

February 9, 2023 | Technical Proposal

Municipal Assistance Section of the Agency of Transportation (VTrans)

VTrans At-The-Ready (ATR) Consultant Engineering Services for Municipal Project Management 2023





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February 9, 2023

Ms. Nydia Lugo, Civil Engineer
Vermont Agency of Transportation
Highway Division - Municipal Assistance
219 North Main Street
Barre, VT 05641

Re: **Vermont Agency of Transportation—At-the-Ready Consultant Engineering Services for Municipalities 2023 Municipal Project Management Services**

Dear Nydia and members of the Selection Committee:

VHB is pleased to present our proposal in response to the Agency's Request for Qualifications for At-the-Ready **Municipal Project Management Services**. Our proven dedication to VTrans and its municipal transportation partners spans over 30 years. We understand the challenges facing Vermont and its communities and are firmly committed to helping achieve the vision of a safer, more efficient, and more connected transportation network. We believe in making meaningful contributions to our communities and our state by providing a balanced relationship between economic growth and environmental stewardship. We are committed to quality and at 1,800-strong, we provide both the local connection and depth of resources to meet the full needs of the VTrans Municipal Assistance Section (MAS).

Our team members' experience planning, permitting, and designing a wide range of roadway, bicycle, pedestrian, stormwater, and multimodal projects across Vermont has provided us with insights into innovations and potential issues that may arise during the course of these projects. Our staff members have served as Project Administrators for VTrans MAS, Structures, and Park and Ride projects, managing consulting engineers through VTrans' processes and procedures, giving VHB even greater insight into what makes projects successful.

We are extremely pleased to present our proposal and we look forward to working together with Vermont municipalities and VTrans on projects that make our communities even better places to live.

Sincerely,

VHB

A handwritten signature in blue ink that reads "Evan P. Detrick".

Evan Detrick, PE

Contract Manager
Director of Transportation
edetrick@vhb.com

A handwritten signature in blue ink that reads "David Saladino".

David Saladino, PE

Principal-in-Charge
Managing Director
dsaladino@vhb.com

Our team is dedicated to our clients and the projects that improve mobility, enhance communities, and make Vermont a better place to live.

Engineers | Scientists | Planners | Designers

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B. General Firm Information



MAS Understanding

The Vermont Agency of Transportation (VTrans) Municipal Assistance Section (MAS) was established in the 1990s as the Local Transportation Facilities section of the Program Development Division. Since its inception, its mission has been to work with and support municipalities and other organizations (the project sponsors) to implement transportation projects that improve its communities. This work includes a wide variety of projects, including bicycle and pedestrian facilities, roadway and intersection improvements, bridge and culvert replacements, stormwater improvements, salt sheds, and municipal park and ride facilities.

Projects advanced through the MAS are funded using a variety of sources, often including federal monies such as Transportation Alternatives grants, along with local matching funds, and occasionally state funds such as the Town Highway and Town Structures Grant Programs. With the use of federal and state funds, the projects are administered through VTrans and must be developed following the VTrans project development process outlined in the MAS's Local Projects Guidebook for Locally Managed Projects. Under this process, the municipality manages and develops the project, and VTrans administers the funding and verifies the established process is being followed. **Although VTrans helps the municipality with many aspects of the project development, it is ultimately the municipality's responsibility to advance the project. To do so, municipalities rely on the help of consultants.** Consultants can assist the municipalities in three different ways:

- » Manage the project on behalf of the municipality as the Municipal Project Manager (MPM)

- » Serve as the designer responsible for developing plans and specifications or preparing scoping reports
- » Provide construction administration and inspection services

To retain the services of a consultant, municipalities have traditionally solicited proposals or statements of qualifications to identify consultants that are interested in helping them with their project, and to determine the best qualified firm to do so. This process can be burdensome on some municipalities, especially those with small staffs that are not familiar with the solicitation process. To streamline and simplify the process, the VTrans MAS developed a request for qualifications to identify a list of consultants that can provide services on an "At the Ready" basis. VTrans then develops three lists of consultants—one for Municipal Project Management, one for Design, and one for Construction Inspection that would essentially pre-qualify firms to provide these services. Once the lists of consultants are established, municipalities are able to pick the firm they feel is most qualified to assist them (after reviewing the qualifications of at least three consultants) and directly negotiate a reasonable scope and fee. Municipalities also still have the option to issue their own solicitations if they prefer. However, by pre-qualifying a pool of consultants, the MAS aims to make the process easier for the municipalities, and condense overall project schedules by eliminating the solicitation effort from the process.

VHB's dedication to helping municipalities

VHB has a long history of delivering multi-faceted transportation services throughout Vermont. Through our extensive experience on dozens of VTrans retainer contracts and individual local projects, we are ideally suited to provide project management services under this retainer. The VHB staff dedicated to providing MPM services under this retainer have provided MPM services to municipalities across the State, and/or have served as consultant project managers working side-by-side with VTrans MAS staff to advance Park & Ride projects directly on behalf of VTrans. Our managers have a deep understanding of MAS's process and procedures and are committed to helping municipalities advance their projects from concept to completion.

Firm Overview

Since 1979, VHB has partnered with public and private sector clients to provide high-quality transportation and stormwater engineering services through an integrated team approach to collaboration. VHB has continued to grow and hone a diverse workforce of 1,800 engineers, designers, scientists, and planners who deliver personalized service and brings value, responsiveness, and excellence to municipalities. We pride ourselves on our ability to guide our clients from initiation to completion of multi-disciplined, challenging, and important transportation projects of all sizes.

VHB Contact: Evan Detrick, PE
edetrick@VHB.com | 802.497.6179
40 IDX Drive
Building 100, Suite 200
South Burlington, VT 05403

VHB Vermont Managing Director: David Saladino, PE

Collaboration is a focal point of our approach to projects: VHB professionals routinely work together across practice areas to provide holistic project solutions. We emphasize truly listening to and understanding our client's unique needs while working collaboratively in a partnership. We also routinely incorporate input from stakeholders into our proposed solutions early in each project's development. This approach has helped us develop our strong track record of delivering comprehensive, forward-thinking, and well-supported projects in a timely and cost-effective manner. Evidence of this success can be found in the industry recognition VHB projects receive—and the number of repeat clients we are happy to serve.



The VHB Vermont Difference

VHB is different from other firms and uniquely prepared and suited to assist municipalities with At the Ready services in a comprehensive way because we offer some many services right from our Vermont offices. VHB offers a broad range of services through our Vermont staff, and we are fully capable to provide Design services, Construction Inspection services, and Municipal Project Management services to municipalities and other local sponsors under this retainer. We have provided similar services on dozens of projects for municipalities across Vermont.

VHB's services under this retainer will be provided out of our three Vermont offices. We offer a staff of nearly 100 professionals across Vermont who have experience in the many disciplines that may be required for local projects. Our staff in Vermont includes:

- » Transportation and Traffic Engineers
- » Structural Engineers
- » Rail Engineers
- » Planners
- » Stormwater Engineers
- » Landscape Architects
- » Public Relations Specialists
- » Professional Land Surveyors
- » Boundary and Right of Way Specialists
- » Geographic Information System (GIS) Specialists
- » Natural Resource and Permitting Specialists
- » National Environmental Policy Act (NEPA) Specialists
- » Historic Preservationists
- » Contaminated Soils Scientists
- » Construction Administrators and Inspectors

Our Vermont offices provide the full range of services anticipated under nearly every MAS project. We take great pride in helping VTrans and municipalities improve the already great quality of life in Vermont. Our local presence, knowledge of VTrans' practices and expectations, and depth of resources allows us to provide personal service, value, and responsiveness every time.



For the planning, design, permitting and construction of the Lamoille Valley Rail Trail, VHB utilized nearly all of the skills listed on the previous page.

We've put together a team in this proposal that reflects VHB's continued commitment to improve mobility, enhance Vermont communities, and balance development and infrastructure needs with environmental stewardship. While every project does not require this deep pool of talent, the resources are there when needed and our Vermont team can continue to call upon these key people as they have in the past.

Our Vermont team is the right size to provide caring and responsive services, and with the support of nearly 100 staff members within Vermont, we have the resources to tackle the most challenging of assignments. We look forward to working with VTrans and municipalities for the betterment of Vermont's transportation infrastructure.

Integrated Services Approach

The VHB Vermont staff has a wide range of skills and experience to cover the complete range of services needed under this retainer. These Include:

- » Preparation of RFPs/RFQs for design and construction phase services
- » Budget preparation and tracking
- » Schedule preparation and tracking
- » Meeting arrangement and facilitation
- » Project administration
- » Acting as liaison between the project sponsor and VTrans, the designer, the contractor, utilities, and resource agencies

As projects are progressed, VHB's Project Manager will coordinate with each discipline as needed to fully understand the impacts and implications and can provide feedback that further informs the overall project strategy. This approach means that our MPMs have a deep understanding of all project issues, that the best design ideas advance, and the final product meets the goals of the community.

Team Accessibility & Responsiveness

When providing services on behalf of clients our goal is to be as accessible as possible. Our team members pride themselves in being accessible for a client's needs day and night. Our local presence allows us to take a hands-on approach with attendance at regular work sessions during development of the project.

One advantage that VHB offers is that all of our MPMs are engineers. They understand the design and construction aspects of their projects, and provide an additional layer of checks and balances to verify that the engineering design is sound, and the construction is being performed in accordance with the municipality's and designer's intentions.



VHB team members collaborating on a project.

Previous Experience

VHB's Vermont staff was built around our relationships with local municipalities and VTrans. We are excited to continue our partnerships throughout the state and look forward to the opportunity to provide innovative, high quality transportation infrastructure projects in the future.

Current Municipal On-Call Engineering Services Contracts

- » City of Burlington
- » City of South Burlington
- » City of Winooski
- » Town of Middlebury

Current Regional Planning Commission On-Call Contracts

- » Chittenden County Regional Planning Commission
- » Northwest Regional Planning Commission

Current Vermont Agency of Transportation On-Call Retainers and Contracts

- » At the Ready (ATR) Consultant Engineering Services for Municipalities
- » Roadway, Traffic, & Safety Engineering
- » Structures Engineering
- » Railroad Engineering
- » Park & Ride Management and Engineering
- » General Environmental Services
- » Natural Resource Services
- » Environmental Resource Services
- » Planning & Policy Services
- » Design-Build Engineering & Construction Support
- » Asset Management
- » Highway Resurfacing
- » Survey Services

Commitment to Quality

Since the firm's inception, VHB has practiced a Quality Control process that was not only based on checking a product but a review by senior technical engineers to make sure of its conformance with the design requirements of the client. Today this process has evolved into a formal

QA/QC program. It is an integral part of the client-focused service element of VHB. QA/QC is a planned program of continual improvement of VHB's work processes and project management techniques. **The goal of VHB's QA/QC program is to provide continuously improving service to our clients, faster production, better ideas,**



and more cost-effective ways in which to produce the work. This translates into client benefits including saving money, accelerated schedules, and reduced problems during construction.

