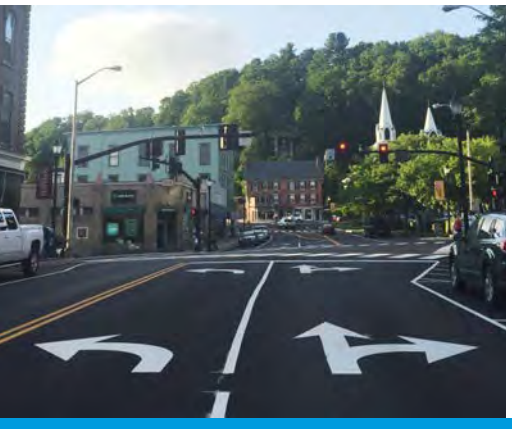
State of Vermont – Agency of Transportation (VTrans)

Two-Tier (State-Local) Qualifications-Based Selection for At-The-Ready (ATR) Consulting Engineering Services for Municipalities 2023

Due: February 9, 2023



PREPARED FOR:

VERMONT
AGENCY OF TRANSPORTATION

CHA

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Wilmington-Brattleboro NH 2971(1)

Section A. | Cover Letter

VT Route 100C Superstructure Replacements (Johnson, VT) | VTrans

February 9, 2023

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

Re: Request for Qualifications | Two-Tier (State-Local) Qualifications-Based Selection for At-The-Ready (ATR) Consultant Engineering Services for Municipalities 2023 | CHA Proposal No. X80450-Q1

Dear Ms. Lugo:

Thoughtfully designed and carefully planned roadways, bridges, bicycle and pedestrian accommodations, and underlying infrastructure including culverts and landscaping help create spaces that encourage activity and energize communities. Communities across the Green Mountain State are committed to implementing and maintaining safe, reliable infrastructure that is essential for daily life, work, and play. For many years, **Clough, Harbour & Associates LLP (CHA)** has worked side-by-side with these Vermont communities, completing projects on time and within budget to exceed client expectations.

The CHA team brings VTrans these strengths:

- Efficient teams thoroughly familiar with VTrans' policies, procedures, and protocols
- Technical expertise with the types of projects anticipated to be advanced
- A deep bench of 1,600 staff
- Offices in Burlington, VT; Albany, NY; Keene, NH; Hartford, CT; and Metro Boston
- An extensive track record of getting projects done right, as exhibited through our many successful projects completed throughout Vermont and New England

Our proposed project team of **CHA**, **Vermont Survey and Engineering, Inc.**, and **Hartgen Archeological Associates, Inc.** has proudly completed a series of successful projects on behalf of VTrans, including dozens of projects involving VTrans' primary agreements.

CHA's team will be led by **Project Manager Dale Gozalkowski, PE**, who brings a wealth of knowledge from his active involvement in the successful completion of over 300 projects involving VTrans. Dale will lead the effort to complete all projects in accordance with a municipality's and VTrans' policies, procedures, and protocols, as well as the municipality's exacting expectations. He will be assisted by **Jim Shields, IE** (lead highway engineer); **Shravya Markandeya, PE, PTOE, PTP, IMSA II** (lead traffic engineer); **Jay Patel, PE** (senior traffic engineer); and **Jeff Najdowski, PE** (lead structures engineer). These key team members are anticipated to have active technical lead roles in the respective professional engineering services we provide. **Robert Faulkner,F PE**, is our principal-in-charge, engineer-of-record, and quality manager for this contract, and he will work with our team and the municipalities so their needs are met and their goals exceeded.

CHA has the capacity to respond promptly, efficiently, and with the personnel to handle any opportunity presented. Design development and production will be tackled by our locally-based team. CHA is eager to partner with Vermont municipalities to deliver infrastructure solutions that improve the transportation foundation throughout the state.

Please contact Rob at 802-236-0009 or rfaulkner@chacompanies.com, or Dale at 518-453-4551 or dgozalkowski@chacompanies.com if you would like to discuss our proposal. Thank you for your consideration.

Sincerely,

Robert Faulkner, PE
Principal-in-Charge and Engineer-of-Record

Dale Gozalkowski, PE
Project Manager

III Winners Circle, PO Box 5269, Albany, NY 12205-0269
T 518.453.4500 • F 518.458.1735 • www.chacompanies.com

Section B. | General Firm Information

VT Route 100C Superstructure Replacements (Johnson, VT) | VTrans

Section B. | General Firm Information

Clough, Harbour & Associates LLP (CHA) is a highly diversified, full-service engineering consulting firm working to responsibly improve the world we live in. We provide a wide range of planning and design services to public, private, and institutional clients. CHA was founded in 1952, and we currently have more than 1,600 professional staff located throughout the United States and Canada available to assist with our proposed team as the need arises.

Clough, Harbour & Associates LLP

3 Winners Circle
Albany, NY 12205

Contact: Dale Gozalkowski, PE
Email: dgozalkowski@chacompanies.com
phone: 518.453.4551 | cell: 518.469.8901

Former firm names and year established:

- Clough, Harbour & Associates LLP, 1981
- Clarkeson & Clough Associates, 1967
- Clarkeson, Clough, Yokel, 1966
- John Clarkeson, Consulting Eng., 1955
- Clarkeson Engineering Co., Inc., 1952

INTRODUCTION

CHA strives to make our team an extension of a municipality's and VTrans' team and is committed to thoroughly understanding your policies, procedures, and protocols. This includes the *VTrans Municipal Assistance Bureau Local Projects Guidebook (2014 – Revised August 2021*) and the *Municipal Assistance Bureau Local Projects Guidebook Appendices (2014 – Revised April 2018)*.

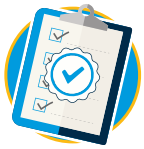
Since the mid-1980s, CHA has successfully completed a wide-range of VTrans' projects, including some of the most challenging and complicated ones taken on by municipalities and VTrans. One such example of a complex municipal project that the CHA team has undertaken involving tremendous collaboration with a municipality, FHWA, and VTrans is the City of Burlington's Champlain Parkway. The Champlain Parkway project encompasses virtually all aspects of engineering, project management, and public engagement that can occur on VTrans' Municipal Assistance (MA) projects. Construction on the Champlain Parkway began in Spring 2022. Aspects of this project will be referenced throughout this submission.

