Vermont Agency of Transportation
March 2020

At-the-Ready Consultant Engineering

Construction Inspection

March 9, 2020

Ms. Nydia Lugo
Technical Development Engineer
Vermont Agency of Transportation
One National Life Drive
Montpelier, VT 05633-5001

Re: Vermont Agency of Transportation –
At-the-Ready Consultant Engineering Services for Municipalities 2020
Construction Inspection Services

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

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 **Construction Inspection 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 1,600-strong, we provide both the local connection and depth of resources to meet the full needs of the VTrans Municipal Assistance Bureau (MAB) program.

We are delighted to have the opportunity to present our proposal and we look forward to continuing working together with Vermont municipalities and VTrans on projects that make our communities even better places to live.

Sincerely,

Evan Detrick, PE
Program Manager
Director of Transportation Engineering
edetrick@vhb.com

David Saladino, PE, AICP
Principal-in-Charge
Managing Director
dsaladino@vhb.com

40 IDX Drive, Building 100
Suite 200
South Burlington, Vermont 05403
P 802.497.6100
F 802.495.5130

General Firm Information

Overview

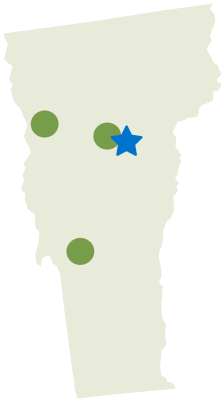
The Vermont Agency of Transportation (VTrans) Municipal Assistance Bureau (MAB) was initially established in the 1990's as the Local Transportation Facilities section of the Program Development Division. Since its inception, the mission of the unit has been to work with and support municipalities and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

Projects through the MAB 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 MAB'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 by serving 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 which consultants are interested in helping them with their project, and to determine the best qualified firm to do so. This process has been burdensome on some municipalities, especially those with small staffs that are not familiar with the solicitation process. In order to streamline and simplify the process, the VTrans MAB developed a request for qualifications to identify a list of consultants that can provide services to municipalities 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 to municipalities. 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 MAB aims to make the process easier for the municipalities, and condense overall project schedules by eliminating the solicitation effort from the process.

VHB is pleased to be teaming with subconsultant S.W. Cole (SWC) to respond to VTrans' RFQ to provide construction inspection services to municipalities and other project sponsors across the State. Our Team has a long history of delivering multi-faceted transportation services throughout Vermont. Through our extensive experience on numerous VTrans retainer contracts and individual MAB projects, we are ideally suited to provide construction services under this retainer. Our Vermont team is small enough to provide caring and responsive services, and with the support of many experts across our companies, 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.



3
offices
in Vermont

with close to
100
employees

★ VTrans Barre Office
● VHB Office

VHB has a long history of delivering multi-faceted transportation services to municipalities throughout Vermont. Through our extensive experience on numerous VTrans retainer contracts and individual MAB projects, we are ideally suited to provide construction phase services under this retainer. Our Vermont team has the breadth and depth of expertise required to tackle the most challenging of assignments while providing caring and responsive locally provided services. We look forward to working with VTrans and municipalities across the state for the betterment of Vermont's transportation infrastructure.

General Firm Information

Since 1979, VHB has partnered with public and private sector clients to provide high-quality transportation engineering services through an integrated team approach to collaboration. VHB has continued to grow and hone a diverse workforce that delivers 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.

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 Difference

VHB is different from other firms and uniquely prepared and suited to assist municipalities with At the Ready services for all of their local transportation improvement needs. VHB offers a broad range of services through our in-house staff, and we are fully capable to provide Construction Inspection services to municipalities and other local sponsors under this retainer. We have provided similar services on numerous projects for municipalities across Vermont.

Local Presence and Knowledge, Regional Expertise and Additional Resources

VHB's services under this retainer will be provided out of our Vermont offices in South Burlington, Montpelier and Rutland. With nearly 100 professional civil and structural engineers, planners, landscape architects, construction inspectors, and environmental specialists, our Vermont office provides the full range of services anticipated under this contract. We live here, we play here and we consistently hire Vermonters. We understand what makes our State special. 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.

Team Accessibility

Our local presence throughout Vermont allows us to take a hands-on approach to construction inspection. While it's not always necessary to have an inspector on-site, We understand that inspection services often require immediate action. When issues arise in the field, it is necessary to resolve the issue quickly so that the contractor is not delayed and asking for additional compensation.

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.

S.W. Cole

S.W. Cole's construction materials testing division has been providing knowledgeable, friendly service since our founding in 1979. Their more than 50 technicians are respectful, dependable, experienced and knowledgeable. Many hold advanced certifications from top industry associations such as the Northeast Transportation Technician Certification Program (NETTCP), the American Concrete Institute (ACI), the International Code Council (ICC) and the National Institute for Certifications in Engineering Technologies (NICET). S.W. Coles eight offices located in strategic cities and towns across northern New England allow them to service projects efficiently, and the flexibility to schedule field testing services in an emergency or last-minute situation—saving clients time and money.

Organizational Chart

The Organizational Chart on the following page shows the core team and key support staff that will work on this retainer contract. For the Construction Inspection services, VHB will have responsibility for each project and will either provide inspection and construction management services with our in-house staff. The staffing for the VHB team will be flexible, and we will always provide the right people for each individual project.

Organizational Chart

Project Sponsor

Principal-in-Charge
David Saldino, PE

Contract Manager
Evan Detrick, PE

CONSTRUCTION INSPECTION

Project Manger/ Resident Engineer
Evan Detrick, PE

Construction Inspectors
Cierra Ford, EIT
Jeff Bachiochi, PE
Jason Keener, PE
Drew Gingras, PE
Branden Roberts, EIT

TECHNICAL ENGINEERING SERVICES TASK LEADERS

Permitting
Brad Ketterling

Historic/Cultural Resources
Kaitlin O'Shea

Survey/ROW
Ryan Cloutier, LS

Park & Ride Facilities, Bridges & Structures
Scott Burbank, PE

Landscape Architecture
Mark Hamelin, CLA

Hydrologic & Hydraulic Studies
Robert Wildey, PE, CPESC

Availability Chart

The importance of this contract to VHB cannot be underestimated. Within VHB, this contract is high-profile, and central to our corporate mission to be the consultant of choice for VTrans and Vermont Municipalities. As such, delivering excellence on ever assignment is our highest priority.

The VHB Team is comprised of professionals with diverse levels of experience and skill sets required to address each of the service areas that may be called upon under this contract. Each person on the VHB Team will be ready and available to begin work as soon as the notice-to-proceed for a task is assigned. Individual availability is identified here based on current projects in various stages of competition. We strive to maintain a healthy and manageable workload for all staff and understand that certain personnel may be more desirable to you for a particular assignment based on experience. The VHB team is prepared to dedicate core individuals based on your needs, which includes redistributing assignments from other clients to alternative staff if the need arises.