Through the QA/QC program, quality is improved not by more checking, but by doing it right the first time and eliminating the sources of these errors. By the time the design gets to the review stage, it has fewer errors, thereby reducing the time required for reviews and corrections.

Additionally, project Quality Audits are conducted by senior leadership team members on a selection of projects three times a year. These audits serve as an opportunity for senior staff members to review the QCPs of randomly selected projects, and discuss what quality practices have been implemented, what worked well, and where improvements can be made.

The Project Team

The Organizational Chart below shows the core team and key support staff that will work on this retainer contract. The staffing for the VHB team will be flexible, and we will always provide the right people for each individual project.

Under this retainer, Contract Manager Evan Detrick, PE will be the initial point of contact for VTrans and municipalities for all assignments. Depending on the specific project, Evan will either serve as the MPM himself, or assign another VHB Project Manager in consultation with the municipality and VTrans MAS Project Supervisor.

The VHB Project Manager will be determined based on the best interests of the municipality, and will not be finalized until the municipality and VTrans are in agreement. For every assignment, Evan will conduct regular check-ins with the MPM to verify the project is moving along as expected and VHB’s services are meeting the expectations of VTrans and the client. Additionally, Evan will be available as a resource to each MPM to make sure the MPM has a firm understanding of the project development requirements, and has the resources they need to be effective. Brief biographies of our key team members are shown in the following section.

C. Organizational Chart



Principal-in-Charge
David Saladino, PE



Contract Manager
Evan P. Detrick, PE ●



Technical Advisor
Wayne Symonds, PE ●

MUNICIPAL PROJECT MANAGEMENT



PROJECT MANAGERS

- | | | |
|-----------------------------|-----------------------|---------------------|
| Evan P. Detrick, PE ● | Jeff Bachiochi, PE ● | Jason Keener, PE ● |
| Jennifer Conley, PE, PTOE ● | Branden Roberts, PE ● | Kelly Barry, PE ● |
| Daniel M. Peck, PE ● | Karen Sentoff, EIT ● | Scott Burbank, PE ● |
| Drew Gingras, PE ● | Cierra Ford, PE ● | Nicole Rogers, PE ● |



SUPPORT

Historic/Cultural Resources

Kaitlin O’Shea

Rail Crossings

Scott Burbank, PE ●

Right of Way/Survey/GIS

Ryan Cloutier, LS

Landscape/Streetscape Design

Michael Willard, LEED AP, ASLA

NEPA/Permitting

Brad Ketterling

Hydrologic & Hydraulic Studies

Robert Wildey, PE, CPESC

Contaminated Soils

Kurt Muller, PE

● Key Personnel



D. Availability Chart

The chart below indicates the average percentage of time each person has available to spend on projects under this retainer.

KEY PERSONNEL	NAME	ROLE	% AVAILABILITY FOR THIS CONTRACT
●	Evan Detrick, PE	Contract Manager, Project Manager	50%
	David Saladino, PE	Principal-in-Charge	10%
●	Wayne Symonds, PE	Technical Advisor	15%
●	Jennifer Conley, PE, PTOE	Project Manager	30%
●	Daniel M. Peck, PE	Project Manager	40%
●	Drew Gingras, PE	Project Manager	50%
●	Jeff Bachiochi, PE	Project Manager	50%
●	Branden Roberts, PE	Project Manager	50%
●	Karen Sentoff, EIT	Project Manager	50%
●	Nicole Rogers, PE	Project Manager	50%
●	Cierra Ford, PE	Project Manager	50%
	Brad Ketterling	Permitting	20%
	Kaitlin O'Shea	Historic/Cultural Resources	20%
	Ryan Cloutier, LS	Right of Way; Survey	20%
●	Scott Burbank, PE	Project Manager, Park & Ride Facilities, Bridges & Structures	15%
	Robert Wildey, PE, CPESC	Hydrologic and Hydraulic Studies	20%
●	Jason Keener, PE	Project Manager	25%
●	Kelly Barry, PE	Project Manager	25%
	Kurt Muller, PE	Contaminated Soils	15%
	Michael Willard, LEED AP, ASLA	Landscape/Streetscape Design	15%

E. Technical Capability

Understanding

The Municipal Project Manager (MPM) has a very important role in the development of projects through the MAS. The MPM is the liaison between VTrans and the project sponsor; prepares solicitations to retain the design consultant and the construction inspection firm; monitors the design consultant to verify they are advancing the project in accordance with the VTrans project development process, and advancing the project on time and within budget; reviews project invoices and pay requisitions; and manages the overall project development process to make certain it is advancing as planned. The MPM is also responsible to keep the sponsor apprised of the project's progress by providing regular updates and coordinating directly with municipal officials, and for explaining any aspect of VTrans requirements to the municipality.

Typical MPM responsibilities may include:

- » Make sure the project follows the "Project Development Process" and adheres to the MAS' "Guidebook for Municipally Managed Projects"
- » Coordinate project activities and monitor project development
- » Review the project deliverables for adherence to federal and state regulations
- » Review and monitor a master schedule
- » Act as member of selection team for RFP/RFQs
- » Make sure that provisions of consulting/contracting contracts are met and submitted on time and within cost limits
- » Review all project invoices for accuracy, completeness and reasonableness
- » Monitor that any permit mandates, conditions and stipulations are incorporated in the project design
- » Contribute to the review of project plans and documents

- » Assist the municipality in right-of-way issues
- » Assist the municipality and design engineer with utility issues for the project
- » Review the project for compliance with federal, state and local laws, ordinances, regulations and permit requirements
- » Assist the Town in engaging the public
- » Review the bid package for construction for general conformance with federal and state regulations
- » Provide project administration of project during construction
- » Secure certification to VTrans that the project was constructed as designed
- » Keep a master project file, to become the possession of the Town once the work is completed

VHB's approach to municipal project management is to take the burden of project management off the municipality, and to also act as a partner to make sure the municipality is fully apprised of the project status and is engaged to the extent they want to be.

Qualifications

VHB's management team is very experienced with completing the full range of MPM services required for municipal transportation projects. Municipal projects require a full range of skills from concepts through the final design and construction phases. Our team members have experience in many aspects of engineering, survey, environmental permitting, public involvement, traffic engineering, bicycle and pedestrian design, landscape design, right-of-way acquisition, and construction services. We understand the complexity of such projects and have completed them successfully for VTrans, and for municipalities. VHB has managed projects from the owner's side and also has extensive experience in completing the actual design, permitting and construction of projects as consultant engineers.

Along with our experience working closely with VTrans and Vermont municipalities, we also bring a breadth of knowledge of the policies and procedures of organizations including:

- » Agency of Natural Resources
- » Army Corps of Engineers
- » FEMA
- » Federal Highway Administration

Having this additional knowledge and close relationships allow us to continually offer unique input, ideas, and solutions based upon a broad range of experience as well as the latest technologies and protocols. Our management team offers strategic approaches to problem solving and strives to employ innovative solutions when faced with challenging project situations.

Many Services Under One Roof

VHB offers the focus and personal attention of a small consulting firm and designated MPM backed by the in-house resources of a multidisciplinary company, with nearly 100 employees in Vermont alone. Our in-house professionals work closely with our supporting team members to provide detailed reviews so that proposed improvements are based on contextual realities that allow for functional planning and development scenarios. By integrating our service offerings and establishing dedicated, strategic project teams, we quickly achieve a deep understanding of each unique client, project and community and turn that understanding into context-driven implementable solutions. While we will be focused on primarily providing MPM services under this retainer, we always have the specific technical skillset just “down the hall” from our MPM’s office if questions arise on the project.

The VHB Philosophy for Municipal Project Management

1. Listen intently—We start by actively trying to understand your vision, your ideas, your constraints and even your frustrations. The best way we can help is by understanding your perspective and desired outcomes. We also want to understand the work that may have already transpired and build on it in moving forward.

- 2. Understand the Context**—No decisions can be made in a vacuum, so we try to understand how decisions in one aspect of the project might affect others. Our management brings extensive knowledge of projects from start to finish, so we are well suited to quickly comprehend how one aspect may relate to another. We also bring a deep understanding of communities throughout Vermont.
- 3. Share Relevant Experiences and Examples**—With a broad background in so many types of projects across Vermont, VHB draws on our strong experience gained through both the management and design perspectives. We have the ability to point to real-life examples where our project management and design concepts have succeeded, and are always willing to share these experiences with our clients whenever helpful.
- 4. Involve Stakeholders**—Ultimately a municipality’s decision makers will make the final selections on all issues with input from VTrans, but a project is always more successful with the input and support of local property owners, merchants, and the general public.
- 5. Tell it like it is**—We believe in explaining our honest opinions and factual information even if opposition arises. As engineers and design professionals, we rely on facts and remain objective amidst controversy. We do not succumb to endorsing grand ideas if they are not also feasible, fundable, permissible, or sustainable. We strive to find creative and innovative solutions that are also grounded in practicality.
- 6. Communicate**—Informed decisions are generally the best decisions. Therefore, it is the MPM’s goal and responsibility to communicate relevant information that will allow the Town to make appropriate decisions and give constructive input.
- 7. Collaborate**—The VHB management team has successfully functioned as an integral part of management and design teams on hundreds of Vermont projects. We know that our approach results in a working relationship that is productive, professional and enjoyable. Our skill sets complement our teaming partners, and we feed off the energy and creativity of a collaborative approach. We are most effective when fully engaged as a team with the project and the people that are involved.

Experience with Financial Management

VHB has provided financial management of projects for clients throughout Vermont and will serve a critical role during project development by ensuring all team members follow established best practices in financial management, reporting, and accounting. VHB is committed to providing the tools and resources to successfully manage projects both technically and financially. Our financial management and reporting protocols have been used company-wide on projects that range from very small to \$200M in construction costs. We bring our clients the experience and insight of successful financial leaders in the profession on best practices such as reporting guidelines, accounting issues and risks, self-auditing, risk management, schedule and budget impacts, and much more.

Project Records and Document Access

In order to facilitate the continuously evolving project records, decisions, designs, drawings, protocols, procedures, etc., VHB can deploy and manage a secure project collaboration internet site that will not only manage financial aspects but all facets of document tracking. Consistent and sustained communication efforts with and among team members will optimize the process and minimize reworking or recalling information previously discussed. The site will have various access controls so MPM's and municipalities can manage who has access to what components. VHB has successfully established project collaboration sites for several VTrans design-build projects and numerous municipal infrastructure projects.

Experience with Preparing RFQs and SOSs

VHB has extensive experience in the preparation of Requests for Qualifications (RFQ) facilitating Qualifications Based Selection (QBS) Procurements, as well as a thorough knowledge of preparing a Scope of Services (SOS). Our unique knowledge base of having been on both the design and management sides of recent VTrans and MAS procurements provides unparalleled experience from the VHB Team.