We will:

Listen
To clearly understand expectations

Respond
To inquiries quickly and efficiently

Document
Meetings and communications accurately



Report
Project progress with clarity

CHA is cognizant of the importance of delivering a municipality's and VTrans' projects on schedule and within budget. This focused effort maximizes the amount of work that can be completed in each annual State of Vermont Transportation budget. CHA works with the personnel from municipalities and VTrans to establish realistic project schedules for all required project tasks, beginning in the technical and cost proposal process. Once those are established, CHA will advance each project in a logical and timely manner.

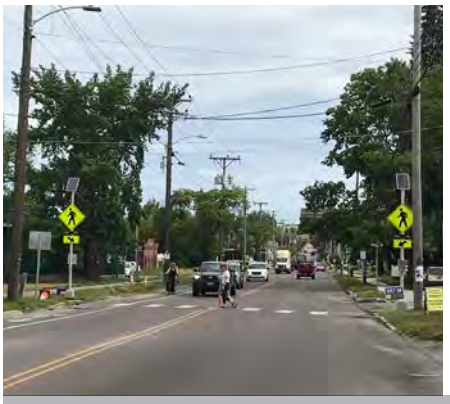
It is through efforts such as these that CHA has developed a reputation of excellent performance and efficiency, delivering on a large range of engineering design and transportation planning projects.

CHA's transportation specialists include engineers, planners, technicians, and CADD designers with extensive experience with traffic operations analysis and modeling, corridor studies, scoping studies, safety studies, signal design, traffic control plans, and traffic impact evaluations.

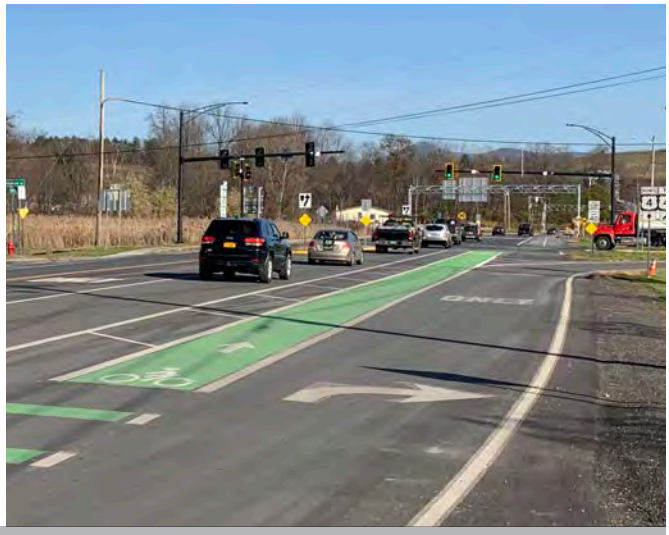
Firm Services

- Traffic Data Collection and Analysis
- Traffic Forecasting
- Traffic Signal and AWSC Warrant Analysis
- Traffic Operations Analysis (Synchro, SIDRA, and HCS)
- Capacity Analysis
- Traffic Modeling and Simulation (Vissim, Aimsun, and SimTraffic)
- Roundabout Analysis and Modeling (SIDRA, Vissim, Aimsun, and HCS)
- Site Access and Circulation Studies and Design
- Traffic Calming Studies and Design
- Traffic Impact Studies and Development Reviews
- Temporary Traffic Control Plans and Detour Plans
- 3D Traffic Models for Public Meetings
- Parking Studies
- Roadway and Drainage Design
- Crash History Analysis
- Traffic Safety Studies and Countermeasure Evaluation
- Pedestrian/Bicycle Facilities Analysis and Design
- Access Management
- Intersection Geometric Design
- Traffic Signal System Design (Permanent and Temporary)
- Traffic Signal Interconnect and Fiber
- Traffic Signal Optimization and Timing Plan Development
- Traffic Signal Preemption (Rail, Emergency Vehicle Preemption, Transit)
- Highway-Rail Grade Crossing Scoping Traffic Signal Operations
- Pavement Marking and Signing Design
- Safe Routes to School
- GIS Data and Mapping
- Act 250, Environmental Court and State Superior Court Expert Witness Testimony
- Complete Streets and Road Diet Assessments
- ITS Design
- Adaptive Traffic Signals
- Lighting Design
- Data Analytics and Smart City Applications

Building TRUST through responsiveness, reliability, expert knowledge and skill



Pine Street in Burlington, VT – Rectangular Rapid Flashing Beacons (RRFB)



West Rutland Class 1 Lane Reassignment and Bicycle Provisions

CHA's experience includes evaluating the operations and safety of the existing transportation system and recommending appropriate, cost-effective improvements to address the transportation system needs. Whether the project involves an isolated intersection or an entire corridor, we focus on:

- Understanding the users of the facility and the surrounding network
- Identifying the existing facilities and the needs for vehicle, pedestrian, bicycle, and transit users, and their compliance with standards and guidance
- Evaluating safety and countermeasure alternatives
- Assessing future conditions
- Recommending cost-effective, feasible improvements that enhance safety and accommodate the needs of all users

Business and Management Structure

The partners of Clough, Harbour & Associates LLP include the following:

- *James B. Fuller*
- *Joseph J. Thomson*
- *Brian McKenna*
- *Robert Faulkner*
- *Michael DeVoy*
- *William Barley*
- *Steven Lawrence*
- *Eric Poreda*
- *Todd Schultheis*
- *Bryan L. Busch*
- *Craig Bigger*
- *Michael Culmo*
- *Anthony Stellato*

CHA has consistently worked with VTrans on hundreds of projects since the 1980s and we recognize that we are an extension of the VTrans team. To this end, we have invested significant time and resources to collaborate with VTrans personnel at all levels throughout the entire organization to facilitate efficient execution on project tasks on multi-disciplined projects.

