and electrical design as well as structural foundation and framing design using Revit for collaboration between engineering disciplines and the Architect. We also provided bid phase and construction phase services including shop drawing reviews, site visits during construction, review of construction quality control test reports, and closeout procedures.

Reference

John Alden, AIA, Principal
20 Main Street, #3
Essex Junction, VT 05452
(802) 878-5153

**DuBois
& King**
inc.

www.dubois-king.com



Chandler Center for the Arts Renovation and Expansion, Randolph, Vermont

DuBois & King provided multidisciplined design services for planned improvements and expansion to the historic Chandler Music Hall. Constructed in 1907, the building consists of a concrete foundation, masonry walls and pilasters, heavy timber trusses, and timber framing. the addition and improvements required the evaluation of structural, mechanical/plumbing, and electrical systems. The project was developed in a phased approach to allow for fundraising.

Civil/site and survey services included subsurface investigations, analysis, and geotechnical engineering to facilitate a structural approach to foundation systems. Design and construction inspection was provided for the addition to the building, which included a 260-foot access drive, parking area, concrete segmental retaining wall, drainage improvements, and water and sewer service replacements. Structural work required the selection of a foundation system for the addition, the development of an estimate for a foundation superstructure system, and thorough evaluation of the existing roof framing system.

MEP work included improvements and expansion of the HVAC systems, plumbing upgrades and expansion, and acoustical measures. The design team evaluated the entire building envelope for load calculations and insulation improvements and modified heating from 3 to 9 zones. The team upgraded controls to provide programming for additional zones and designed new air handling distribution system to serve new building addition areas and evaluated capacity of new air conditioning system to provide treatment for hall seating area. The electrical and safety system upgrades included lighting, switching, controls, and a new 800AMP service for the custom stage lighting and sound system.

**DuBois
& King** inc.

www.dubois-king.com



Facility Assessments for 42 Buildings City of Concord, New Hampshire

D&K led a multidisciplinary consulting team to perform assessments involving civil/site, structural, mechanical, electrical, architectural, and hazardous material evaluations for 42 public buildings, from administrative to public works facilities of varying ages. Facilities ranged from an ice skating arena to a library to the City Hall and totaled more than 230,000 square feet.

D&K engineers evaluated condition of parking lot and sidewalk pavements and drainage structures, building drainage, foundations, slabs, and superstructures. The team identified building elements with evidence of overstressed conditions, displacement or movement of components, and elements in need of maintenance.

The team provided mechanical assessments of the facilities, including age and condition of all boiler, circulators, heat exchangers, chillers, condensing units, circulators, air handling units, building ventilation systems, and automatic temperature controls systems. D&K assessed the condition of heating, hot water, steam and chilled water piping, duct work, plumbing fixtures, fire protections systems. Electrical evaluations included electrical service size, GFCI device placement and operation, fire alarm system, emergency lighting system, light levels, and exterior lighting. Inspected electrical panels, MCCs, load centers, etc., for condition, capacity, age and placement.

**DuBois
& King** inc.

www.dubois-king.com