We are well-versed in the federal requirements of consultant services contracting and understand the Brooks Act (Public Law 92-582), which is the federal legislation that led to the requirement of QBS Procurement for Federal Aid Engineering Services Contracts. QBS selection requires the submission of both a technical SOQ and a separately sealed Price Proposal. While the initial selection of a consultant is based solely on qualifications, prior to award there is a negotiation phase that allows for further definition of consultant scope and fee. If the owner and consultant cannot come to terms on a mutually acceptable scope and fee, negotiations would then begin with the second most qualified firm.

VHB has worked with many of the engineering consultants and construction contractors throughout Vermont. As MPM, VHB will advise municipalities on our experience working with any engineer or contractor they are considering hiring. We can tell you what strengths and potential weaknesses each has regarding costs, schedules, change orders, skillset, etc., so you can make an informed decision before entering into a contract for design or construction.

The Importance of Public Outreach

A critical component of any public project is to maintain clear communications among the municipal staff, local stakeholders, state agencies, and the community, as well as establish channels to raise questions and find answers in a timely and cost-effective manner. The results of such a collaborative process will be consistent messages, public awareness and education, stakeholder buy-in, a consensus on priorities, and a project that meets the municipality's needs and the public's expectations.



Community Outreach in South Burlington

VHB has extensive experience in facilitating the public outreach process. We understand that community involvement is an integral part of the project development process. **With the need of communities to understand the transportation and stormwater planning and design process, and how it affects and improves their quality of life, comes a significant investment and commitment to stakeholder participation and outreach.** A personalized community outreach plan caters to the project and community's needs, as well as balances important planning goals. VHB's key staff have a strong record of successfully facilitating the public process throughout Vermont, whether it is conducted for a town-wide master plan, a highly contested infrastructure project, or a small intersection improvement.

Project Experience

VHB was the first consultant to provide Project Administrative Services for the VTrans Structures Section and continues to provide these services today for the MAS on their Park & Ride projects and well as VTrans Design-Build projects. In addition to providing Project Administrative Services on most of the Design-Build projects for the Structures Section, VHB has provided Project Administration Services directly for VTrans on 17 projects for the Highway, Safety, and Design Section, 29 projects for the Rail Section, four projects for Structures Section and six Park and Ride projects for the Municipal Assistance Section which also follow the VTrans Project Development process.

VHB is currently providing Project Management service directly to VTrans on their large BUILD grant project to replace numerous railroad bridges in the Rutland area, and we are currently serving as MPM for the Town of Duxbury on the Scrabble Hill Road Slope Stabilization project.

 **17** Highway, Safety & Design Section Projects

 **4** Projects for the Structures Section

 **29** Rail Section Projects

 **6** Park & Ride/Municipal Assistance Bureau

VHB has provided Project Management Services directly to VTrans on many assignments. We know and understand their process!



Scrabble Hill Road Slope Stabilization project site walk



Scrabble Hill Road Slope Stabilization project site walk

Key Personnel



Evan P. Detrick, PE

Contract Manager/Project Manager | 39 years of professional experience, 7 years with VHB

Evan is Director of Transportation in VHB's South Burlington office with over 35 years of experience supporting federal, state, and municipal projects. Evan's responsibilities include scoping and budgeting, personnel and work assignment scheduling, project management, and quality control. He has completed the design and management of projects, including a variety of sidewalks, pathways, and trails; roadways on new alignments; roadway widening and rehabilitation; bridge construction and replacement; environmental assessments in accordance with NEPA; traffic signal improvements; property and topographic surveys; flood-plain certifications; and numerous stormwater improvement projects.



Wayne Symonds, PE

Technical Advisor | 31 years of professional experience, 1 year with VHB

Wayne is a Senior Structural Engineer supporting VHB's bridge design team throughout New England. Prior to joining VHB, Wayne worked for nearly 30 years with the Vermont Agency of Transportation (VTrans) as a bridge engineer, Project Manager, Structures Program manager and retiring as the Chief Engineer for the Highway Division. In his role as the Structures Program Manager, he led the development of the VTrans Accelerated Bridge program and implementation of alternative contracting in Vermont, including Design Build and CMGC. At VHB, Wayne is focused on mentoring, quality assurance, innovation, and constructability for bridge and other Transportation projects.



Jennifer Conley, PE, PTOE

Project Manager | 29 years of professional experience, 4 years with VHB

Jennifer is VHB's Director of Transportation Systems for Vermont. She has extensive transportation engineering experience having managed engineering design tasks for projects throughout New England including planning and scoping studies, traffic operational studies, and engineering design. Incorporating all roadway users, Jennifer has designed Complete Streets throughout New England. She has also managed transportation master plans for municipalities and institutions and conducted corridor studies.



Daniel M. Peck, PE

Project Manager | 23 years of professional experience, 23 years with VHB

A civil engineer with focus on transportation projects ranging from scoping studies and design projects (conceptual through contract design) of roadway, intersection, sidewalk and multi-use path projects that follow the VTrans MAS process, to include public informational meetings, review of right-of-way plans, development of construction estimates, and utility coordination.



Drew Gingras, PE

Project Manager | 15 years of professional experience, 10 years with VHB

Drew is a Project Manager and Engineer with experience in transportation projects including bike/pedestrian planning and design, planning and scoping studies, traffic operations analysis, traffic calming design, and complete street conceptual design. Drew has designed more than 30 miles of on-street bicycle facilities, and has served as the design engineer on bicycle and pedestrian design projects throughout the northeast. Drew served as the Project Engineer for both the Colchester Avenue and East Allen Street Corridor Studies with the Chittenden County Regional Planning Commission (CCRPC).



Jeff Bachiochi, PE

Project Manager/Transportation | 11 years of professional experience, 6 years with VHB

Jeff is a Civil Engineer with extensive experience working on transportation and infrastructure projects, including urban roadways, highways, bridge approaches, rail & intermodal stations, traffic signals, and pedestrian/bicycle facilities. He is proficient in AutoCAD Civil 3D for roadway & utility modeling and plan production, and has experience creating specifications, estimates, and bidding documents for state, municipal, and privately funded infrastructure projects. Jeff has managed several path and roadway projects administered through the VTrans MAS. As a project engineer, Jeff is responsible for producing plans and specifications that are technically sound, coordinated, and constructible.



Branden Roberts, PE

Project Manager/Transportation | 8 years of professional experience, 8 years with VHB

Branden is a Transportation Engineer, with experience in roadway design, bicycle and pedestrian facility design, and landfill design, as well as field inspection experience with construction materials like concrete, soil, and asphalt. He has performed many tasks including horizontal and vertical alignment design, roadway/multiuse trail modeling and cross section development, guardrail design, open flow and closed drainage design including watershed delineation, and quantities. He has experience in performing the above tasks by hand and utilizing computer aided programs such as MicroStation, Inroads, AutoCAD Civil3D and StormCAD.



Karen Sentoff, EIT

Project Manager/Traffic | 10 years of professional experience, 4 years with VHB

Karen joined the VHB team bringing experience as a transportation researcher and analyst at the University of Vermont Transportation Research Center. Her prior studies in civil and environmental engineering and her professional background in transportation represent a versatile set of skills supporting work at the confluence of transportation planning, design, and research. Karen continues to be excited by novel methods of transportation data collection, analysis, and modeling. She applies this to create practice-ready solutions to the real-world problems tackled by her team.



Cierra Ford, PE

Project Manager | 5 years of professional experience, 5 years with VHB

Cierra is a Transportation Designer in VHB's Vermont office, with experience in scoping and design, construction inspection, developing plans and managing projects. Cierra's services include drafting preliminary and final design plans using MicroStation and assisting senior project managers and engineers to complete design calculations for civil and structural projects. Cierra is managing several design projects being administered through the VTrans MAS, and has managed several construction projects also developed through the VTrans MAS.



Scott Burbank, PE

Project Manager/Structural | 28 years of professional experience, 13 years with VHB

Scott is Director of Structures in VHB's South Burlington office with extensive experience in planning, design and construction of both highway and railroad bridges and roadway reconstruction projects. His qualifications also include services for quality control and quality assurance, construction cost estimating, accelerated bridge construction (ABC), and structural inspections of both railroad and highway bridges. Scott has extensive experience managing projects on behalf of the VTrans MAS through his experience managing multiple Park & Ride projects directly for VTrans.



Jason Keener, PE

Project Manager | 16 years of professional experience, 11 years with VHB

Jason is a Transportation Engineer in VHB's South Burlington, Vermont, office with experience in culvert, roadway, and bridge replacement, Vermont stormwater standards, and construction inspection. His skills include computer-aided drafting programs MicroStation as well as surveying with a robotic total station.



Kelly Barry, PE

Project Manager | 10 years of professional experience, 10 years with VHB

Kelly is a Structural Engineer in VHB's South Burlington, Vermont, office. Her design experience includes concrete and steel bridges, as well as numerous culvert projects. Kelly has assisted on many aspects of projects including task management, plan development, bridge inspection, load ratings, cost estimating, and structural design. She is also experienced in computer aided drafting programs such as MicroStation and AutoCAD.



Nicole Rogers, PE

Project Manager | 10 years of professional experience, <1 year with VHB

Nicole is a Traffic Engineer in VHB's South Burlington office. A Professional Engineer, she has experience in transportation projects throughout New England that include corridor planning and scoping studies, traffic operations analysis and optimization, traffic calming and Complete Streets planning and conceptual design, and road safety audit reports. Nicole routinely utilizes and develops GIS applications in support of transportation planning and engineering assignments as well as to enhance project proposals, marketing products, presentation, and project infographics.

F. Resumes

Evan P. Detrick, PE

Contract Manager/Project Manager



Education

BS, Civil Engineering,
Pennsylvania State University,
1984

BA, Liberal Arts, East
Stroudsburg University of
Pennsylvania, 1984

Registrations/Certifications

Professional Engineer (Civil), VT

Affiliations/Memberships

Vermont Society of Engineers

Evan is Director of Transportation in VHB's South Burlington office with over 35 years of experience supporting federal, state, municipal, and private sector projects. Evan's responsibilities include scoping and budgeting, personnel and work assignment scheduling, project management, and quality control. He has completed the planning and design of projects, including a variety of sidewalks, pathways, and trails; roadway widening and rehabilitation; bridge construction and replacement; environmental assessments in accordance with NEPA; traffic signal improvements; property and topographic surveys; floodplain certifications; and numerous Safe Routes to School and Transportation Enhancement projects.

39 years of professional experience, 7 years at VHB

VTrans Municipal Assistance Bureau, At-the-Ready Retainer Contract

With Evan as Contract Manager, VHB was selected by VTrans for the MAB "At-the-Ready" list of transportation engineering consultants that are pre-qualified to perform consultant services to state municipalities. VHB was selected under all three categories, including Project Management, Design, and Construction services.