NAME	ROLE	AVAILABILITY FOR THIS CONTRACT
Evan Detrick, PE	Contract Manager	15%
David Saladino, PE	Principal-in-Charge	15%
Jeff Bachiochi, PE	Project Engineer	25%
Drew Gingras, PE	Project Engineer	25%
Branden Roberts, EIT	Project Designer	25%
Cierra Ford, EIT	Project Designer	40%
Brad Ketterling	Permitting	10%
Ryan Cloutier, LS	Survey/ROW	10%
Mark Hamelin, CLA	Landscape Architecture	10%
Kaitlin O'Shea	Historic/Cultural Resources	10%
Scott Burbank, PE	Park & Ride Facilities, Bridges & Structures	10%
Robert Wildey, PE, CPESC	Hydrologic & Hydraulic Studies	10%

Construction Inspection

Understanding

Construction is the most visible part of any project. It's when the sponsor and general public get to see the improvements being made, and there is a sense of accomplishment as the project is brought to fruition. While most contractors do a fine job during construction, towns need verification that their contractor is building their project as intended. It is the role of the Resident Engineer and Construction Inspector to verify that the contractor is adhering to the plans and specifications, and constructing the project properly.

VHB knows that for any project to be a success, it must progress smoothly and be compliant with design plans, specifications, procedures, and environmental permits/regulations from the start. Therefore, our team will undertake the following for all construction projects:

- Review and have a working knowledge of the plans, specifications, estimates, and special provisions before the start of construction
- Perform frequent or continuous inspection of the work
- Conduct regularly scheduled construction progress meetings
- Verify the construction is being completed in conformance with the contract plans and specifications
- Prepare Daily Reports, calculate quantities, and complete a photo log showing progress
- Provide timely, clear and concise feedback to the contractor
- Provide materials inspection testing in accordance with the appropriate Inspection Level of the VTrans' Quality Assurance Program (QAP) and Materials Sampling Manual (MSM)
- Calculate and verify the final quantities
- Maintain communication with the MPM and coordinate with the Design Engineer, VTrans MAB Project Supervisor, and the contractor whenever needed
- Provide written, weekly updates to the municipality, MPM, VTrans MAB Project Supervisor, and the contractor

Our Approach

The VTrans Construction Manual emphasizes that "usually more can be accomplished by positive persuasion than by the use of the full authority given to the Resident Engineer." The VHB Team staff has established a solid track record of positive working relationships statewide with many municipalities, contractors, the public, utility companies and state and federal regulators alike.

> The VHB Team's approach to achieve success is to assign qualified people with appropriate experience on every project.

VHB has a deep pool of engineers, construction managers and inspectors, and we will assign those persons with the most relevant experience for each assignment. We will work with the VTrans Project Supervisor and municipality to identify the best team members for each project, and have them meet with VTrans and the municipality prior to the pre-construction meeting to discuss their experience and roles before construction begins.

Once our team is on board, we will manage construction in a proactive way. We will keep the municipality and VTrans informed with routine updates and bring issues forward for discussion and resolution before they become problems. Our resident engineer will be involved with and knowledgeable of the construction status through frequent communication with our Construction Inspector. Our Inspectors will raise issues and concerns with the contractor immediately upon identification, and will coordinate with the public in a respectful and cordial way. Our goal is to be an advocate for the municipality to have construction proceed as smoothly and trouble-free as possible.

Role of the Resident Engineer

The Resident Engineer is the point of contact between all parties during construction and is ultimately responsible to verify that construction is completed in accordance with the contract documents. They supervise the Construction Inspector and provide engineering guidance, conduct routine site visits, and are available for field calls, as necessary. The Resident Engineer provides office support, reviews test reports and pay requisitions, as well as coordinates between the design engineer, VTrans MAB Project Supervisor, MPM and the contractor. The Resident Engineer is in contact with the Inspector on a daily basis and assists the Inspector with the daily clerical requirements, allowing the Inspector to focus on the construction activities. The Resident Engineer arranges for and leads the pre-construction meeting and the regular construction status meetings, convenes special meetings if necessary, and arranges for and leads the final inspection. Once the contractor has completed a minimum of 90% of the work, VHB will issue a Certificate of Substantial Completion to the contractor and schedule a final inspection. After the final inspection is complete, VHB will issue a punch-list to the contractor for the completion of the project. When the contractor has completed the items on the punch list, VHB will issue a certification to the Town and the VTrans MAB Project Supervisor stating that the project was constructed as designed and in accordance with the appropriate and necessary construction revisions, in conformance with all the project specifications, and that construction fully complied with all necessary contract provisions.

Role of the Construction Inspector

The Construction Inspector will be the person with their "boots on the ground". They are the first line of defense for the municipality to ensure the construction contractor is following the plans, and providing materials that meet the specifications. The Inspector must be firm with the contractor, and immediately establish that they have the ultimate say in whether or not the work meets expectations. The Inspector must be thoroughly familiar with the VTrans specifications and standards, what materials are to be used, how to assess their quality, and how they should be paid for. Our Construction Inspector will meet with the contractor each day prior to the commencement of work to go over the anticipated work, and at the conclusion of each day to verify the contractor's plans for the following day.

The current practice on MAB projects is to have the municipality retain the services of a qualified firm to conduct material testing and sampling. This includes items such as performing concrete cylinder breaks to test the strength of Portland cement concrete; verifying the gradation of subbase materials to make sure they have the proper blend of sands and gravels; and verifying the mix design of asphalt pavements to make sure they have enough, but not too much, bituminous material. This work is arranged by and coordinated through the Inspector. As part of the construction phase services contract, the inspection firm will include a testing firm on their team, and the Inspector will make arrangements with the testing firm to be on-site whenever testing should be conducted, make sure the proper tests are being conducted, and then review the test results. The Inspector will also conduct tests as materials are being placed, including verifying that the proper thickness is used for items such as concrete sidewalks and roadway pavements; and materials are being placed at the proper temperatures (asphalt must be within a certain temperature range and concrete can't be placed if it is too cold). The Inspector's responsibilities also include reviewing certifications provided the contractor and their suppliers that items such as pavement markings are comprised of the correct type of paint; signs have been fabricated with the correct type of reflective surface; and steel and iron products have been manufactured in the United States if "Buy America" provisions apply to the contract.

Another important role of the Inspector is to interface with affected property owners. Virtually all construction projects have some impacts to adjacent properties, and the Inspector is often the person that owners reach out to in order to ask questions or make complaints. The Inspector must do whatever they can to answer questions and reasonably address property owner concerns. VHB Inspectors listen carefully and treat the owners with respect even when an owner is being particularly difficult. The Inspector must answer questions and resolve issues whenever possible, yet know when resolution is beyond their authority and recognize when it is necessary to elevate the discussion to the Resident Engineer or town officials. Keeping the public happy throughout construction is one of the best measures of a project's success. The VHB team understands this, and works proactively to keep owners informed by explaining the upcoming work, its schedule, and how it will affect the owner's property and access before the work occurs.