Management Personnel

Any project advanced under this At-The-Ready primary agreement will be led by our Project Manager, **Dale Gozalkowski, PE**. Dale will work closely with his senior management team, which consists of our Partner-in-Charge and Engineer-of-Record, **Rob Faulkner, PE**. For projects involving bridge structures, our Engineer-of-Record is **Bryan Busch, PE**. The essential critical communication lines run from VTrans through Dale. Dale will engage other leaders of each technical specialty within CHA's design team or our subconsultant's leaders (**Vermont Survey and Engineering, Inc.** and **Hartgen Archeological Associates, Inc.**) as needed based on the unique details involved with a specific project and task.

As our Partner-in-Charge and Engineer-of-Record, **Rob Faulkner, PE**, will be responsible for resource prioritization and corporate-level considerations to provide engineering services in a timely and cost-effective manner. Additionally, **Rob Faulkner, PE**, will be our Quality Control Manager responsible for leading quality assurance considerations. Dale, Rob, and Bryan are registered professional engineers in the State of Vermont.

The names and contact information of these specialty leaders from CHA or our subconsultants can be found on our organization chart.

Dale meets weekly with senior management to actively engage our team in discussions including innovation, quality assurance, partnering, and resource planning. Dale is also part of separate regular weekly meetings with project engineers where pertinent information and decisions regarding projects will be discussed in both meetings and regular project-specific meetings that Dale will lead.

Capacity

The CHA team has the locally-based and readily available capacity to respond promptly, efficiently, and with staff consistency to handle any assignment or opportunity.

Traffic Engineering

Evaluating operations and safety is an integral part of all transportation projects, beginning with agency/municipal coordination, using available resources to obtain existing data, performing a site investigation, and obtaining new data when necessary. From data collection and volume development to existing conditions analysis and improvement recommendations, CHA's transportation staff routinely evaluates operations using the most current traffic analysis software and technologies.

CHA is involved with traffic control and traffic management plans for construction staging and special events. Our experience includes urban and rural areas with various levels of traffic control. We have been involved with the development of traffic volumes for construction detours and diversions to model traffic operations during construction (e.g., Synchro/SimTraffic, Vissim). Based on results of the construction staging modeling, recommendations are made for temporary lane geometry changes, detour routes, signal timing modifications, and temporary traffic signal control.

Responsibly Improving the World We Live In

One of our featured projects, the **City of Burlington's Champlain Parkway**, is a complex urban project that required careful consideration of traffic control and traffic management plans for construction staging.

For this project, CHA prepared traffic management plans for VTrans per FHWA guidelines and included defined work zone limits, project background information, an overview of the roadways directly affected by the proposed work, site-specific traffic restrictions anticipated on the major roadways, impacts from other projects in the region, and the anticipated project schedule.

Traffic Data Collection and Analysis Tools

CHA owns and maintains state-of-the-art equipment for collecting traffic data, including the Miovision© video camera and automated data extraction system, hand-held traffic data recorders, and GPS positioning devices. CHA also has traditional equipment, including automatic traffic recorders (tubes), radar speed guns, and ball-bank speed indicators. This equipment allows us to effectively collect all types of information such as vehicle classification, the number of pedestrians, gaps, and vehicle speeds.

The Miovision© video system is the latest in traffic data collection equipment. The video camera can be installed on any utility or light pole and positioned to record an intersection or roadway for multiple pre-programmed periods. This technology allows us to set the camera to record without needing a person present for the count periods. The video is then post-processed using Miovision's proprietary software to obtain the vehicle, pedestrian, and bicycle counts. This technology is reliable, highly accurate, and non-intrusive. Because the setup and take down occurs at the roadside, there are no issues in traffic disruption or safety, as crews and equipment remain outside the travel-way during equipment deployment. Further, having a video record of the count location enables additional data to be extracted later.

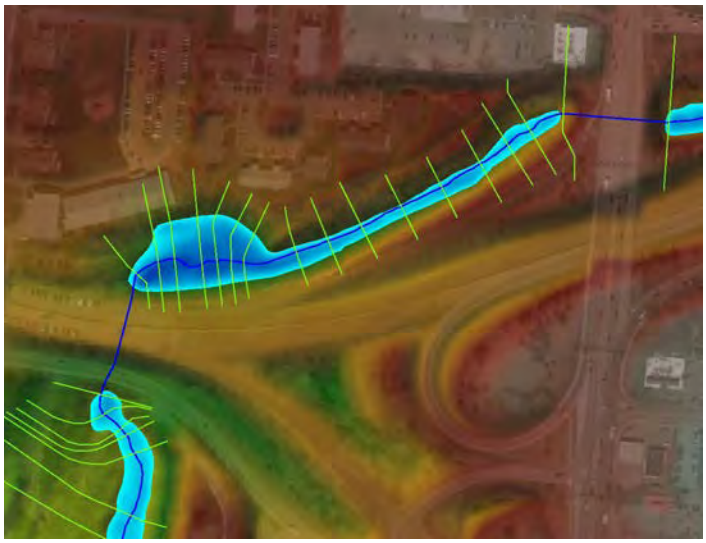
Our staff evaluates all types of intersections, ranging from simple unsignalized intersections to complex interchanges and roundabouts. In addition, CHA has developed a variety of customized spreadsheet applications to facilitate uniform data collection/processing, analysis, and evaluations.

Traffic Graphics Tools

A key element in building consensus for recommended solutions is the ability to translate concepts into forms that can be easily communicated to stakeholders, including regulatory agencies. CHA uses a variety of tools to present ideas and foster interaction among stakeholders as applicable to the unique project. For example, the interactive tool Streetmix quickly tests and illustrates alternative configurations and multimodal uses of available space within a roadway corridor. Google Sketch-up, Autodesk Max, and other digital sketch tools are used to create 3D views, artist renderings, and photo-based visualizations. Transportation modeling programs such as SimTraffic, Aimsun, and Vissim are used not only for analytical computations, but also to produce visualizations and animations of traffic flow and operations.

Hydrologic and Hydraulic (H&H) Engineering

CHA is well-versed in H&H engineering and has been performing these services for VTrans and other transportation entities throughout New England for decades. These efforts include determining hydraulic openings for culverts and bridges, AOP considerations, detailed scour analysis, stream alteration permitting, and the evaluation of floodplain impacts. CHA is familiar with the H&H methodologies outlined in the *VTrans Hydraulics Manual* and routinely uses the full-range of recommended modeling software such as HEC-HMS, HY-8, and HEC-RAS (1D and 2D models).