Municipal Project Management Services, Town of South Hero, Vermont

Prior to joining VHB, Evan was Municipal Project Manager, working with Town of South Hero and Vermont Agency of Transportation, in developing project to better accommodate bicyclists and pedestrians along portions of South Street and Martin Road in South Hero. Providing support to the Town by: acting as liaison between Town and VTrans, advising Town regarding LTF (MAS) Project Development Process, soliciting engineering proposals for design of project, reviewing engineering consultants progress as design is developed, acting on behalf of Town for right-of-way negotiations, facilitating public meetings and discussions, assisting in review of construction bid documents once design is completed, performing administrative duties during construction, keep records of project correspondence and files.

Local Project Management, Hartford Roundabout Project, STP 0113(59)S, Hartford, VT

Prior to joining VHB, Evan was Local Project Manager for the construction of roadway improvements along the western end of Sykes Mountain Avenue. The project improved traffic flow through and access to businesses, enhance safety, and improved roadway surfaces/stormwater drainage. The project included construction of two roundabouts, sidewalks, streetscape improvements, and roadway reconstruction. Providing support to the Town by: acting as a liaison between the Town and VTrans, advising the Town regarding the VTrans MAB Project Development Process, reviewing engineering consultants progress as the design is developed, acting on behalf of the Town for right of way negotiations, facilitating public meetings and discussions, assisting in the review of construction bid documents once the design is completed, performing administrative duties during construction, and keeping records of project correspondence and files. The project is funded by FHWA, administered by VTrans, and is developed in accordance with the VTrans Project Development Process.



David Saladino, PE

Principal-in-Charge



Dave is the Managing Director of VHB's South Burlington, Vermont, office. He has more than two decades of project management, transportation engineering, traffic engineering and transportation planning experience in both the public and private sectors. Dave's recent project experience includes transportation scoping and corridor planning, traffic impact studies, parking studies, transportation microsimulation modeling, and design of intersections, roundabouts, roads, sidewalks, and traffic signals.

Education

BS, Civil & Environmental Engineering, University of Delaware, 1998

Registrations/Certifications

Professional Engineer (Civil), VT,
Professional Engineer (Civil), NH

Affiliations/Memberships

Institute of Transportation Engineers, Vermont

Institute of Transportation Engineers, New Hampshire

26 years of professional experience , 8 years with VHB

Chittenden County I-89 2050 Study, Chittenden County, VT

David is Project Manager for a multiyear study of the Interstate I-89 corridor through Chittenden County. The project involves close collaboration with project clients (VTrans and CCRPC), stakeholders, and members of the public to develop a comprehensive plan for improvements along I-89 through 2050, including assessment of interstate widening, new/improved interchanges, and technology upgrades.

I-89 Exit 12B/Tilley Land Use and Transportation Plan, South Burlington, VT

As Project Manager for the VT116-Kimball-Tilley Land Use and Transportation Plan, David led a team that examined the Tilley Drive/Kimball Avenue area of South Burlington to identify a package of transportation and land use recommendations that would foster a dense, mixed-use, multimodal development pattern. The project involved significant outreach to abutting landowners and members of the public.

Malletts Bay Transportation & Stormwater Scoping Study, Colchester, VT

Served as overall Project Manager for this three-part scoping study, which involved a bicycle and pedestrian scoping study for a new facility along West Lakeshore Drive, an intersection scoping study for the Lakeshore Avenue/Blakely Road intersection, and a stormwater scoping study for the Malletts Bay area.

Country Club Road Master Planning, Montpelier, VT

Served as VHB Project Manager to develop a comprehensive master plan for the 131-acre Country Club Road parcel in Montpelier. The Master Plan involved extensive existing conditions investigations, development of alternatives, and public outreach to arrive at community consensus on a preferred plan for the property.

Winooski Transportation Master Plan, Winooski, VT

David was Project Manager for the development of a Transportation Master Plan for the City of Winooski. The Master Plan was the culmination of significant stakeholder outreach, planning and technical analysis, and coordination with City staff to develop an Action Plan for Winooski's transportation infrastructure.

East Allen Street Corridor Scoping Study, Winooski, VT

Served as Project Manager for a CCRPC Corridor Scoping Study along the East Allen Street (VT 15) corridor in Winooski, Vermont. The project involved an evaluation of existing conditions, committee and stakeholder outreach, alternatives evaluation, and identification of a preferred alternative.



Wayne B. Symonds, PE

Technical Advisor



Education

BS, Civil Engineering, University of Vermont, 1992

Registrations/Certifications

Professional Engineer (Civil), VT

Wayne is a Senior Structural Engineer supporting VHB's bridge design team throughout New England. Prior to joining VHB, Wayne worked for nearly 30 years with the Vermont Agency of Transportation (VTrans) as a bridge engineer, Project Manager, Structures Program manager and retiring as the Chief Engineer for the Highway Division. In his role as the Structures Program Manager, he led the development of the VTrans Accelerated Bridge program and implementation of alternative contracting in Vermont, including Design Build and CMGC. At VHB, Wayne is focused on mentoring, quality assurance, innovation, and constructability for bridge projects.

31 years of professional experience, 1 year with VHB

City of South Burlington, Exit 14 Pedestrian Bridge,

Wayne was part of the VHB team that provided hybrid meeting support for this project that is critical to the South Burlington pedestrian and bicyclist community. A long time in the making, this meeting provided an opportunity for the project team to meet with the community to review proposed options and solicit feedback for a collaborative design. He is also supporting the team to evaluate structure alternatives and address challenging soil profiles.

VTrans, I-89 Exit 17 Bridge Replacement, Colchester, VT

VHB Senior Structural Engineer providing quality assurance and constructability review for this major transportation infrastructure project for the Vermont Agency of Transportation (VTrans) to reconstruct Exit 17 on Interstate 89 in Colchester. The project will address safety at the interchange and replace the poor condition bridge on VT Route 2 over the interstate.

VTrans, I-91 Bridges 96-3N and 96-3S, Lyndon, VT

VHB Senior Structural Engineer providing support for the development of the procurement documents for the Design-Build project to replace culverts in deep fill on I-91 in Lyndon Vermont.

VTrans, VT Route 100 over Deerfield River, Readsboro, VT

VHB Senior Structural Engineer providing quality assurance and constructability review for the redesign of the new plate girder bridge over the Deerfield River. The project is complicated by difficult geotechnical conditions and predicted hydraulic scour.

Vermont Agency of Transportation

Notable VTrans projects managed while at include the I-91 West River Bridge in Brattleboro and Main Street and Merchants Row over Vermont Rail in Middlebury. He has managed many Town Highway Bridge projects and understands the nuances involved with municipally lead projects.

Wayne also worked three years in the Construction Section where he was the Construction Structures Engineer and has experience in all aspects of bridge construction and supporting field staff in addressing construction issues.



Jennifer Conley, PE, PTOE

Project Manager



Jennifer is VHB's Director of Transportation Systems for Vermont. She has extensive transportation engineering experience having managed engineering design tasks for projects throughout New England including planning and scoping studies, traffic operational studies, and engineering design. Incorporating all roadway users, Jennifer has designed Complete Streets throughout New England. She has also managed transportation master plans for municipalities and institutions and conducted corridor studies.

Education

BS, Civil Engineering,
Rensselaer Polytechnic
Institute, 1993

29 years of professional experience, 4 years with VHB

Registrations/Certifications

Professional Engineer, VT
Professional Engineer, MA
Professional Engineer, NH
Professional Traffic Operations
Engineer
Professional Engineer, ME
Professional Engineer, RI

Affiliations/Memberships

Institute of Transportation
Engineers, New England
Rensselaer Polytechnic Institute
Civil and Environmental
Engineering Advisory Board
WTS International, Vermont

City of Burlington, Great Streets–Main Street Revitalization, Burlington, VT

Jennifer is currently serving as Project Manager for the reimagining of Burlington's Main Street. The project included extensive community and stakeholder outreach, resulting in unanimous approval of the project concept by City Council. Conceptual Engineering Design includes design of the pedestrian realm, off-street separated bike lanes, and design of transit stops along Main Street.

East Allen Street Scoping Study, Winooski, VT

The Chittenden County Regional Planning Commission (CCRPC) partnered with VHB to identify short- and long-term improvements to East Allen Street with the aim of creating a safe, vibrant, and multimodal gateway corridor into downtown Winooski, VT. The scoping study prioritized enhancing travel for pedestrians and bicyclists, supporting economic growth, improving safety, increasing transit accommodations, and managing vehicular congestion for the corridor. Jennifer functioned as the Project Manager for this scoping study.

Colchester Avenue Bikeways, Parking, Intersection Safety Study, Burlington, VT

Jennifer has served as the Project Manager for Colchester Avenue Study leading the Project Team through the assessment of existing conditions, engagement of the public to determine the local concerns, and the development, evaluation, and presentation of alternatives. Jennifer and the VHB team worked closely with a diverse Advisory Committee of residents and business representatives and engaged the public through both in person and online public meetings.

Swanton Village Downtown Scoping Study, Swanton, VT

Serving as Project Manager, Jennifer has led the multidisciplinary project team through the Downtown Scoping Study for Swanton Village. The project required a delicate balance to better accommodate the needs of pedestrians and bicyclists while accommodating vehicular traffic through the Village and providing parking and enhanced sidewalks to ensure continued economic development

VTrans Rail and Freight Plans, Statewide, Vermont

Jennifer is currently serving as the VHB lead for the updates to the Rail Plan and Freight Plan. She has managed efforts to update all existing conditions for the existing Rail and Highway infrastructure including asset conditions (rail, bridge, highway, support services, connections) and safety. Jennifer has worked with the VTrans team to develop evaluation criteria for a range of projects and initiatives that VTrans and partners are considering. As project ranking are being developed, she is leading the team to develop the cost estimates for inclusion in the plans.



Daniel M. Peck, PE

Project Manager



A civil engineer in VHB's Highway Department, Dan's focus is on transportation projects ranging from scoping studies and design projects (conceptual through contract design) of roadway, intersection, sidewalk and multi-use path projects that follow the VTrans MAS process, to include public informational meetings, review of right-of-way plans, development of construction estimates, and utility coordination.

23 years of professional experience, 23 years with VHB

Education

BS, Civil Engineering, University of New Hampshire, 2000

Registrations/Certifications

Professional Engineer (Civil), VT

City of Burlington, Bike Path Rehabilitation, Burlington, VT

Dan was project engineer for the rehabilitation of a bike path located along Burlington's waterfront that has extraordinary views of Lake Champlain and the Adirondack Mountains. The 30-year-old bike path is a multi-use facility that supports alternative transportation, recreation, and active lifestyles; attracts visitors to the City of Burlington and stimulates the local economy; and enhances the overall quality of life. Being one of the busiest multi-use paths in the state, it is showing its age in terms of overall conditions and functionality, and VHB is addressing primary areas of design concern, including path width, geometry, shoulder conditions, and sight distance. Dan is providing quality assurance and quality control for the path design.