Pre-Construction Meeting and Regular Construction Progress Meetings

Most projects benefit from regular progress meetings, which are normally held biweekly or monthly depending on schedule and progression of work.

Prior to getting started with the project, VHB will set-up a Pre-Construction Conference with the Town, MPM, VTrans MAB Project Supervisor and the contractor. At the Pre-Construction Conference, the roles and expectations along with the contact information for the attendees as well as the contractor's construction schedule will be discussed. In addition to these items, the following items will also be addressed:

- Verify that the contractor has contacted Dig-Safe
- Scheduling the regular construction status meetings, if required
- Determine the procedure and "chain-of-command" for reporting any unusual occurrences and any accidents within the project limits
- Set-up the procedure for submitting and issuing any modifications and/or changes to the plans by the contractor
- Review the specific items requiring shop drawings and/or certificates and discuss how the shop drawing process will be administered
- Discuss preparation of the contractor's progress payment estimates
- Discuss the contractors requirements for traffic control for each phase of the project

The Resident Engineer will schedule and facilitate regular progress meetings, and the Construction Inspector will attend to provide a detailed update on the project status, review progress, describe the results of material testing, discuss any concerns regarding the contractor's work and how those concerns are being resolved, and identify any action items. These meetings are a good opportunity for the municipality and VTrans Project Supervisor to hear first-hand how the construction is progressing, ask questions, and verify that the Resident Engineer and Inspector are managing the project appropriately.

Frequently discussed topics normally include: traffic control, dust mitigation, site soil tracking, construction signing, permitting criteria, property owner issues, erosion and sediment control, material sources and waste, materials testing and results, borrow and staging areas, coordination with state agencies, utility coordination, Requests for Information, updated schedule, pay requisitions, and other topics as required.

Certifications

Construction Inspection services include reviewing material certifications provided by the construction contractor and their suppliers, and conducting material testing in accordance with the appropriate Inspection Level of the VTrans' Quality Assurance Program (QAP) and Materials Sampling Manual (MSM). The certifications typically include pavement marking and paint materials, traffic signs and posts, iron castings for detectable warning surfaces, concrete curb and drainage structures, reinforcing steel, etc. Each certification must be reviewed to check that it is fully completed and signed, and to verify it is for the appropriate item being used in the construction. Material testing is performed on the concrete that sidewalks are made from to ensure it meets the strength requirements specified by the designer, on the subbase stone materials to ensure they meet the gradation requirements outlined in the project specifications, and to ensure that base materials are compacted properly. While VHB doesn't perform material testing ourselves, we partner with firms such as S.W. Cole who perform the material testing for our projects as directed by the VHB construction inspector. Once the testing is done and laboratory work completed, results are reported back to our inspector so they can be reviewed for conformance to the contract.

Castleton Sidewalk Reconstruction

Installation of the Oak Creek Village Culvert

Project 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.

Providing consulting services to municipalities, and to state and federal agencies, is a core purpose of our company and a key focus of our Vermont staff. Our overall approach to the management of this contract is informed by our successful experience on a wide range of similar on-call assignments.

Castleton Sidewalk Reconstruction

Contact: Michael Jones, Town Manager
802.468.5319 Ext. 203 | manager@castletonvt.org

VHB provided Construction Oversight and Inspection Services for this project consisting of approximately 3,800 linear feet of concrete sidewalk along the north side of VT Route 4A, starting at the intersection of Drake Road and running westerly to the Hydeville Post Office. The project also included catch basins, stormwater piping, bituminous concrete driveway ramps, topsoil placement and seeding. Duties included monitoring site safety and EPSC measures, providing engineering field support and providing clarifications to the contractor and Town, reviewing submittals, certifications, and preparing change orders, maintaining project records such as daily work reports, submittals and material certifications, material testing and inspection reports, payroll certifications and wage rate interview forms.

Oak Creek Village Culvert Replacement

South Burlington, VT

Contact: Justin Rabidoux, DPW
802.658.7961 x6101 | jrabidoux@sburl.com

VHB provided construction management and resident engineering/field engineering and design engineering for the installation of two precast box culverts in a residential development in South Burlington, VT. Each culvert required a temporary stream by-pass system, the relocation of existing underground telecommunication and electrical utilities, waterlines, and sewer lines, replacement of curb and sidewalk, new catch basins, paving and landscaping. VHB provided oversight of daily operations to verify compliance with contract plans and special provisions, and Vermont Agency of Transportation Standard Construction Specifications. Services also included monitoring of erosion control protection measures, providing design engineering for a 320 linear foot long subsurface storm pipe extension change order, engineering field support and clarifications to the contractor and the City of South Burlington. VHB reviewed submittals, material certifications, prepared change orders, conducted pressure testing on new water and sewer lines, and reviewed payment applications to ensure all quantities were accurately documented and calculated. VHB personnel facilitated monthly meetings with the contractor, the City, and VTrans, and managed and coordinated materials testing services to ensure all testing requirements were met. Project

Commerce Square

records such as photo documentation, submittals and material certifications, material testing and inspection reports, payroll certifications and Davis Bacon wage rate interviews were maintained by VHB and provided to the City following completion of the project.

Commerce Square

South Burlington, VT

Contact: Justin Rabidoux, DPW
802.658.7961 x6101 | jrabidoux@sburl.com

For the City of South Burlington, VHB performed planning, grant funding support, design, permitting, cost estimating, preparation of construction documents, and construction management and resident engineering services for the retrofit stormwater treatment system located on the lands of the Commerce Square Shopping Center along Williston Road. VHB services on the project involved coordination with the private land owner, modeling of existing drainage areas, assessment of retrofit alternatives, design of drainage system diversion structures and design and permitting upgrades associated with a new swirl separator and enlarged detention pond to intercept runoff from approximately 95.7 acres of developed land with 42 acres of impervious area draining to the stormwater-impaired Tributary Three of Potash Brook. Construction began in summer of 2017 and was completed in 2018. VHB provided construction inspection throughout the construction period.

Kelley Stand Road Reconstruction

Sunderland, Vermont

Contact: Mark Hyde
802.375.6106 | mhyde@sunderlandvt.org

For this project VHB provided project scoping, design services, and full construction oversight for reconstruction of approximately four miles of Kelley Stand Road (Forest Highway 6) and reconstruction

A new bridge on Kelley Stand Road

A completed section of Burlington Bike Path

along sections of Roaring Branch stream channel located in Sunderland, Vermont. Project scope included reconstruction of 32 damaged sites along to the road, including two bridges, multiple roadway sections, and channel reconstruction.