Burlington Champlain Parkway HEC-RAS Analysis

On the **Champlain Parkway**, CHA encountered a challenge on Potash Brook (an impaired waterway) that required the development of an H&H model. The model would assess potential floodplain impacts from the construction of a shared-use path located along the northern bank of the brook that will provide pedestrian and bicycle access between U.S. Route 7 (Shelburne Street) and Pine Street.

A review of the effective Flood Insurance Study (FIS) for Chittenden County (August 2014) indicated that Potash Brook was studied by approximate methods, so base flood elevations had not been developed along the stream corridor. Instead, the Flood Insurance Rate Map (FIRM) displays the approximate floodplain limits for Potash Brook (Zone A), which appear to be inconsistent within the study reach, based on a review of the latest available topographic mapping. Along with this fact, CHA considered the potential impact on adjacent landowners from fill placement shared-use path. As a result, CHA developed a detailed HEC-RAS model for the reach of Potash Brook from Queen City Road to U.S. Route 7 (Shelburne Street).

Environmental Permitting

All projects shall meet the requirements of the National Environmental Policy Act of 1969 (NEPA). There are three classes of actions that prescribe the level of documentation required in the NEPA process, including the Categorical Exclusion (CE), Environmental Assessment (EA), and Environmental Impact Statement (EIS). Many municipal projects are processed using CEs, and the Programmatic Agreement Categorical Exclusion (PA-CE) evaluation, documentation, and submission process is the common approach. When applicable, it will be progressed on a parallel track to the plan development process.

To maximize efficiency in field data review and collection, the design team will initiate the PA-CE research during the Preliminary Plans development stage. This research and coordination typically consist of a limited regulatory record review of the area adjacent to the corridor. CHA also coordinates with the United States Fish and Wildlife Service and the Vermont Agency of Natural Resources to research the potential for threatened or endangered species impacts because of the construction of the proposed project or the presence of wetlands or wetland buffers. In addition, CHA coordinates with the municipal and/or regional officials so that the proposed project is consistent with their intentions.

Simultaneously, Hartgen Archeological Associates, Inc. identifies cultural resource issues related to the project area and develops an Archeological Resource Assessment (ARA) for the project area. The sensitivity rating will be formulated from project area research, the field review, and the Environmental Predictive Model for Locating Archeological Sites (supplemented by the online GIS VermontArcheoMap).

Project area research consists of examining archeological site location maps and site files available online at the Vermont Department of Historical Preservation (VT DHP), historical maps and related documents online, and the digital archives

for State and National Register historic structures and districts with boundary maps. The identification of archeologically sensitive areas and historic properties in the project produced by the ARA will be linked to project Preliminary Plans to indicate resources present in the Area of Potential Effects (APE).

The investigation findings concerning archeological sites, historic structures, and districts will be summarized in a report, which will also contain recommendations for their treatment. This report is included as an attachment to the PA-CE. The PA-CE documentation will be directed through the municipality and VTrans Environmental Services Manager when required. These documents will be created in draft form and provided to the respective municipality and VTrans Environmental Regional Specialist for their review and concurrence. These documents will be verified, signed, and forwarded to the municipality and FHWA Environmental Program Manager for final concurrence and approval. Once approved, any permit requirements and/or environmental mitigation will be incorporated into the Final Plans.

Utility Relocation Assistance

CHA has been performing utility engineering services for transportation and utility entities throughout New England for decades. These efforts include using state and federal regulations and utility company design standards for installing or replacing new and existing utilities, including relocation of existing lines for transportation improvement projects. CHA is familiar with and has worked with most of the utility companies in New England and has a working history with the required coordination efforts and design requirements. If the municipality requests utility relocation services, CHA would acquire the “as-built” and “existing conditions” plans and coordinate the relocation with the planned improvements and utility standards to verify that all stakeholders meet the design requirements. CHA will complete the required communications with the impacted utility and develop the design based on their standards.

Railroad Engineering Services

CHA has designed over 50 highway-rail grade crossings for VTrans in the last 10 years. VTrans has been using its draft of the *VTrans Public Grade Crossing Guidance* more liberally and has routinely been performing grade crossing scoping meetings (formerly known as railroad diagnostic meetings) at highway-rail grade crossings located within 1,000 feet of a project’s limits, as well as incorporating more improvements to these crossings than in years past. Should the need arise to incorporate highway-rail grade crossing work, CHA has an extremely capable team ready that is well-versed in addressing these situations, from grade crossing scoping meetings through field reconnaissance, design, and engineering support. Members of CHA’s team have professional working relationships with the various Operating Railroads throughout the State of Vermont.