Town of Bennington, Multiuse Pathway, Bennington, VT

Dan is the Project Manager for the design of approximately 1.5 miles of multiuse path connecting downtown Bennington to a park and elementary school. The path will be constructed within a railroad right-of-way and will include the rehabilitation of an existing railroad bridge and traffic signal modifications.

Town of Manchester, Rail Trail, Manchester, VT

Dan was the Project Manager for a feasibility study to evaluate alternatives for the conversion of approximately 1.5 miles of an abandoned railroad corridor to a multi-use path in Manchester. The path would be an extension of the Town's existing multimodal trail network and potentially provide an off-road connection between the Manchester schools and the neighboring Dorset schools. The study evaluated construction costs, potential phasing, resource impacts and permitting requirements.

Town of Hinesburg, Sidewalk and Multiuse Path, Hinesburg, VT

Dan was Project Engineer for the development of a transportation enhancement project that contains two distinct segments: a 5-foot-wide sidewalk along the west side of Mechanicsville Road, and a 10-foot-wide paved multi-use path along the north side of the CVU Road.

Essex Junction, Multiuse Path, Essex Junction, VT

VHB designed a 1,175-foot-long multiuse path along the existing rail corridor between North Street and Central Street. The new path allows cyclists and pedestrians to move from Essex High School to and from Central Street without using a public street. Key components of this project included coordination with the railroad, utilities, businesses, and residents, design of the path, lighting, and stormwater treatment. Funded by the Vermont Agency of Transportation, the Chittenden County Regional Planning Commission, and the Village, this project marks the first time New England Central Railroad has allowed such a project along an active rail line.



Drew Gingras, PE

Project Manager



Education

BS, Civil Engineering, University of Vermont, 2011

Registrations/Certifications

Professional Engineer, DC

Affiliations/Memberships

National Committee on Uniform Traffic Control Devices, Bicycle Technical Committee

Drew is a Project Manager and Engineer in VHB's South Burlington office with experience in transportation projects at the municipal, state and federal levels. His experience includes bicycle and pedestrian planning and design, corridor scoping studies, traffic operations analysis, traffic calming design, trail planning and design, and complete street design. Drew has served the State of Vermont and its cities and town on countless transportation projects. Drew has the experience and expertise to navigate all phases of project, from project definition and public engagement, through to engineering design and project construction.

11 years of professional experience, 10 years with VHB

Intervale Road Shared-Use Path, Burlington, VT

Through VTrans MAB "At-the-Ready", VHB was recently selected by the City of Burlington to design a shared-use path along Intervale Road in Burlington's North End. Drew is serving as Project Manager for this latest effort. The project navigates difficult topography and has required coordination with two other parallel and concurrent projects – The installation of a steam line connecting the McNeil Plan to the UVM Medical Center, and VTrans' own design project to rehabilitate the existing railroad crossing. The project is currently in Conceptual Design and is proceeding on schedule.

Lake Street and Maquam Shore Road Scoping Study, Swanton, VT

Drew recently served as the Project Manager for The Town of Swanton to prepare a study evaluating multimodal alternatives and safety improvements along the Lake Street and Maquam Shore Road corridor. The study sought to evaluate improvements for bicyclists and pedestrians to connect from the intersection of Lake Street and River Street, south along Maquam Shore Road to the Swanton and St. Albans border.

City of Burlington, Great Streets–Main Street Revitalization, Burlington, VT

Drew is Project Engineer and Active Transportation Lead for the reimagining of Burlington's Main Street. VHB was selected to perform the planning and construction engineering design of a complete revitalization and reconstruction of Main Street in downtown Burlington. The project included extensive community and stakeholder outreach, resulting in unanimous approval of the project concept by City Council.

Birchcliff Parkway Traffic Calming, Burlington, VT

With Drew as Project Manager, VHB was direct selected by the City of Burlington for the Birchcliff Parkway Traffic Calming project. VHB led the project through public engagement to determine a preferred design alternative for the neighborhood roadway. From there, VHB completed final engineering design of traffic calming and safe routes to school improvements. The project is scheduled for construction in Spring 2023.



Jeff Bachiochi, PE

Project Manager



Jeff is a Civil Engineer in VHB's South Burlington office with extensive experience working on transportation and infrastructure projects, including urban roadways, highways, bridge approaches, rail & intermodal stations, traffic signals, and pedestrian/bicycle facilities. He is proficient in Microstation, OpenRoads, and AutoCAD Civil 3D for roadway & utility modeling and plan production, and has experience creating specifications, estimates, and bidding documents for state, municipal, and privately funded infrastructure projects. Jeff has performed construction administration services for various types of contract delivery methods including Design-Build, CM/GC, and Public-Private-Partnership projects.

Education

MS, Civil Engineering,
Northeastern University, 2016

BS, Civil Engineering,
Northeastern University, 2012

Registrations/Certifications

Professional Engineer (Civil
Engineer), MA

11 years of professional experience, 6 years with VHB

VTrans, Park and Ride Project, Williamstown-Northfield, VT

Project Manager for the Northfield/Williamstown Park and Ride project that was constructed in 2021-2022. Located on a parcel already occupied by a VTrans district maintenance facility, the project design included parking for 75 vehicles, a bus shelter, a realigned access drive to be shared by both park-and-ride users and state maintenance vehicles, with associated security fencing and gate to separate the uses.

Beaver Pond Shared Use Path, Proctor, VT

Project Manager and lead engineer for the design of a new shared use path in Proctor, VT. The Town of Proctor has acquired a Bicycle & Pedestrian Grant, administered by the Vtrans Municipal Assistance Bureau (MAB), and has engaged VHB to design and permit the project through the MAB process. The new path, to be used by both pedestrians and bicyclists, will connect recreational areas at Beaver Pond to the town green on Main Street by utilizing an abandoned rail corridor.

South Royalton Sidewalk, Royalton, VT

Project Manager and lead engineer for the design of a new multi-level sidewalk project in the historic downtown village of South Royalton. This revitalization project will improve ADA access to businesses along Chelsea Street by replacing the existing stairs at each entrance with a flush raised sidewalk. The project also includes new sidewalks, ramps, street parking, pedestrian crossings & refuge islands, lighting, and other streetscape amenities. VHB is tasked permitting the project which includes a significant historic component to the Categorical Exclusion document in compliance with NEPA.

Bayside Roundabout, Colchester, VT

Task Manager for the design and permitting of a new roundabout to replace the existing signalized intersection of Blakely Road, East Lakeshore Drive, and West Lakeshore Drive (the Bayside Intersection). The project includes field survey; investigation of contaminated soils; development of conceptual designs through complete contract documents; design of stormwater treatment practices; pedestrian rapid flashing beacons, new crosswalks, sidewalks, and shared-use path; public engagement; preparation of a Categorical Exclusion to satisfy NEPA; and improvements to Bayside Park.



Branden Roberts, PE

Project Manager



Education

BS, Civil Engineering,
Wentworth Institute of
Technology, 2014

Registrations/Certifications

Professional Engineer, VT

Branden is a Transportation Engineer, with experience in roadway design, bicycle and pedestrian facility design, and landfill design, as well as field inspection experience with construction materials like concrete, soil, and asphalt. He has performed many tasks including horizontal and vertical alignment design, roadway/multiuse trail modeling and cross section development, guardrail design, open flow and closed drainage design including watershed delineation, and quantities. He has experience in performing the above tasks by hand and utilizing computer aided programs such as MicroStation, Inroads, AutoCAD Civil3D and StormCAD.

8 years of professional experience, 8 years with VHB

City of Burlington, Bike Path Rehabilitation, Burlington, VT

Branden was the lead designer of six separate contracts for the rehabilitation of bike path located along Burlington's waterfront that has extraordinary views of Lake Champlain and the Adirondack Mountains. The 30-year-old bike path is a multiuse facility that supports alternative transportation, recreation, and active lifestyles; attracts visitors to the City of Burlington and stimulates the local economy. Design services included path widening, replacement of the pavement and subbase, intersection improvements, and the addition of stormwater treatment facilities.

City of Winooski, Main Street, Winooski, VT

Branden was a project designer for this three-quarter mile downtown roadway reconstruction including bicycle/pedestrian improvements, streetscape enhancements, undergrounding aerial utilities, closed drainage redesign and treatment, signal design, striping reconfiguration and signing upgrades. As a priority bicycle and public transit corridor, there was an added design emphasis surrounding a connection through downtown for all modes of transportation.

East Main Street Sidewalk, Wilmington, VT

This project was a sidewalk reconstruction/redesign that started with conceptual plans and went through ROW, and most recently utility adjustments. Branden designed new/reconstruction of sidewalk throughout the corridor, 3 new retaining walls to be constructed adjacent to the sidewalk, and signing/crosswalk improvements along the corridor. He also produced the ROW plans and tables for this project.

St. Albans, Lake Street Connection, St. Albans, VT

Branden was a Design Consultant for this project to provide engineering services, streetscape design, and necessary infrastructure improvements on Lake Street between Main Street and Federal Street in accordance with the City's 2009 Downtown Master Plan. Branden's duties included design modifications, work zone traffic control plans, and quantities.

Warren Village Main Street Improvement, Warren, VT

Branden worked on this complete streets project to design a new village center for the town of Warren. He took the architect's hand sketches and recreated them in MicroStation. While drafting the plans, Branden backchecked the grading to make sure drainage and important tie-ins were met. He created vertical and horizontal alignments as well as a model for this project. He also quantified the roadway portion of the project after the design was complete and assisted the architect with producing his estimate.



Karen Sentoff, MS, EIT

Project Manager



Education

MS, Civil & Environmental Engineering, University of Vermont, 2012

BS, Civil & Environmental Engineering, University of Vermont, 2008

Registrations/Certifications

Engineer in Training, VT

Karen joined the VHB team bringing experience as a transportation researcher and analyst at the University of Vermont Transportation Research Center. Her prior studies in civil and environmental engineering and her professional background in transportation represent a versatile set of skills supporting work at the confluence of transportation planning, design, and research. Karen continues to be excited by novel methods of transportation data collection, analysis, and modeling. She applies this to create practice-ready solutions to the real-world problems tackled by her team.

10 years of professional experience, 4 years with VHB

City of Burlington, Great Streets–Main Street Revitalization, Burlington, VT

VHB was selected to perform the planning and construction engineering design of a complete revitalization and reconstruction of Main Street in downtown Burlington. The project included extensive community and stakeholder outreach, resulting in unanimous approval of the project concept by City Council. Conceptual Engineering Design efforts include the pedestrian realm, off-street separated bike lanes, and design of transit stops along Main Street.