Burlington Bike Path Phase 1a

Burlington, Vermont

Contact: Jon Adams-Kollitz
(802) 540-0363 | jadamskollitz@burlingtonvt.gov

VHB performed resident engineering services that consisted of coordinating and facilitating a preconstruction conference, review of contractor submittals, material testing and certification, review of material testing results, coordination with the City and Contractor, full-time on-site construction observation, and final inspection. VHB consulted with and kept the City fully informed on project progress throughout the duration of this contract.

The Green Mountain Transit Downtown Transit Center

Green Mountain Transit Downtown Transit Center | Burlington, Vermont

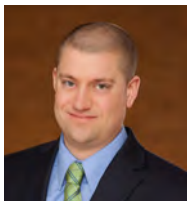
VHB led a team of professionals in civil engineering, architecture, mechanical engineering, electrical engineering, structural engineering, security, and traffic engineering to deliver the project on time and under budget. The project was also designed in close coordination with Burlington Public Works, and Burlington Electric Department to make sure the facility was carefully and thoughtfully integrated with the Burlington Downtown area in accordance with state and local accessibility requirements. VHB also provided construction phase engineering support to GMT including delivering a smooth ride from project conception to grand opening and full operation.

Key Personnel

Evan Detrick, PE

Project Manager/
Resident Engineer
35 years of professional experience

Evan is a Civil Engineer with over 35 years of experience supporting federal, state, municipal, and private sector projects. Evan's responsibilities include project scoping and budgeting, personnel and work assignment scheduling, project management, public engagement, and quality control. He has completed the planning and design of over 60 MAB/LTF projects and numerous projects directly for VTrans. His experience has included a variety of sidewalks, pathways, and trails; bridge rehabilitation and replacement; intersection and traffic signal upgrades; roadway resurfacing and reconstruction; property and topographic surveys; streetscape and lighting enhancements; stormwater improvement projects; and many projects involving public outreach. Evan was Resident Engineer for inspection of the Route 4A Sidewalk Project in Castleton, will be the Resident Engineer for Plainfield's upcoming Main Street Pedestrian Bridge project. Evan was also the Project Manager for the replacement of the Quechee Covered Bridge in the aftermath of Tropical Storm Irene, which included the preparation of an alternatives analysis, complete design of the new structure, and construction inspection throughout the entire duration of construction.



Jason Keener, PE

Construction Inspector
13 years of professional experience

Jason is a Project Engineer with experience in culvert, roadway, and bridge replacement, and construction inspection. His skills include computer-aided drafting programs AutoCAD and MicroStation as well as surveying with a robotic total station. He provided construction oversight and inspection services on the Kelly Stand Road Reconstruction project that included approximately four miles of Kelley Stand Road (Forest Highway 6) and reconstruction along sections of Roaring Branch stream channel located in Sunderland, VT; inspection of the Oak Creek Culvert Replacement in South Burlington; and he is currently the Project Engineer for Plainfield's Brook Road Bridge #21 replacement project.

Jeff Bachiochi, PE

Construction Inspector/
Resident Engineer
8 years of professional experience

Jeff is a Civil Engineer with 8 years of experience working on transportation and infrastructure projects, including roadways, bridge approaches, traffic signals, and pedestrian/bicycle facilities. He has performed construction administration services for various types of contract delivery methods, including Design-Build, CM/GC, and Public-Private-Partnership projects. Jeff has performed construction oversight services for various roadway and rail projects, coordinating with contractors, municipal officials, local authorities, and other stakeholders; and communicating between field staff and design engineers to solve complex construction issues with minimal project delay.

Cierra Ford, EIT

Construction Inspector
2 years of professional experience

Cierra is a Transportation Designer in VHB's Vermont office, with experience in scoping and design, construction inspection, and developing plans. Cierra served as the Construction Inspector on Castleton's

Route 4a Sidewalk project, which included extensive outreach and coordination with numerous property owners. Cierra will also be an inspector working under the VTrans Resident Engineer for their project to improve an existing Park & Ride lot and reconstruct 8.5 miles of VT Route 15 in Underhill, Westford and Cambridge in the summer of 2020.

Drew Gingras, PE

Project Engineer
8 years of professional experience

Drew is a Project Engineer, and his experience to date has been predominantly focused on the design of non-motorized transportation infrastructure. His broader experience includes planning and scoping studies, bicycle/pedestrian facility planning and design, traffic calming design, and complete street design. Drew has designed over 30 miles of on-street bicycle facilities, and has served as the design engineer on such local projects as the NBRC grant funded Three Rivers Path Extension project for the Town of St. Johnsbury, multiple phases of the rehabilitation of the Burlington Bike Path, and the Lamoille Valley Rail Trail.

Branden Roberts, EIT

Transportation Designer
6 years of professional experience

Branden is a Transportation Designer, with experience in roadway and bicycle/pedestrian path design, as well as field inspection experience with construction materials like concrete, soil and asphalt. He provides horizontal and vertical alignment design, roadway modeling and cross section development, guardrail design, open flow and closed drainage, and quantities.

Branden was the lead designer for Phases 2 and 3a of the Burlington Bike Path and was heavily involved in almost every aspect of the design. Branden has also developed plans for the restriping of Railroad Street in St. Johnsbury to eliminate an unnecessary through lane, and repurposing of the lane as a bike buffer and bike lane. This project will also add bike lanes on a narrower section of Railroad Street, and add destination signing to connect the downtown area to the existing trailhead for the Three Rivers Path.

Resumes

Evan P. Detrick, PE

Project Manager/Resident Engineer

Education

BA, Liberal Arts, East Stroudsburg University, 1984

BS, Civil Engineering, Pennsylvania State University, 1984

Registrations/ Certifications

Professional Engineer (Civil) VT

Affiliations/ Memberships

Vermont Society of Engineers

Institute of Transportation Engineers, Vermont

Evan is a Civil Engineer 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; bridge and culvert construction and replacement; highway projects such as arterial roadways on new alignments; roadway widening and rehabilitation; environmental assessments in accordance with NEPA; traffic signal improvements; property and topographic surveys; slope stabilization projects; and numerous Safe Routes to School and Transportation Enhancement projects.

4 years with VHB and 35 years of professional experience

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.

VT Route 4A Sidewalk, Castleton, VT
Project Manager for project that included Construction Oversight and Inspection Services for approximately 3,800 linear feet of concrete sidewalk along the north side of VT Route 4A; starting at the intersection of Drake Road and running westerly to the Hydeville Post Office. The project also included catch basins, stormwater piping, bituminous concrete driveway ramps, topsoil placement and seeding. VHB duties included monitoring site safety and EPSC measures, providing engineering field support and providing clarifications to the contractor and Town, reviewing submittals, certifications, and preparing change orders, maintaining project records such as daily work reports, submittals and material certifications, material testing and inspection reports, payroll certifications and wage rate interview forms.