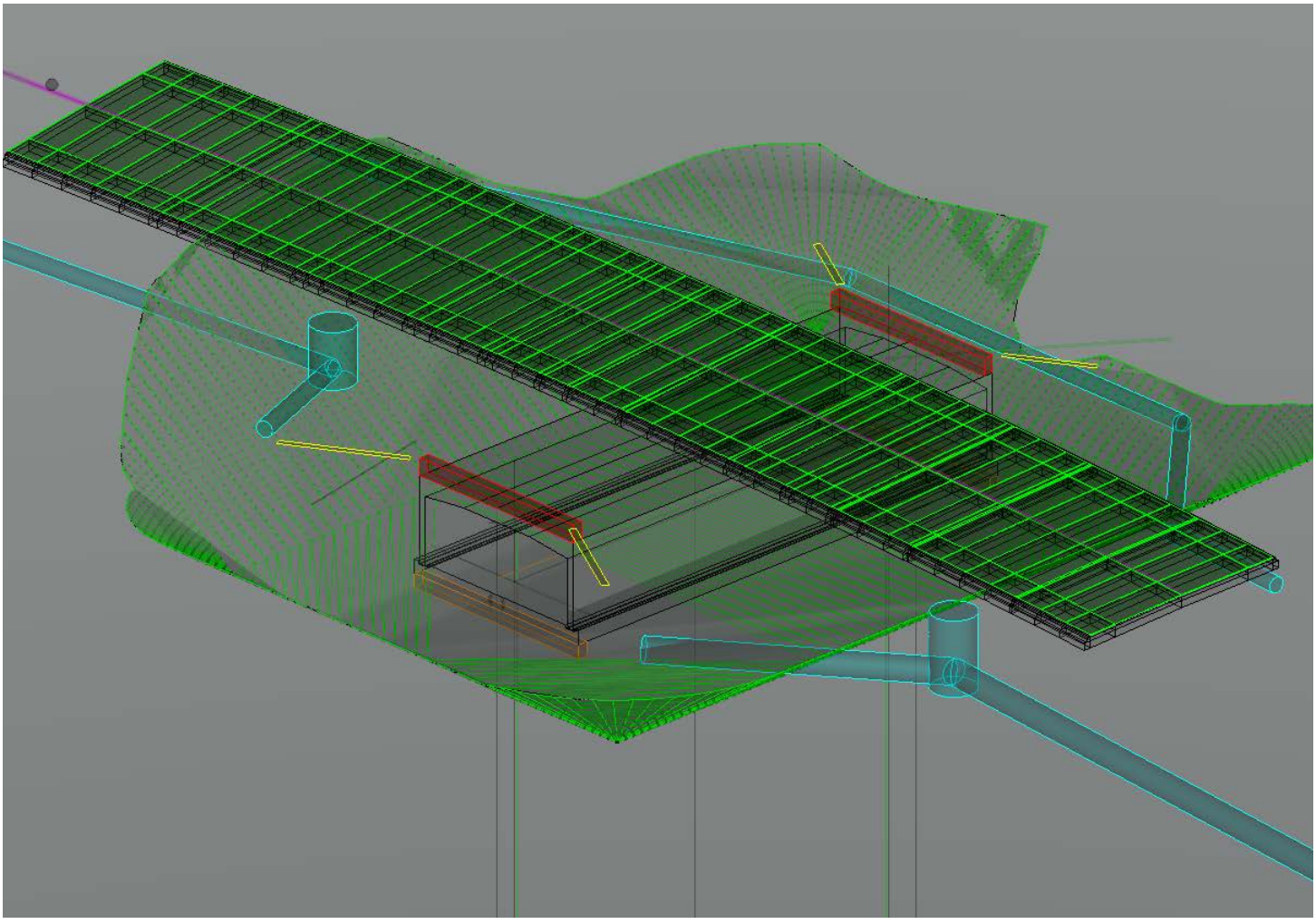
BEFORE: Rutland South Main Street Grade Crossing

AFTER: Rutland South Main Street Grade Crossing

CADD Efficiencies and Electronic Delivery

CHA has over 30 years of experience in plan production using the most recent MicroStation and InRoads CADD software versions. CHA has the ability and flexibility to use either InRoads or OpenRoads based on VTrans' preferences or requirements for any given project. CHA's team will develop digital files following the latest specifications and requirements outlined in the VTrans *CADD Standards and Procedure Manual (2014)* and the current guidance regarding VTrans' CADD conventions. Our CADD operators are enrolled in the VTrans CADD update distribution list to be aware of current changes or updates that may affect active projects. Our staff regularly check the VTrans CADD Help website for new or updated resources.

Our proposed team includes dedicated CADD technicians with extensive experience working with VTrans' standards. CHA has a thorough knowledge of the standard drawings and design details available on the VTrans CADD Help website. Our team uses this resource frequently, which allows us to develop project plans to VTrans' preferences with increased efficiency and cost savings. CHA can plot our plan submissions using customized MicroStation drivers, which creates plan sheets in Adobe PDF file format with line weights and types identical to the drafting standards in Section 7 of the *VTrans CADD Standards and Procedure Manual (2014)*. CHA routinely exchanges completed project plans and pertinent project information through the secure VTrans FTP site. CHA also uses the VTrans SharePoint site to obtain the latest information regarding municipal and VTrans projects.



A Recent 3D InRoads Model Example

Project, Regulatory and Public Meetings

CHA's team of engineers and planners prepare for and execute first-rate meetings tailored specifically to reach the target audience. Depending on the project's attributes and complexities, various meetings are needed to take a project from concept to construction.

These meetings include focused project meetings with engaged municipal personnel, meetings with regulatory agencies to secure permit clearances, public outreach meetings, project update meetings, and formal project presentations like public hearings involving intricate planning and execution.

Keys to accomplishing successful meetings are technical expertise, a thorough understanding of the intimate details of each project, complete comprehension of the purpose of the meeting (including the desired outcomes before the meeting is held), the attendees' levels of understanding of the project, and the meeting attendees' perspectives and concerns.

CHA has worked with VTrans on dozens of projects that required public meetings. These projects involved direct and regular coordination between the CHA design team, VTrans, and concerned constituents. We have found that each project has its own set of unique circumstances and considerations. Dale Gozalkowski and many of the technical design leaders on CHA's team actively lead technical discussions in all types of meetings. VTrans and municipal personnel quickly recognize that a project team led by Dale is technically sound and meetings will be conducted efficiently and professionally. CHA's team includes many talented presenters who are regularly asked to present projects, including the technical nuances to national, regional, and state-level audiences.

In addition to the technical expertise of the CHA team, we are extremely capable of involving technology and computer graphics, including simulations and renderings, to help relate key project details to the respective audience. As an example, the renderings below were created from the birds-eye aerial simulation prepared for public outreach meetings for the **Champlain Parkway** project.

Burlington Champlain Parkway – Visual Rendering Sample #1

Burlington Champlain Parkway – Visual Rendering Sample #2

Field Surveying, Base Mapping Creation, and Right-of-Way Services

The field surveying, base mapping, creation, and the right-of-way services tasks will be performed by **Vermont Survey and Engineering, Inc. (VSE)**. VSE's surveying services include geodetic control and topographic, hydrographic, boundary, ALTA/ACSM, and construction layout surveys. They have the necessary trained and experienced personnel and professional quality equipment to provide GPS data acquisition on geodetic control projects. On other projects, robotic total stations and data collectors are used, allowing field data to be quickly downloaded to office computers and further processed using the appropriate software. Information can also be uploaded to the collector to facilitate layout work. VSE can place up to six survey crews in the field, with crew members averaging more than 10 years of experience. Field crews typically locate all boundary-related features within the limits of a project and approximately 50 - 100 feet outside the project.