Colchester Avenue Bikeways, Parking & Intersection Safety Scoping Study, Burlington, VT

In collaboration with CCRPC and City of Burlington, VHB identified and developed transportation improvements for the Colchester Avenue corridor and intersection with East Avenue. A critical corridor that has undergone incremental changes, this study created a longer-term vision for a multimodal facility with dedicated bike infrastructure and permanent safety improvements. Karen developed and evaluated alternatives and engaged project stakeholders and public to guide decisions.

CCRPC, Amtrak Connections, Burlington, VT

Amtrak recently completed a long-planned extension of the Ethan Allen Express route to Burlington's Union Station. With the arrival of daily Amtrak service, CCRPC and Burlington Business Association have teamed with VHB to evaluate the access, circulation, multimodal connections, and wayfinding to and from the Amtrak platform at Union Station. Karen served as technical lead, bringing together resources to identify gaps in the existing walk, bike, transit, vehicular, and regional transportation connection to the station and recommending improvements and partnerships.

Swanton Downtown Scoping Study

The Village of Swanton sits at the confluence of primary regional routes along US 7 and VT 78, where the vision for a vibrant downtown center requires balance between the traffic thoroughfare and a more walkable, bikeable, and accessible Village core. Together with Village partners, community stakeholders, and the public, the VHB team helped to identify, develop, evaluate, and prioritize alternative designs for creative context sensitive solutions that are feasible, constructible, and will improve safety for pedestrians, cyclists and drivers.



Nicole Rogers, PE

Project Manager



Nicole is a Traffic Engineer in VHB's South Burlington office. A Professional Engineer, she has experience in transportation projects throughout New England that include corridor planning and scoping studies, traffic operations analysis and optimization, traffic calming and Complete Streets planning and conceptual design, and road safety audit reports. Nicole routinely utilizes and develops GIS applications in support of transportation planning and engineering assignments as well as to enhance project proposals, marketing products, presentation, and project infographics.

Education

BS, Civil Engineering, University of Vermont, 2013

Registrations/Certifications

Professional Engineer (Civil), MA,

Affiliations/Memberships

WTS International, Boston

10 years of professional experience, <1 year with VHB

CCRPC, East Charlotte Traffic Calming, East Charlotte, VT

VHB worked with the CCRPC and Town of Charlotte to evaluate traffic calming measures appropriate for the East Charlotte Village Center. The area of study surrounds the intersection Hinesburg Road and Spear Street and focused on best practices and effective countermeasures to help reduce speeds in the rural transition zones and small-town centers. The study's short- and long-term recommendations have garnered support from the Charlotte Selectboard. Nicole has further developed supported recommendations and provided preliminary costs estimates for the Town.

City of Burlington, Great Streets Parking Analysis, Burlington, VT

VHB worked with the City of Burlington to conduct a parking inventory and utilization study to better understand the existing capacity and existing and future demand for parking in the downtown area. Nicole provided extensive data analysis and graphic design to develop a parking study document to help aid future decision making.

Upper Valley Lake Sunapee Transit Signal Priority System, NH/VT

Prior to joining VHB, Nicole evaluated and identified the infrastructure capabilities and needs to provide a transit signal priority (TSP) system along two established routes in the Upper Valley Lake Sunapee region. Work included a comprehensive field assessment of the signal equipment as well as planning and coordination with local and state stakeholders to determine an appropriate plan of action. Nicole's responsibilities included the development of a signal inventory database within the GIS environment as well as the preparation of an interactive, web-based "story map" highlighting the findings of the signal inventory and potential system wide improvements to provide a TSP system through means of multimedia content and mapping.

Vermont Agency of Transportation, Civil Engineer I/Traffic Design, Montpelier, VT

Prior to joining VHB, Nicole was involved in the statewide Traffic Signal Optimization Program. She was responsible for developing and deploying new signal timings for 14 coordinated intersections along Route 7 in Shelburne, VT. Nicole created construction documents for traffic related projects using MicroStation. Her project experience included roundabouts, signalized intersections, general intersection safety improvements, and intersection geometry improvements.



Cierra Ford

Project Manager



Cierra is a Transportation Designer in VHB's Vermont office, with experience in scoping and design, construction inspection, and developing plans. Cierra's services include drafting preliminary and final design plans using MicroStation and AutoCAD software and assisting senior project managers and engineers to complete design calculations for civil and structural projects.

5 years of professional experience, 5 years with VHB

Education

BS, Civil Engineering, Worcester
Polytechnic Institute, 2018

BTV Quick Build Conversions, Burlington, VT

Cierra was the Project Engineer for the Quick Build Conversions project in Burlington, which involves work at three downtown intersections. Work at each intersection includes the reconstruction and expansion of sidewalks, installation of curb, new pavement markings and signage, drainage improvements, and other related items.

Burlington Bike Path Rehabilitation, Burlington, VT

VHB is providing design and permitting services for the third phase of the Burlington Bike Path Rehabilitation from Queen City Park Road to Perkins Pier. The project involves incorporating urban and rural placemaking and planning, civil and structural engineering, geotechnical expertise, environmental remediation, and innovative and intentional landscape architectural design. Cierra is assisting with the final design and plan development for this project.

Winooski, Main Street Reconstruction Project, Winooski, VT

Cierra is a Design Consultant for the preliminary design of a roadway reconstruction project along US Route 7 in Winooski. This project is highly complex, involving multiple sub-consultants and the integration of roadway, utility, and streetscape improvements. Cierra is responsible for the design of the underground utility network, consisting of new water, sewer, drainage, electric, telecom, and gas lines. She is also assisting with the design of pavement markings, signage, and temporary traffic control plans.

Hinesburg VT Route 116 Sidewalk

Cierra is the Project Engineer and primary contact to the client for the design of a sidewalk on VT 116 in Hinesburg. Cierra is responsible for the design, coordinating with the Town, assisting with property owner meetings, developing Right-of-Way plans, and managing project records.

St. Johnsbury Three Rivers Path, St. Johnsbury, VT

Cierra is Project Engineer for the preliminary and final design of a multimodal path in St. Johnsbury, which consists of on-road bike lanes as well as an off-road aggregate path, abutting several Class III wetlands. Cierra was responsible for the project design and coordinating with the architect for the design of a pavilion at the path's trailhead.

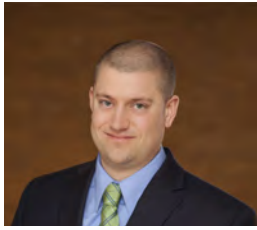
Wilmington East Main Street Sidewalk, Wilmington, VT

Cierra is a Design Consultant and primary contact for the preliminary design of a sidewalk project on VT Route 9 in Wilmington. Cierra is responsible for the design of a new sewer main running underneath the sidewalk with new laterals to most properties along its length, as well as the development of Right-of-Way plans.



Jason D. Keener, PE

Project Manager



Jason is a Transportation Engineer in VHB's South Burlington, Vermont, office with experience in culvert, roadway, and bridge replacement and rehabilitation, structural design, and construction inspection. His skills include steel and concrete design, structural analysis and modelling, as well as computer-aided drafting programs AutoCAD and Microstation.

16 years of professional experience, 11 years with VHB

Education

BS, Civil Engineering, Clarkson University, 2006

Registrations/Certifications

Professional Engineer, VT

Affiliations/Memberships

Vermont Society of Engineers

Plainfield / Brook Road Bridge, Plainfield, VT

Jason is the Project Manager and Lead Design Engineer for this project to design the replacement of the flood prone Brook Road Bridge (B21) that passes over Great Brook in the Village of Plainfield. The bridge is repeatedly impacted by flooding, causing significant channel erosion and property damage. The project included topographic survey, deed research, geotechnical analysis for foundation design, bridge type study, final bridge design, permitting, and a FEMA benefit cost analysis. VHB identified bridge replacement alternatives and met with the Plainfield Selectboard to present these alternatives and assist in selecting a preferred alternative which will increase hydraulic capacity and improve the transport of debris and sediment. VHB has designed the replacement structure and delivered construction plans, specifications and a construction cost estimate to the Town and is currently assisting the Town in obtaining grants to fund the construction of the project..

Rochester / West Hill Rd Bridge, Rochester, VT

VHB is currently working with the Town of Rochester and the Green Mountain National Forest on construction of a new bridge on West Hill Road in Rochester over Brandon Brook to replace the existing bridge, which is a timber structure built in 1919 and is far below present-day bridge standards and load rating. VHB has performed survey, design, and permitting services, and has assisted the Town in obtaining all necessary regulatory permits, preparing ROW plans, developing bid documents and advertising the project for bids. VHB will be providing construction engineer services throughout construction of the project. Jason is the Task Manager and Lead Design Engineer for this project responsible for coordinating with the Town, GMNF, regulators, project stakeholders, and the VHB design team.

Popple Dungeon Road Bridge Replacement, Chester, VT

Working with the Town of Chester and the VTrans Municipal Assistance Section Jason was the Project Manager and Lead Design Engineer for this project to select and design a replacement structure for a failed culvert on Popple Dungeon Road in the Town of Chester. VHB assisted the Town in following the VTrans's Municipal Assistance processes to complete an Alternatives Investigation, identify a preferred alternative, design a replacement structure, develop construction and bid documents, advertise the project, and construct the replacement bridge. Throughout the project Jason coordinated with the Town, VTrans, subconsultants and stakeholders and led the VHB team which provided all aspects of project development which included topographic survey, natural resource investigation, obtaining required permits, design of a pre-cast pre-stressed concrete slab bridge, Utility coordination and ROW acquisition, and project construction administration.



Kelly Barry, PE

Project Manager



Kelly is a Transportation Engineer in VHB's South Burlington, Vermont, office. Her design experience includes concrete and steel structures, as well as roadways and bike/pedestrian facilities. Kelly has assisted on many aspects of projects including task management, plan development, bridge inspection, load ratings, cost estimating, and structural design. She is also experienced in computer aided drafting programs such as MicroStation and AutoCAD.

Education

MS, Civil Engineering, University of New Hampshire, 2013

BS, Civil Engineering, University of New Hampshire, 2011

Registrations/Certifications

Professional Engineer (Civil Engineer), VT

Affiliations/Memberships

WTS International, Vermont

10 years of professional experience, 10 years with VHB

116 Sidewalk, Hinesburg, VT

Kelly served as a Design Engineer for the final design of a 1,000-foot sidewalk along Vermont Route 116 in Hinesburg. Her responsibilities included coordination with clients and State representatives and plan development and design. The project included the development of alternatives and conceptual plans through production of right-of-way plans, contract plans, and construction cost estimate.