Quechee Covered Bridge #6, Bridge Replacement, Hartford, VT
Prior to joining VHB, Evan was Project Manager for design and construction phase services for the replacement of the Quechee Covered Bridge (CB#6) over the Ottauquechee River. The bridge was significantly damaged by Tropical Storm Irene and the Town decided to implement the recommendation to replace the aging structure with an entirely new bridge. Services included development of an alternatives analysis, preliminary engineering, permitting, preparation of an H&H study, final design, bid phase services, construction administration, and full-time construction observation.

Chelsea Mountain Road, Road Reconstruction, Randolph, VT
Prior to joining VHB, Evan was Project Engineer for design and construction oversight of drainage ditching, replacement of culverts, and reclaiming pavement along 3½ miles of roadway. Included installation of nearly 500 feet of new drainage culverts and cleaning of culverts plugged with debris. Responsibilities included investigation of geotechnical borings and formulation of a pavement recommendation, cost estimation, phasing of work plan, overall monitoring of construction methods, compilation of project budgets, oversight of periodic construction progress meetings, coordinating with local authorities on project schedule or field change orders, and coordination with utility companies.

Jason David Keener, PE

Construction Inspector

Education

BS, Civil Engineering, Clarkson University, 2006

Registrations/Certifications

Professional Engineer VT, 2016

Affiliations/Memberships

Vermont Society of Engineers

Jason is a Bridge Engineer and Construction Inspector in VHB's South Burlington, Vermont, office with experience in culvert, roadway, and bridge replacement design, construction inspection and oversight, and Vermont stormwater. His skills include computer-aided drafting programs AutoCAD and Microstation as well as surveying with a robotic total station.

8 years with VHB and 12 years of professional experience

Kelley Stand Road Reconstruction Project, Sunderland, VT

Jason provided construction oversight and inspection for this project that involved scoping, design services, and full construction oversight for reconstruction of approximately four miles of Kelley Stand Road (Forest Highway 6) and reconstruction along sections of Roaring Branch stream channel located in Sunderland, Vermont. The project scope also included reconstruction of 32 sites along to the road damaged during Tropical Storm Irene, including two bridges, multiple roadway sections, and channel reconstruction.

Market Street Culvert Replacement, South Burlington, VT

Jason provided construction engineering inspection and management services for a culvert replacement project on Market Street. The project consisted of the replacement of an undersized culvert with a precast concrete arch culvert on cast-in-place concrete footings along with the associated stream channel and roadway work. Due to the larger size of the replacement structure water, sewer, and electric utilities were required to be relocated around and beneath the replacement structure. Jason's responsibilities included preparation of contract documents, bid phase services, construction inspection and project management, and coordination between the City, the Contractor, State of Vermont DEC, utility companies, and the travelling public.

Commerce Square Stormwater Pond, South Burlington, VT

Jason provided engineering services for a stormwater improvement project adjacent to the Commerce Square shopping center. Responsibilities included preparation of Contract Documents, and providing construction project management and coordination between the City, the Contractor, State of Vermont DEC, utility companies, and adjacent property owners and businesses.

Brook Road Bridge Replacement | Town of Plainfield

Project 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 includes topographic survey, deed research, geotechnical analysis for foundation design, bridge type study, final bridge design, permitting, and a FEMA benefit cost analysis. VHB has currently identified bridge replacement alternatives and has met with the Plainfield Selectboard to present these alternatives and assist in selecting a preferred alternative. The replacement alternatives and proposed bridge improvements increase hydraulic capacity and improve the transport of debris and sediment, and would accommodate a 5-foot wide sidewalk on the north or downstream side of the bridge.

Jeff Bachiochi, PE

Transportation Engineer/Construction Inspector

Education

MS, Civil Engineering, Northeastern University, 2016

BS, Civil Engineering, Northeastern University, 2012

Registrations/Certifications

Professional Engineer (Civil Engineer) MA, 2017

Jeff is a Civil Engineer in VHB's South Burlington, VT office. He has 7 years of experience working on transportation and infrastructure projects, including urban roadways, highways, bridge approaches, rail & intermodal stations, traffic signals, and pedestrian/bicycle facilities. He has performed construction administration services for various types of contract delivery methods, including Design-Build, CM/GC, and Public-Private-Partnership projects. Jeff is proficient in developing roadway & utility modeling and plan production, and has experience creating specifications, estimates, and bidding documents for state, municipal, and privately funded infrastructure projects. As a project engineer, Jeff is responsible for producing plans and specifications that are technically sound, coordinated, and constructible.

3 years with VHB and 8 years of professional experience

Binney Street Redevelopment - Cambridge MA

Prior to joining VHB, Jeff performed construction oversight services on behalf of the City of Cambridge for the multi-phase redevelopment of Binney Street in Cambridge, MA. To mitigate traffic associated with the various building projects, the redevelopment project included reconstruction of roadways, sidewalks, separated bike lanes, traffic signals, utilities, and streetscape/landscape elements along Binney Street between Land Boulevard and Third Street. Jeff was responsible for ensuring all work within the public way was performed to City standards and in conformance to the Contract Specifications. Jeff coordinated between City officials and the developer's CM consultant both in weekly meetings and in the field to manage work zone permits, monitor traffic impacts, and resolve field issues.

Boston Landing Commuter Rail Station

Prior to joining VHB, Jeff served as the deputy project manager for the design and construction of Boston Landing Station, a new MBTA commuter rail station in Allston/Brighton, MA. Jeff's roles included attending weekly site meetings with the contractor, monitoring construction progress, resolving field issues, facilitating shop drawing reviews and RFI responses, coordinating with utility companies and other agencies, as well as reviewing and approving payment requisitions. Jeff served as the primary point of contact to NB Development Group, a subsidiary of New Balance who privately funded the project as a Public-Private Partnership (P3).

New Town Road, Rutland, VT

Jeff was the Project Engineer leading the design of a new roadway in the Town of Rutland that was being developed to relieve traffic congestion and improve property access off the U.S. Route 7/4 corridor. The project, designed in accordance with VTrans specifications and local road requirements, included a new road extending 2,000 linear feet between Farrell Road and U.S. Route 7; the reconstruction of 900 linear feet of Randbury Road; reconfiguration of a parking lot, and driveway consolidations. Jeff developed the horizontal and vertical alignments for both roads, typical and cross sections, and quantity and cost estimates.

Cierra Ford, EIT

Construction Inspector

Education

BS, Civil Engineering, Worcester Polytechnic Institute, 2018

Registrations/Certifications

Engineer-in-Training, 2018

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.