VSE also has extensive experience preparing right-of-way plans and associated title abstracting for VTrans. As a firm specializing in surveying, the VSE staff—as a matter of their daily routine—abstract titles, recover field evidence, interpret evidence, and produce the final product. VSE's strict protocol for research ensures every written document is recovered in a chain of title. VSE establishes Vermont State Plane coordinates for every project.

Additionally, all digital files for base mapping and right-of-way plans will be developed following the latest specifications and requirements outlined in the *VTrans CADD Standards and Procedure Manual (2014)*.

Project Management Approach

We have instituted a functional, seamless management plan for this project to identify the chain of command and technical responsibilities to carry out all project tasks. This plan is essential to keeping the municipality and VTrans apprised of the project status and providing quality service.

Our approach to effective project management and schedule/cost control is based on defining roles, relationships, and client requirements so that our personnel clearly understand each team member's specific responsibilities. These guidelines provide a distinct structure for directing, controlling, and reporting activities and determining and providing additional resources to meet commitments and changing project needs.

One of the most important aspects of effective project management is the continuous flow of information between our project team, the municipality, and VTrans. This dialogue is especially critical on a project involving many technical disciplines and interested parties, with a high degree of visibility.

Engineering Support During Construction

The CHA project team recognizes the importance of remaining involved and focused during this stage of the project. Members of our team have developed a solid reputation with municipalities' and VTrans' project managers, regional construction engineers, and resident engineers for being extremely responsive in reviewing contractor submittals, processing requests for information, furnishing general construction advice, and representing a municipality and VTrans in construction conflict resolution issues. All contractor submissions will be reviewed and stamped by a professional engineer licensed in the State of Vermont in accordance with V*Trans' Standard Specifications for Construction*. Additionally, the CHA project team will attend the respective pre-construction conference to provide clarity to any design nuances or environmental commitments as needed.

Wilmington-Brattleboro NH 2971(1) Paving Operation

Section C. | Organizational Chart

Section C. | Organizational Chart

Clough, Harbour & Associates LLP (CHA)

Vermont Survey & Engineering, Inc. (VSE)
Survey and Mapping, Right-of-Way Acquisition

Hartgen Archeological Associates, Inc. (HA)
Cultural Resources

Project Manager
Dale Gozalkowski, PE

Partner-in-Charge, Engineer-of-Record, Quality Manager
Robert Faulkner, PE

Subconsultants

Brant Venables, PhD, RPA
(HA) | Professional Archeologist / Project Manager

Walter Wheeler
(HA) | Senior Architectural Historian

Brian Knight, MS
(HA) | Architectural Historian

Andrew McQueeney
(VSE) | Right-of-Way Specialist / Project Manager

Stephen Fraser, LS
(VSE) | Right-of-Way Specialist / Project Manager

Matthew Yefchak
(VSE) | Senior Crew Chief

Matthew Backman
(VSE) | CADD Operator / ROW Agent / Survey Party Chief

Roadways | Bicycles and Pedestrians | Facilities/Intersections | Safety | Transportation Alternatives | Traffic | Railroad | Hydraulic | Landscape Design | Utilities

Jim Shields, IE
Lead Highway Engineer

Brian Healey, PE
Project Engineer

Jack Scudder, PE
Project Engineer

Shravya Markandeya, PE, PTOE, PTP, IMSA II
Lead Traffic Engineer

Jay Patel, PE
Senior Traffic Engineer

Nick Schwartz, RLA, LEEDAP
Lead Landscape Architect (Bicycle/Pedestrian Design & Landscape Architect)

Mickey Dames
Principal Engineering Technician Designer

Josh Heald
Senior Engineering Technician Designer

9/1/23 Update: New resumes added.

Patrick Weitlauf, PE, *Project Engineer*
Matthew Kowalski, IE, *Assistant Project Engineer*
Sandeep Das, IE, *Assistant Project Engineer*
Juvena Ng, IE, *Assistant Engineer*
Emily Timber, RLA, *Landscape Architect | Project Manager*
Diane Tirinato, *Landscape Designer*
Samuel Huntress, *Landscape Designer*

Matthew Mokey, PE
Lead Project Engineer (Railroad Design)

Kris Detlefsen, PE, CPESC
Lead Project Engineer (Hydraulics Design)

Charlie Symmes, PE
Lead Project Engineer (Geotechnical Design)

Jason Gorman, PE
Lead Project Engineer (Utility Design)

Chris Einstein, PWS
Lead Environmental & Natural Resources Scientist

Samantha Miller
Environmental & Natural Resources Scientist

John Greaves, IV, CWS
Environmental & Natural Resources Scientist

Bridges and Culverts

Bryan Busch, PE
Engineer-of-Record (Structures)