Burlington Bike Path Rehabilitation Project, Burlington, VT

Kelly was a Design Engineer for the design of Phase 2 of the rehabilitation of a 30-year-old bike path through Burlington to Colchester, Vermont. Being one of the busiest multi-use paths in the state, VHB addressed primary areas of design concern, including path width, geometry, shoulder conditions, and sight distance. Kelly's responsibilities included plan development and design. The project included the development of alternatives and conceptual plans through production of right-of-way plans, contract plans, traffic control, and construction cost estimate for 3.3 miles of bike path.

Grout Road Bridge, Montpelier, VT

Grout Road Bridge is a single span steel girder with timber deck bridge supported on unreinforced concrete abutments that services four private residences. VHB is responsible for the engineering to provide a load rating of the bridge in existing conditions, alternatives analysis report, permitting, utility coordination and design bid documents for the selected alternative. For the existing structure to last until full replacement can be completed, VHB is responsible for providing interim repair recommendations and interim repair documents for bid. As Project Manager, Kelly is responsible for coordinating between the Town, FEMA, the VHB design team, and local stakeholders.

Pinello Road Bridge Replacement, Bethel, VT

VHB is the designer for the Pinello Road Bridge project which involves the replacement of an existing temporary vehicular bridge in Bethel, VT. The original bridge was washed away in a FEMA declared emergency storm event in 2019. The project will replace the temporary structure with composite steel girder bridge on integral abutments that meets the bankfull width. The scope of work under this contract includes roadway and structural design, utility relocation, and developing Right-of-Way plans. As Project Manager, Kelly is responsible for coordinating between the Town, VTrans, FEMA, the VHB design team, and local stakeholders.



Scott E. Burbank, PE

Project Manager



Scott is Director of Structures and Rail in VHB's South Burlington office with extensive experience in planning, design and construction of both highway and railroad bridges and roadway and railroad crossing reconstruction projects. His qualifications also include services for quality control and quality assurance, construction cost estimating, accelerated bridge construction (ABC), and structural inspections of both railroad and highway bridges.

Education

BS, Civil Engineering, Worcester
Polytechnic Institute, 1993

Registrations/Certifications

Professional Engineer
(Structural I), VT

29 years of professional experience, 13 years with VHB

VTrans Project Administrator

Scott has been working as a Project Administrator managing design consultants for the Municipal Assistance Bureau (MAB) on multiple park and ride projects over the last eight years completing four park and ride project expansions in Springfield, Bradford, Colchester, and Berlin, as well as a new park and ride in Williston that is currently under construction.

VTrans / Depot Street Bridge Replacement, Rockingham (Bellows Falls), VT

Scott is the Senior Project Manager overseeing the design and quality insurance for the VTrans Rockingham, Bellows Falls project which involves the removal and replacement of a historic concrete arch bridge with an off alignment vehicular bridge and addition of a multi-modal pedestrian bridge for VTrans. This project includes the reconfiguration of two town roads, rehabilitation of a parking lot, extensive utility relocation and undergrounding, drainage design, design of the vehicular bridge, and 3D modeling of all design elements. By managing challenging site constraints around the historic canal, VHB is progressing a design that will revitalize the village of Bellows Falls and increase accessibility for all modes of transportation on the town's island property. VHB is leading the environmental permitting and engineering design efforts including structural engineering, roadway design, and public outreach.

VTrans / VT Route 100 Bridge No. 25 Replacement, Readsboro, VT

Scott is the Senior Project Manager responsible for the internal management of the VHB and subconsultant project team, coordination with the VTrans Project Manager, and other VTrans staff, as well as external stakeholders, such as the Town of Readsboro, Federal and State Regulators, Property Owners, and Utility Companies. Scott also provides project oversight, ensuring the project permitting, design and plan submittals are completed and delivered on-time and on budget. This project includes the removal and replacement of Bridge No. 25 carrying VT Route 100 over the Deerfield River in Readsboro, VT. The project will replace the existing fracture critical, three-span bridge with a two-span, 370-foot-long bridge. VHB is working closely with VTrans Structures, the Agency of Natural Resources, and the geotechnical consultant to navigate the project's unique site conditions, including steep embankments, global stability concerns, and adjacent historical and natural resources. The proposed bridge will be constructed using a temporary bridge, which will maintain vehicular and pedestrian access across the Deerfield River during construction. The scope of VHB's work under this contract includes roadway and bridge design, utility coordination, environmental services, hydraulic analysis, and stormwater design.



Kaitlin O'Shea

Historic/Cultural Resources



Kaitlin is a Preservation Planner in VHB's Vermont office. With a strong background in and understanding of preservation principles and practice, she provides proficiency in regulatory process and compliance, particularly Section 106 review and Section 4(f) evaluations, as well as historic documentation, historic resource identification, and project management in the government framework. Kaitlin meets the Secretary of the Interior's Professional Qualification Standards for an Architectural Historian and Historian (36 CFR 61).

Education

MS, Historic Preservation,
University of Vermont, 2011

BS, Historic Preservation,
University of Mary Washington,
2006

Affiliations/Memberships

Advisor, National Trust for
Historic Preservation

Advisor, Vermont Marble
Museum

UVM Historic Preservation
Alumni Association

17 years of professional experience , 8 years with VHB

VTrans Historic Preservation Services Contracts, Statewide, VT

As part of the Historic Preservation Services 2018 Contract (#PS0709), VHB was selected one of four firms to provide various preservation services to VTrans. Under this authorization, Kaitlin has completed reviews and documentation for historic resource evaluations, Vermont Architectural Resource Inventory (VARI) forms, Section 106 reviews, and Section 4(f) evaluations as well as mitigation projects such as Historic Resource Documentation Packages (HRDPs). Kaitlin is the Project Manager for the recently awarded Historic Preservation Services 2022 Contract (#PS1000), for which VHB was ranked in first place.

Chelsea Street Sidewalk Project, South Royalton, VT

On behalf of the Town of Royalton, Kaitlin completed the historic resource identification report for above-ground cultural resources as part of the VTrans MAB project process. VHB was hired to complete the design and engineering for the project. Following the completion of the report, VTrans requested that Kaitlin complete the Section 106 review and Section 4(f) evaluation. The Project involves streetscape and sidewalk reconstruction and redesign as well as pedestrian improvements to revitalize the Chelsea Block.

Hartford Bridge 7 Replacement, VTrans, Hartford, VT

Under contract with VTrans, Kaitlin completed the Section 106 review, MOA, and Section 4(f) evaluation for the replacement of the historic Bridge No. 7, which is located in the Hartford Village Historic District. The project resulted in an adverse effect to the bridge and the historic district. VTrans requested that Kaitlin write the individual Section 4(f) evaluation – the first one to be written in Vermont in seven years. Kaitlin worked closely with VTrans staff and their consulting engineers as part of this process.

Lamoille Valley Rail Trail STP LVRT(10)(11)(12)(13)(15), Swanton to St. Johnsbury, VT

Under contract with the VTrans, Kaitlin is part of the VHB team designing, engineering, and completing the environmental permits for the remaining 30 miles of the 93-mile project. Building on prior resource assessments, Kaitlin reviewed over 150 bridges, culverts, and cattlepasses to evaluate their historic integrity and significance as well as the project impact to each resource and the Lamoille Valley Railroad linear historic district. Kaitlin completed all of the Section 106 reviews and related Memorandum of Agreements (MOAs), as well as the Section 4(f) evaluations.



Robert Wildey, PE, CPESC

Hydrologic and Hydraulic Studies



Robert is Water Resources Engineer with VHB's Environmental Services Group where he has worked on a variety of water and stormwater-related projects for both public and private-sector clients. His key focus is the interface between natural streams and the built environment, from bridges and culverts that carry transportation infrastructure to stormwater treatment practices that manage runoff from impervious areas and convey flows to surface waters. Robert is experienced with environmental permitting related to wetlands and other water resources at the local, state, and federal levels on projects as diverse as residential developments, retail shopping centers, renewable energy facilities, highway and rail projects, and utility corridors. He specializes in evaluations of erosion, sedimentation, and geomorphology in rivers.

20 years of professional experience , 17 years with VHB

Education

MS, Civil Engineering, University of New Hampshire, 2006

BS, Environmental Sciences, University of South Florida, 1997

Registrations/Certifications

Professional Engineer, VT

Affiliations/Memberships

American Society of Civil Engineers

American Water Resources Association

Town Salisbury Bridge No. 4 Waterway Crossing Analysis, Salisbury VT

As part of the design for the replacement of Town Highway Bridge No. 4 carrying Maple Street over Leicester River, Robert provided design guidance to support the structural engineers in determining the proposed bridge dimensions and configuration to meet hydraulic freeboard and openness requirements for the project design storm. VHB performed a hydrologic and hydraulic analysis for the existing and proposed bridge to develop a preliminary structure size for the subject crossing and evaluate the potential impacts to the water surface elevation (WSE) of the river. VHB developed a step-backwater hydraulic model for the river crossing using the US Army Corps of Engineers (ACOE) hydraulic program HEC-RAS, Version 4.1.0 in accordance with the VTrans Manual and current practices.

VTrans, Culvert and Bridge Investigations, Vermont

Robert performed field investigations, hydrologic analysis, and hydraulic modeling associated with the design, permitting, and construction of culvert and bridge replacements at numerous crossing structures associated with Vermont Agency of Transportation (VTrans) roadway projects. One of these projects involved over 150 culverts along Vermont Route 100 in Killington, Pittsfield, and Stockbridge. Although this project was initially scoped as a roadway improvement project, it became apparent that a hydraulic analysis of the drainage infrastructure was warranted prior to the project moving to construction. In order to meet the project budget and timeline, a remote-sensing approach using GIS was applied to develop watershed areas and drainage characteristics, and a spreadsheet model was developed to calculate design flows and determine the hydraulic requirements for each culvert.

VTrans, Hydraulic Manual Revisions, Montpelier, Vermont

The Vermont Agency of Transportation (VTrans) Hydraulics Manual provides guidance for the assessment and design of hydraulic structures that are critical parts of the VTrans transportation infrastructure. The Hydraulics Manual had last been reviewed over 10 years earlier and needed to be brought up-to-date to reflect the current state of practice. Under contract to VTrans, Robert served as a key member of the VHB team to review the existing manual, confirm calculations, and rewrite text to make the manual more user-friendly.



Ryan Cloutier, LS

Right-of-Way/Survey/GIS



Ryan is a Survey Manager in VHB's South Burlington office. Ryan serves clients' survey needs through the full project lifecycle from initial planning and research, to right of way, utility and boundary survey, through final design, construction, as-built and ALTA survey. He has in-depth experience on both the public and private sectors having held senior positions at the Vermont Agency of Transportation and with private consulting firms throughout New England.