2 years with VHB and 2 years of professional experience

Town of Castleton Route 4A Sidewalk Construction Inspection

Cierra is assisting with construction inspection services for this project that consists of approximately 3,800 linear feet of concrete sidewalk along the north side of VT Route 4A; starting at the intersection of Drake Road and running westerly to the Hydeville Post Office. Project also includes catch basins, stormwater piping, bituminous concrete driveway ramps, topsoil placement and seeding. Duties include monitoring site safety and EPSC measures, providing engineering field support and providing clarifications to the contractor and Town, reviewing submittals, certifications, and preparing change orders, maintaining project records such as daily work reports, submittals and material certifications, material testing and inspection reports, payroll certifications and wage rate interview forms.

Town of Stowe, Village Sidewalk and Utility Relocation Project

Cierra worked as a designer, assisting with the development of plans, details, quantity estimates and construction cost estimates. The project includes replacing and widening 7,300 linear feet of sidewalk, replacement of street lights, addition of landscaping and plaza areas, and relocating overhead utilities to underground positions. The project also includes concrete slab removal and full-depth pavement replacement of 2,000 linear feet of South Main Street.

Burlington Bike Path Rehabilitation, Phase 3, 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. The goal of this project is to integrate conservation, sustainability, connectivity, and accessibility along its route through neighborhoods, parks, urban wilds, and waterfront property. Cierra is assisting with the final design and plan development for this project.

Three Rivers Path, St. Johnsbury, VT

Cierra is serving as the project engineer for the preliminary and final design of a multimodal path in St. Johnsbury, VT. The project 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 as well as coordinating with the architect for the design of a pavilion at the path's trailhead.

BTV Quick Build Conversions, Burlington, VT

Cierra was the project engineer for the Quick Build Conversions project in Burlington, VT. This project involves work at three intersections in the downtown area. 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.

Branden Roberts, EI

Transportation Designer/Construction Inspector

Education

BS, Civil Engineering, Wentworth Institute of Technology, 2014

Registrations/Certifications

Engineering Intern - VT, 2019

Branden is a Transportation Designer, with experience in roadway 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 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.

6 years of professional experience

Cardno ATC Associates, Avon, MA

Prior to VHB, Branden was a Senior Technician at Cardno ATC from May 2011 to December 2014. His tasks were both field and laboratory based for construction materials testing. In field experiences include plant and construction site inspections on concrete, soil and asphalt, sampling of new and existing materials to return for testing in the laboratory, leading a small testing team on large contracts, writing daily field reports and reporting results and/or concerns to clients on site. When in the laboratory Branden performed tests on numerous construction materials and assisted in asphalt and concrete mix designs.

VTrans VT Route 17 Resurfacing, New Haven to Bristol, VT

Brandon is a transportation designer for this project to provide engineering services to assist VTrans in the development of resurfacing, rehabilitation, and preventative maintenance for an approximately 4.3 mile section of VT Route 17 between New Haven and Bristol, Vermont. The project is part of VHB's on-call contract with VTrans to provide Highway Resurfacing engineering support. Construction is scheduled to begin in 2020.

Burlington Bike Path Rehabilitation, Phases 2 and 3, Burlington, VT

Braden was the lead designer 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 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. Design services included path widening, replacement of the pavement and subbase, intersection improvements, and the addition of stormwater treatment facilities.

Lamoille Valley Rail Trail Phase 1C, Swanton to Sheldon, VT

Branden was a design consultant for this 11.6-mile snowmobile/multi-use trail reconstruction from Swanton to Sheldon. This project on an abandoned rail road corridor involved trail widening, drainage reconstructions, major timber cutting/trimming, signing improvements, bridge improvements, private access restriction and full depth reconstruction of the entire trail. Task include design of the project from preliminary plans through full contract plans.

Drew Gingras, PE

Project Engineer/Construction Inspector

Drew is a Project Engineer in VHB's South Burlington, VT office. As a Professional Engineer, he has experience in transportation projects that include bike/pedestrian planning and design, shared-use path design, planning and scoping studies, traffic operations analysis, traffic calming design, and PS&E streetscape design. His experience has involved work on projects predominantly focused on non-motorized transportation infrastructure.

Education

BS, Civil Engineering, The University of Vermont, 2011

Registrations/Certifications

Professional Engineer DC, 2017

Affiliations/Memberships

National Committee on Uniform Traffic Control Devices (NCUTCD), Bicycle Technical Committee Member

9 years with VHB and 9 years of professional experience

Burlington Bike Path Rehabilitation Phases 1a and 1b, Burlington, VT
As the Project/Resident Engineer, Drew provided conceptual design for the rehabilitation of the eight-mile-long Burlington Greenway, and final design for Phases 1a and 1b (totaling 1.5 miles in length), as well as the construction inspection services for project construction in a high-profile downtown area. The project involved incorporating urban and rural placemaking and planning, civil and structural engineering, geotechnical expertise, and environmental remediation, as well as innovative and intentional landscape architectural design. The goal of the project was to integrate conservation, sustainability, connectivity and accessibility along its entire eight miles; through neighborhoods, parks, urban wilds, and.

Village of Essex Junction, Multiuse Path, Essex Junction, VT
VHB was the engineer for the design and permitting of an approximately 1,200-foot-long "rail with trail" multi-use path through the Village of Essex Junction. Drew was the Project Engineer for this project with tasks that have included multi-use path design, intersection and signing/striping improvements, permitting, and right-of-way acquisition.

Three Rivers Path Extension & Trailhead Center, St. Johnsbury, VT
Drew served as the Project Engineer for this key trail project in the Town of St. Johnsbury. The Three Rivers Path will provide a crucial connection between the Lamoille Valley Rail Trail and the town center of St. Johnsbury through the construction of a 10-foot-wide shared use trail, and implementation of on-street "advisory bike lanes" along Bay Street. In the role of Project Engineer, Drew assisted with preliminary and final design phases for the drainage, signing and striping plans for on-street bike lanes, pathway drainage design, and contract document preparation.

Burlington Bikeway Engineering Services, Burlington, VT
Drew was the Project Engineer for a bicycle facility retrofit project in downtown Burlington, VT. The project expanded the network of permanent on-street bike facilities within the City and provided crucial connections between existing bike facilities and the Burlington Greenway. The proposed bicycle retrofit projects include innovative design elements including one-way and two-way separated bicycle lanes, cross-bikes, mixing zones, bicycle detection, and bicycle signalization.

Lamoille Valley Rail Trail, Lamoille County, VT
VHB provided the Vermont Association of Snow Travelers (VAST) environmental and engineering services on this Local Transportation Facilities project for a 93-mile trail through 17 communities and 3 counties over 88 bridges, and 500 culverts. Drew assisted with conceptual trail design, intersection design, and plan development.