Jeff Najdowski, PE
Lead Structures Engineer

Nick Bennett, PE
Assistant Lead Structures Engineer

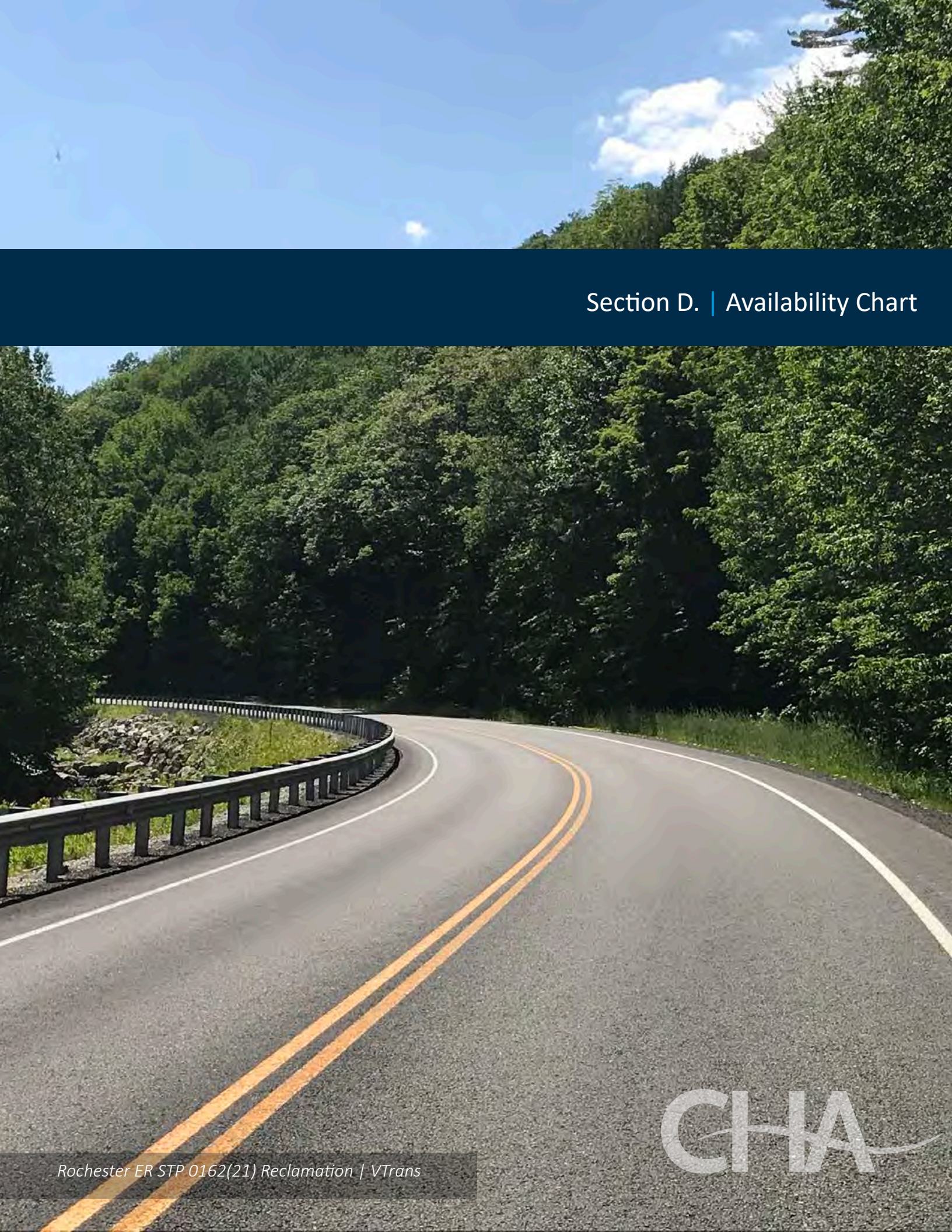
Iana Headley-Kroll, PE
Senior Structures Engineer

Antonio D'Elia, PE
Junior Structures Engineer

Phil Roth
Principal Engineering Technician Designer

Please refer to the individual resumes included in this submission for state-specific licensure information. All engineering work for the project will be supervised and stamped by individuals who are licensed in the state of Vermont.

Section D. | Availability Chart



Rochester ER STP 0162(21) Reclamation | VTrans

Section D. | Availability Chart

NAME	TITLE	PROJECT AVAILABILITY
CLOUGH, HARBOUR & ASSOCIATES LLP		
Dale Gozalkowski, PE	Project Manager	50%
Robert Faulkner, PE	Partner-in-Charge, Engineer-of-Record, Quality Manager	50%
James Shields, IE	Lead Highway Engineer	60%
Brian Healey, PE	Project Engineer	70%
Jack Scudder, PE	Project Engineer	70%
Shravya Markandeya, PE, PTOE, PTP, IMSA II	Lead Traffic Engineer	50%
Jay Patel, PE	Senior Traffic Engineer	50%
Nick Schwartz, RLA, LEEDAP	Lead Landscape Architect (Bicycle/Pedestrian Design)	60%
Mickey Dames	Principal Engineering Technician Designer	65%
Josh Heald	Senior Engineering Technician Designer	60%
Matthew Mokey, PE	Lead Project Engineer (Railroad Design)	70%
Kris Detlefsen, PE, CPESC	Lead Project Engineer (Hydraulics Design)	70%
Charlie Symmes, PE	Lead Project Engineer (Geotechnical Design)	60%
Jason Gorman, PE	Lead Project Engineer (Utility Design)	55%
Chris Einstein, PWS	Lead Environmental & Natural Resources Scientist	65%
Samantha Miller, PE	Environmental & Natural Resources Scientist	50%
John Greaves, IV, CWS	Environmental & Natural Resources Scientist	6%
Bryan Busch, PE	Engineer-of-Record (Structures)	50%
Jeff Najdowski, PE	Lead Structures Engineer	50%
Nick Bennett, PE	Assistant Lead Structures Engineer	60%
Iana Headley-Kroll, PE	Senior Structures Engineer	55%
Antonio D'Elia, PE	Junior Structures Engineer	70%
Phil Roth	Principal Engineering Technician Designer	70%
VERMONT SURVEY & ENGINEERING, INC.		
Andrew McQueeney	Project Manager - ROW Specialist	50%
Stephen Fraser, LS	Project Manager - ROW Specialist	50%
Matthew Yefchak	Senior Crew Chief	50%
Matthew Backman	CADD Operator, ROW Specialist, Survey Party Chief	50%
HARTGEN ARCHEOLOGICAL ASSOCIATES, INC.		
Brant Venables, PhD, RPA	Professional Archaeologist & Project Manager	40%
Walter Wheeler	Senior Architectural Historian	30%
Brian Knight, MS	Architectural Historian	30%

Section E. | Technical Capability

Pine Street Bicycle Lanes with Painted Buffers | Burlington, VT

Section E. | Technical Capability

Additional Factors for Municipal and VTrans Consideration: CHA Relevant Experience and Capabilities

On the following pages, we discuss some examples of our previous experience and technical capabilities that are relevant to the types of skills, experience, and expertise anticipated for the current RFP.

Client: City of Burlington, VT | Champlain Parkway *(Burlington, VT)*

CHA is providing engineering services to create a multimodal transportation facility that removes traffic from residential streets and provides a transportation gateway to the downtown commercial district.

This City of Burlington project included evaluations of multiple alignments, cross-section alternatives, circulation patterns, roundabout options, and provisions for transit and pedestrian/bicycle accommodations. These evaluations included assessments of transportation system performance and of impacts related to environment, air/noise, historic districts, rail mainline, and railyard facilities.