Education

BS, Mathematics, Saint Michael's College, 1998

Registrations/Certifications

Licensed Surveyor, VT

25 years of professional experience, 6 with VHB

East Main Street Sidewalk, Wilmington, VT

Ryan and his team conducted the field survey for the reconstruction of approximately 1,400 linear feet of existing sidewalks along the north side of East Main Street, in the historic center of Wilmington. This project includes new granite curbing, new concrete sidewalks, stairs and walkways, and driveway entrances. The project also includes the construction of several fieldstone walls, the replacement/extension of a sewer main and six laterals, and two new crosswalks. Because the new sidewalk will be wider than the existing, the project involves utility pole relocations to eliminate conflicts with the proposed sidewalk.

Vermont Agency of Transportation (VTrans), Survey Services On-Call, Vermont

Ryan is the Project Manager for the VTrans 1.5M Survey Services On-Call Contract. His responsibilities include the full project management lifecycle, from initiation through project closeout. Projects using remote sensing technology include US 7–Shelburne Road Traffic signal project; Rockingham Ledge scan along I91; 3 miles of the Colchester Causeway connecting Colchester to South Hero, VT; and the Hartland, VT I91 bridge replacement project.

40 IDX Drive ALTA survey, South Burlington, VT

Ryan served as Project Manager on an ALTA survey of a 16-acre commercial site. A project with this much detail would normally take three weeks to survey using traditional methods, but using UAV, VHB was able to collect all of the necessary information in a couple of hours flight time and deliver the project ahead of schedule.

Franklin County State Airport, Vermont

Under an on-call contract with the Vermont Agency of Transportation (VTrans), Ryan was the project lead to provide boundary, topographic and records research for airport improvement projects. VHB performed a topographic survey of approximately 30 acres at the airport for stormwater improvements and fence upgrades. The topographic survey was combined with existing aerial LiDAR to build the final surface.

PanAm Bridge Deformation Monitoring, Bernardston, MA

Ryan served as Project Manager on a 3D scanning project to perform deformation monitoring of PanAm Bridge 42.81 in Bernardston. Services include the use of a 3D scanner to create a point cloud of the bridge piers, bridge arches, bridge abutments, and bridge wingwalls on both the east and west sides of the bridge pre- and post-construction. Ryan then compared the results of the pre-construction scan with the results of the post-construction scan to identify any vertical movement of the bridge pier, bridge arches, bridge abutments, or bridge wingwalls.



Michael Willard, ASLA, LEED AP

Landscape/Streetscape Design



Education

AA, Architecture, Vermont
College, 1992

Registrations/Certifications

LEED Accredited Professional

Affiliations/Memberships

American Society of Landscape
Architects

Vermont Bee Keepers
Association

With over two decades of professional experience, Mike has an extensive portfolio of landscape architectural projects which includes master planning, commercial development, multifamily housing, residential projects, government facilities, streetscapes, parks, transportation, healthcare, institutional, innovative storm water, hotels, and resorts. In addition to Mike's strong design capabilities, he has a broad range of technical skills on all aspects of construction detailing and implementation and in-depth knowledge of construction materials and methods.

27 years of professional experience, 6 years with VHB

College Street Waterfront Access, Burlington, VT

Michael assisted the City of Burlington to strengthen the City's waterfront. This project consisted of redesigning lower College Street to incorporate innovative storm water gardens, transit stops, public parking and public bathroom facilities, outdoor gathering spaces, street trees and street lighting. This streetscape serves as the entrance to the Waterfront Park and Echo Center.

South Burlington City Center/Market Street, South Burlington, VT

As project manager, Michael worked closely with the City and design team to develop an award-winning streetscape design. Market Street was designed as one continuous "Main Street" with three distinct design styles that seamlessly link together. These design styles respond to the City's new Form Based Code zoning. The streetscape design incorporated innovative stormwater design, pedestrian connectivity to neighboring recreation assets, a multi-use path, and outdoor café and sitting areas.

Newport Waterfront and Downtown Master Plan, Newport, VT

As project manager, Michael was an integral member of the design team and visioning process for the Waterfront and Downtown Master Plan for the historic City of Newport. The plan identifies opportunities, public facilities, infrastructure improvements, land uses, and other physical enhancements to generate increased activity and economic vitality.

Downtown Core Master Plan, St. Albans, VT

As project manager, Michael was an integral member of the design team and visioning process for the Downtown Core Master Plan for the historic city block in St. Albans. The master plan included prioritizing development sites within the underutilized core block that would eventually see these priority sites turn into a new VT State Office Building, Downtown Hotel, and new multi-level parking garage.

Church Street Marketplace—Block One, Burlington, VT

As project manager, Michael was responsible for leading the design team to develop the site design, permitting and construction documentation. Phase One of this project was to provide design direction on streetscape improvements for the existing three pedestrian mall blocks. Some of these improvements included handicap access to merchants, installing new street trees, fixing general repairs and removing trip hazards. This project also included creating a new venue space in front of the downtown mall by developing a paving pattern to define the space. Phase Two of this project will extend the Marketplace one city block by eliminating vehicular traffic and continuing the pedestrian mall. Upon completion, this project will enhance and strengthen the famous "Outdoor Pedestrian Mall" that was originally created in 1981.



Brad Ketterling

NEPA/Permitting



Education

MS, Physical Geography,
University of Western Ontario
(Canada), 1995

BS, Geography, Concordia
University, 1992

Brad has worked as an environmental scientist for close to two decades, specifically in the fields of wetland mitigation site feasibility and design, stream assessment, watershed planning, state and federal permitting, and NEPA compliance. Brad helps clients navigate complex regulatory requirements and achieve successful results by identifying and assessing natural and cultural resource issues and constraints and developing strategies to obtain authorizations that are in the best interest of the client and the environment. He has worked on a variety of projects from linear transportation and energy infrastructure improvements to telecommunications networks to ski resorts to natural areas restoration. Brad has managed projects for a variety of private and public sector clients, including the Vermont Agency of Transportation, the Vermont Telecommunications Authority, Green Mountain Railroad Company, and the City of Burlington, Vermont.

27 years of professional experience, 20 years with VHB

Burlington Bike Path Rehabilitation, Burlington, VT

Brad assisted with various permitting activities associated with the proposed rehabilitation of the Burlington Bike Path, including: coordinating the process of infiltration testing to support the use of a driveable grass pavement system in Waterfront Park; coordinating with Department of Public Works Stormwater Program Manager to discuss potential stormwater treatment approaches; permit applications for Construction and Operational Phase Permits from the DEC Stormwater Section; preparation of city permit applications (Zoning Permit and Small Project EPSC Plan); and coordination with Senior Planner at Department of Planning and Zoning. He also performed a shoreline assessment of the Urban Reserve to assess areas in potential need of stabilization.

Cold Brook Stream and Floodplain Enhancement Project, Wilmington, VT

Brad is Project Manager responsible for developing the mitigation strategy to reclaim two artificial ponds in the floodplain of Cold Brook in Wilmington, Vermont. Relicts of past sand and gravel mining activities, these ponds captured Cold Brook during Tropical Storm Irene, resulting in elevated water temperatures in this trout stream and a disruption of natural sediment transport processes. He developed an approach to fill the ponds with rock material from adjacent reservoir excavation, establishing a pilot channel for Cold Brook. He also coordinated extensively with the U.S. Army Corps of Engineers and Agency of Natural Resources to gain concept approval and obtain all necessary permits.

Middlebury Main Street and Merchants Row Bridges, Middlebury, VT

Brad was Task Manager for Environmental Services, evaluating potential natural resources and other constraints on the design for the replacement of two bridges over the Vermont Railway in Downtown Middlebury as part of an Environmental & Historic Structures Evaluation and National Environmental Policy Act (NEPA) documentation. As a Local Transportation Facilities (LTF) project, direct coordination with VTrans staff was required with the Historic Preservation Officer, Archaeology Officer, and various members of the Environmental Section. Brad also coordinated directly with the Federal Highway Administration (FHWA) Environmental Program Manager with respect to NEPA compliance documentation and the development of an appropriate Section 4(f) Evaluation for bridge replacement.



Kurt Muller, PE

Contaminated Soils



Education

BS, Environmental Engineering,
University of Vermont, 2004

BA, Biology, University of
Vermont, 1999

Registrations/Certifications

Professional Engineer, VT

Affiliations/Memberships

Vice President - Vermont
Environmental Consortium
(2013- present)

American Council of
Engineering Companies

Kurt's engineering expertise includes project management, investigation and remediation design, clean-up oversight, and stakeholder collaboration for brownfield sites. Specifically, Kurt's expertise focuses on managing complex projects that require coordination with a variety of stakeholders including EPA, DEC, attorneys, municipalities, transportation agencies, and the public. During all of his projects, Kurt has emphasized meaningful, proactive communication and community participation in order to ensure a successful outcome. Kurt is a licensed Professional Engineer in Vermont with 18 years of experience in the private sector.

18 years of professional experience, 4 years with VHB

Brownfields Investigation and Redevelopment

Project Manager on more than 50 EPA-funded Brownfield site investigations, where he has prepared Workplans/QAPP documents and investigation reports. He has performed Evaluations of Corrective Action Alternatives (ECAA) and prepared numerous Corrective Action Plans (CAPs) that address a wide variety of contaminants. Familiar with and generate risk-based and self-implementing cleanup plans for TSCA-regulated PCB sites. Characterized former dry-cleaner site with chlorinated solvent impacts. Designed, coordinated and implemented remediation for two former paper mills impacted by dioxins/furans and PCBs, which included developing DEC & EPA approved QAPPs for post remediation dioxins/furans indoor air clearance sampling, the first of their kind for Region 1 EPA. Prior to project management, performed soil, vapor and groundwater sampling using a variety of techniques including EPA's slow purge sampling procedures, membrane interface probing, Drive Point/Direct Push technology, Waterloo Profiling, incremental sampling methodology, soil and sediment coring, bathymetry assessments, and monitoring well installation. Also, supervised numerous underground storage tank closures throughout Vermont.

Management, Remediation and Construction Oversight

Between 2008 and project completion in 2013, provided oversight and project management for the National Park Service (NPS) on the successful Kregci Dump Site remediation in Cuyahoga Valley National Park. In 2014 and 2015 performed oversight and management assistance during the remediation of operable unit 1 (OU1) of the Washington Gas Site for NPS, and oversaw the construction of an isolation barrier at the Orphan Mine Site in Grand Canyon National Park. Provided investigation oversight and document review to confirm Administrative Order of Consent compliance at the GERO Vincennes Site. Designed, managed, and implemented an EPA approved soil and groundwater management plan for the City of Burlington's Waterfront Access North project (2013-present) that rehabilitated land surrounding a former coal fired power plant for safe recreational reuse.

Environmental Site Assessments (ESAs)

Performed and/or oversaw more than 90 ESAs on a variety of commercial and residential properties. Project manager/lead engineer on several subsurface Phase II hydrogeologic investigations at a variety of petroleum, chlorinated solvent, and PCB contaminated sites.