Brad Ketterling

Senior Environmental Scientist

Education

MS, Physical Geography, University of Western Ontario, 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. Brad has managed projects for a variety of private and public sector clients, including the National Park Service, the Department of Defense, the Vermont Agency of Transportation, the Vermont Telecommunications Authority, the Maryland Aviation Authority, Green Mountain Railroad Company, the City of Burlington, Vermont, and James City and Arlington Counties in Virginia.

17 years at VHB and 24 years of professional experience

Contract Manager, General Environmental Services and Natural Resource Services 2019 Retainer Contracts, Vermont Agency of Transportation

Brad is the Project Manager for the General Environmental Services & Natural Resource Services 2019 retainer contracts. Responsibilities include responding to work order requests, assigning tasks to VHB's environmental staff members, reviewing work products for quality control/quality assurance, providing technical and strategic support, and ensuring VTrans goals and expectations are met. Assignments under the two contracts have ranged from comprehensive natural resource inventories for roadway improvement projects to specialized bat acoustic surveys for bridge repair or replacement projects. Brad also oversees the preparation of a variety of state and federal regulatory permit applications.

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 to ensure resiliency of the future bike path alignment along the lakeshore.

St. Albans Federal Street Multimodal Connector Project, St. Albans, VT

Brad was Task Manager for National Environmental Policy Act (NEPA) compliance for the proposed Federal Street Multimodal Connector Project. He was the lead author of the Environmental Assessment (EA) and was responsible for outreach to and direct coordination with state and federal regulatory agencies, including the Federal Highway Administration's (FHWA) Environmental Program Manager and the Vermont Agency of Transportation's (VTrans) Historic Preservation and Archaeology Officers. Brad

Kaitlin O'Shea

Historic/Cultural Resources

Education

MS, Historic Preservation, University of Vermont, 2011

BA, Historic Preservation, University of Mary Washington, 2006

Affiliations/Memberships

Advisor, National Trust for Historic Preservation

President, UVM Historic Preservation Alumni Association

A historic preservationist by education, avocation, and profession with a strong background in and understanding of preservation principles and practices. Kaitlin provides expertise in regulatory process and compliance, particularly Section 106 review and Section 4(f) evaluations, as well as historic documentation and historic resource identification. From national and statewide conference presentations to public meetings, she is skilled in stakeholder interaction and communication. Kaitlin meets the Secretary of the Interior's Professional Qualification Standards for an Architectural Historian and a Historian (36 CFR 61).

5 years with VHB and 13 years of professional experience

Middlebury Bridge and Rail Project, Middlebury, VT

Kaitlin assisted with the design for the proposed replacement of two 93-year-old bridges over the Vermont Railway track in Downtown Middlebury under an aggressive schedule using Vermont's first Construction Manager/General Contractor (CMGC) project delivery system. As part of Section 106 mitigation measures, Kaitlin assisted in drafting the *Guidelines for Preparing a Historic Structures Monitoring Plan*. Kaitlin worked on the Environmental Assessment, participated in public meetings, and revised the Section 106 memo and the Section 4(f) documents.

VTrans Historic Preservation Services On-Call Authorization, Vermont

As part of the General Environmental Services Contract #PS0448 between VTrans and VHB, an on-call authorization was established to provide various Historic Preservation Services, enabling VHB to complete work for the VTrans Historic Preservation Officer as needed. Under this authorization, Kaitlin has completed reviews and documentation for Section 106 reviews and Section 4(f) evaluations as well as mitigation projects. Kaitlin drew upon her past experience as a VTrans Historic Preservation Specialist to craft efficient yet effective documents in accordance with VTrans' expectations.

Winooski Main Street Revitalization Project Historic Resources Survey

On behalf of the City of Winooski, Kaitlin completed a historic resources report to satisfy the review requirements for Section 106 of the National Historic Preservation Act. The scope of work involved survey of 84 properties within the project corridor. The survey results were detailed in tabular format and included the address, a brief description of each property, approximate date of construction, evaluation of integrity and recommended determination of eligibility. Each property was photographed and keyed to the table. The report was submitted to the VDHP.

Various Projects, University of Vermont, Burlington, VT

Under contract with the University of Vermont, Kaitlin has completed a Historic Resource Documentation Package for 439 College Street, and has assisted UVM Campus Planning with preservation regulatory guidance and requested documentation on the Ira Allen Chapel and the Pierce-Spaulding House projects. VHB is currently under contract to complete the Determination of Effect letter for Act 250 for the UVM Music Recital Hall building.

Ryan Cloutier, LS

Right of Way; Survey

Education

BS, Mathematics, Saint Michael's College, 1998

Registrations/Certifications

Licensed Surveyor VT, 2007

Presentations

'Making Right-of-Way Accessible' for FHWA's GIS in Transportation Webcast

Presenter at GIS-T and ESRI UC on Making Right of way Accessible

Awards

2017 State of Vermont Public Service Recognition - Team Honoree, Business Process Management/Right of way Team

Ryan is a Survey Manager in the VHB's growing South Burlington, Vermont office, with close to 20 years of professional experience. He provides overall program management for the Vermont office's survey team and expands the suite of survey services offered to state, municipal, and private sector clients. 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.

2 years with VHB and 21 years of professional experience

Vermont Agency of Transportation (VTrans), Survey Services On-Call, Statewide
Ryan is the Project Manager for the VTrans $1.5M Survey Services On-Call contract. Ryan's responsibilities include the full project management lifecycle, from initiation through project closeout. Ryan works closely with VTrans to scope projects, assign the appropriate resources, mitigate risks, and deliver the projects on schedule and within budget. For the US 7–Shelburne Road Traffic signal project, Ryan passed on traditional survey collection methods in favor of a UAV. The use of a UAV not only saved time and money, but it kept the field crew out of one of Vermont's busiest roads. Other projects utilizing remote sensing technology include 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.

Middlebury Bridge and Tunnel Project, Middlebury, VT
Ryan is the Survey Manager for the replacement of two nearly 100-year-old rail bridges and the construction of a 360-foot tunnel in the center of Middlebury, Vermont. Ryan provided support for the development of right of way plans and title work for the acquisition of real property.

VTrans / VT 116 / Hinesburg Highway/Roadway Design, Hinesburg VT
Ryan is the Survey Manager for the CVU road, VT 116, and Shelburne Falls road intersection improvement project covering approximately 1 mile of roadway. Ryan provides on-going support for the development of right of way plans and titles work for the acquisition of real property.

St. Johnsbury Railroad Street Bicycle and Pedestrian Improvements, St. Johnsbury, VT
Ryan is the Survey Manager for the St. Johnsbury Railroad Street Bike/Ped project to construct a road diet, bicycle lanes, pedestrian crossing with RRFB's, landscaping and associated work on South Main Street and Railroad Street. Ryan's services included the research and retracement of 3000 linear feet of railroad and limited access right of way.

Williston Stormwater Retrofits, Williston, VT
Ryan is the survey manager for the development of storm water retrofits along two and one-half miles of the I89 corridor in Williston, VT. To meet the projects aggressive schedule and budget VHB deployed UAV to collect high resolution imagery and a

Scott Edward Burbank, PE

Structures

Education

BS, Civil Engineering, Worchester Polytechnic Institute, 1993

Registrations/Certifications

Professional Engineer (Structural I) VT, 2000

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. His qualifications also include services for accelerated bridge construction (ABC), quality assurance, construction cost estimating and engineering services, and inspections of both railroad and highway bridges.

10 years with VHB and 25 years of professional experience

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 six years completing two park and ride project expansions in Springfield and Bradford, and a new park and ride in Colchester. Scott is currently managing the Williston and Berlin Exit 7 Park and Ride projects for the MAB..

Brattleboro Town Highway Bridge #7, Brattleboro, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 7 over Halladay Brook in Brattleboro VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating throughout the development of the project.

Guilford Town Highway Bridge #65, Guilford, VT

Scott was the Project Manager for the complete replacement of Town Highway Bridge No. 65 over Hinesburgh Brook in Guilford, VT. This project included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for rapid bridge construction techniques. Accelerated bridge construction elements were used to minimize the roadway closure period during construction.

USDA, Green Mountain National Forest IDIQ, Vermont

Scott provided structural engineering support for bridges, culverts, embankments, and other structures when the United States Department of Agriculture (USDA) Forest Service retained VHB to provide surveying and civil and structural engineering services for a multi-year Indefinite Delivery/Indefinite Quantity (IDIQ) contract to support activities in the Green Mountain and Finger Lakes National Forests in Vermont and New York. VHB's services included civil and structural engineering for bridges, culverts, embankments, roads, and other structures.

VTrans ER BRF 0162(18) and Rochester, ER STP 0162(19), VT

Scott was the Project Manager for the complete replacement of two state bridges on VT 73 over Brandon Brook and the White River. Both bridges were destroyed during Tropical Storm Irene. These projects included project scoping, environmental resource documentation, regulatory permitting, hydraulics analysis, structural design and construction cost estimating for VTrans first multiple bridge replacement projects on a single corridor within one Town.

Robert Wildey, PE, CPESC

Hydrologic and Hydraulic Studies

Education

MS, Civil Engineering, University of New Hampshire, 2006

BS, Environmental Sciences, University of South Florida, 1997

Registrations/Certifications

Professional Engineer, VT, 2020

CPESC, 2009

Affiliations/Memberships

American Society of Civil Engineers, 2019

American Water Resources Association, 2006

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.

14 years with VHB and 17 years of professional experience

VTrans / Colchester NH 028-1(31) Exit 17, Colchester , VT

As part of VHB's interdisciplinary team, Robert oversaw the development of the Individual Construction Stormwater (INDC) permit application for this major interchange improvement project. The project includes roadway realignment, new bridge construction, new off-ramps, and slip lanes along Interstate 89, along with state and federal wetland permitting and Act 250 coordination.

VTrans / Georgia Culverts, Georgia, VT

Robert conducted a field investigation of existing conditions and performed hydrologic and hydraulic analysis for the proposed replacement of a perennial stream culvert crossing Interstate 89 in Georgia, Vermont.

VTrans / Killington-Stockbridge, Killington, VT

As part of a 10.5-mile roadway improvement project, Robert was part of a team that developed a rapid hydrologic and hydraulic assessment tool to quickly evaluate over 100 culverts within the project area. This evaluation was used to identify which structures needed to be upgraded for hydraulic capacity. Once structures were identified, Robert worked with the structural design team to ensure that the new culverts met the VT DEC criteria for passing perennial streams.

Middlebury Main Street and Merchants Row Bridges, Middlebury, Vermont

As part of a major bridge replacement project for the Town of Middlebury, VHB designed a tunnel that will replace two sub-standard bridges, reconnect town parks, and ultimately allow for double-stack rail clearance. Because a portion of the project is adjacent to Otter Creek, potential floodplain and river corridor impacts were required to be evaluated. Of particular interest was the temporary road that will be constructed partially within the Otter Creek floodplain to provide access to the work area and buildings during the construction process. Robert developed the responses to the regulatory criteria and coordinated with Vermont DEC River Management Engineers and Floodplain Coordinators to ensure that the Project could be permitted and constructed.

Mark Hamelin, PLA, CLARB Certified

Director of Landscape Architecture/Land Planning

Education

MLA, Master in Landscape Architecture, Harvard University Graduate School of Design, 1981

BS, Recreation Resource Management, University of Vermont, 1978

Registrations

PLA - VT, NH, ME, NY, PA, CO

CLARB - Council of Landscape Architectural Registration Boards - Certification #33827

Affiliations/Memberships

American Society of Landscape Architects

American Planning Association

Deriving inspiration from the physical and contextual nature of the site, Mark has the ability to quickly grasp a projects vision to create simple, yet elegant solutions to highly complex land planning problems. He brings more than 35 years of professional landscape architecture, land planning, and urban design experience on a wide range of public and private sector projects across Vermont, throughout the country and internationally. Mark's work has been recognized by his peers with 20 professional design/planning awards. Notable accomplishments include Burlington's Waterfront Park, the recently completed Waterbury State Office Complex, and the Spruce Peak Master Plan at Stowe Mountain Resort.

4 years with VHB and 39 years of professional experience

Warren Village Main Street Improvement Project - Warren, Vermont
The VHB Team is proud to have been to contracted to assist the Town of Warren with the transformation of its Village Center into a pedestrian friendly space for all users. A first of its kind project in a small Vermont village, the plan features efficient use of vehicular space to create pedestrian nodes and safe circulation, reduces vehicular traffic speed and integrates state of the art storm water practices into the village streetscape. As project manager and lead designer Mark is instrumental in bringing together the divergent interests, both public and private, to achieve a successful design embraced by the community.

Downtown Core Master Plan, St. Albans, VT
As lead designer Mark 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. With previous employer.

Burlington Waterfront Park and Promenade, Burlington, Vermont
Located on the shore of Lake Champlain with views of the high peaks of the Adirondacks in the background, the former railroad yard and brown field site now serves host to Burlington's community wide events. As Lead Designer, Mark was responsible for public participation, lead design and permitting of Burlington's premiere urban waterfront park. With previous employer.

North Beach Campground Master Plan - Burlington, Vermont
Working with the City of Burlington Parks, Recreation, and Waterfront (BPRW), Mark was lead designer for the North Beach Campground Master Plan. The Campground is integrally connected to the Burlington Bike Path and North Beach, the largest beach in the BPRW system and is an iconic part of Burlington and the Lake Champlain shoreline. The master planning effort seeks to provide integrated storm water solutions, a diversity of camping opportunities: ranging from full hook up RV sites to tent sites and the separation of day use beach traffic from camping areas.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