Bicycle and pedestrian design was accomplished with the following: proposed shared-use paths, on-street bicycle lanes, sharrows (shared lane markings), pavement marking buffers near on-street parking, and bicycle boxes for turning at signalized intersections. Curb extensions were implemented at numerous intersections to reduce pedestrian crossing distances. Additionally, design vehicle turning movements were optimized to reduce roadway widths. These optimizations were made by considering the design vehicle and function of the streets involved at an intersection-by-intersection basis and RRFBs associated with multiple midblock crosswalks. Raised intersections were incorporated into the design to improve pedestrian visibility and reduce vehicular traffic speeds.

Design services included hydraulic and hydrologic analysis for Potash Brook floodplain (an impaired waterway) due to anticipation of the embankment being placed within the limits of the floodplain; subsurface exploration and geotechnical design, requiring soil improvements to support the box culvert at Englesby Brook; box culvert structural design for Englesby Brook; and highway-rail grade crossing design at Home Avenue (complete reconstruction), Flynn Avenue (complete reconstruction), Sears Lane, Maple Street, and King Street. CHA also provided engineering services for the Act 250 application and hearings, including expert witness testimony at Vermont State Superior Court and Vermont Environmental Court. NEPA processing efforts involved a DSEIS, FSEIS, LS DSEIS, LSFSEIS, and various re-evaluations. Coordination of complex federal and state environmental permits was required. Extensive public outreach efforts were involved throughout this project.

Contact: Norm Baldwin, PE | 802-865-5826 | nbaldwin@burlingtonvt.gov

Client: VTrans | Berlin Composite Reclamation and Rehabilitation *(Berlin, VT)*

This $5.6M project included the NH STP 2947(1), STP 2935(1), and NH STP 2938(1) projects, which included reclaiming approximately one mile of the Berlin State Highway and rehabilitating approximately five miles of U.S. Route 302, VT Route 62, and Berlin State Highway. This project involved the reconstruction of the existing grade crossing on U.S. Route 302, including the addition of rail signals. Traffic engineering services provided as part of these assignments included evaluation and design of stop bar detection systems, pedestrian signal system improvements, and developing special provisions to support these new technologies. This project also included the evaluation and design of an alternate signing and pavement marking scenario encompassing U.S. Route 302, which included the conversion of a four-lane section into a three-lane section with a median two-way opposing left-turn lane and improved on-roadway bicycle accommodations. Additionally, this project incorporated experimental pavement markings throughout the U.S. Route 302 corridor. Incorporating these experimental markings allowed VTrans to evaluate the newest products available.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

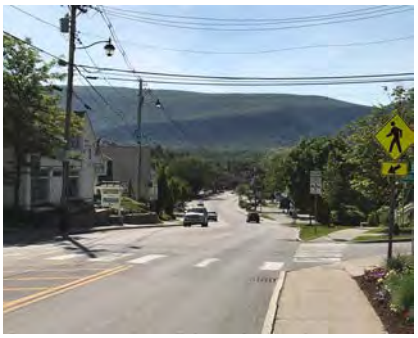
Client: VTrans | Wilmington-Brattleboro NH 2971(1) Reclamation
(Wilmington, Marlboro, and Brattleboro, VT)

This project consisted of full-depth reclamation of 12.6 miles of Vermont Route 9, a principal arterial on the National Highway System in the towns of Wilmington, Marlboro, and Brattleboro. The project also included drainage improvements, superelevation corrections, guardrail installation, and signing and pavement marking plans following the Manual on Uniform Traffic Control Devices (MUTCD). The project had a construction cost of approximately $23.8M and included:

- Evaluation and design of the addition of a westbound left-turn lane at the South Road intersection with Vermont Route 9 within the existing highway right-of-way limits
- Evaluation for replacement of the existing westbound left-turn lane near the Royal Chelsea diner and design of a two-way opposing left-turn lane to improve traffic operations
- Design of horizontal and vertical alignments
- Development of roadway typical sections and paving order of operations notes and tables
- Superelevation design based on AASHTO guidelines
- Involved complicated iterations for over 100 curves in 12.6 miles, including numerous nonstandard radii and reverse curves
- Nonstandard curves were evaluated for appropriate curve warning signs and chevrons following MUTCD and VTrans' design standards
- Design of a guardrail based on AASHTO Roadway Design Guide using lengths of need based on cross-section analysis
- Creation of an inventory of existing culverts, inverts, and depth-of-cover for use in determining replacement or repair needs
- Development of miscellaneous roadway details, paving details, and bridge transition details
- Evaluation of impacts to roadside features by projecting slope limits from the InRoads roadway model
- Extensive use of Bentley Inroads design software and application of AASHTO, MUTCD, and VTrans' standards
- Evaluation of multiple midblock crossing locations based on the town's request and designed sidewalk access ramps, pavement markings, signs, and rectangular rapid flash beacons (RRFBs) at these locations
- Installation of marked bike lanes and signing in the town of Brattleboro

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: VTrans | Manchester STP 2970(1) Rehabilitation *(Manchester, VT)*



This $5.3M project included rehabilitating approximately 6.6 miles of VT Route 7A, VT Route 11, and VT Route 30. In addition to the conventional pavement rehabilitation, this project included reconstructing an existing grade crossing and development of a traffic management plan. Traffic engineering services provided as part of this assignment included evaluation and design of stop bar detection systems, pedestrian signal system improvements, and developing special provisions to support these technologies. This project included on-street bicycle accommodations which consisted of shared travel lanes and exclusive bicycle lanes.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: VTrans | Johnson, VT – VT Route 100C Superstructure Replacements *(Johnson, VT)*

This accelerated bridge construction project included the superstructure replacement of Bridges 1 and 2 on VT Route 100C over the Gihon River. The initial intent of this project was to replace the superstructure of only Bridge 2 in response to structural deficiencies. However, after CHA raised concerns about the roadway geometry of the approaches, VTrans determined that rehabilitating the superstructure Bridge 1 (located approximately 100 feet away) and widening both structures would be the better overall solution at this location.

Precast solid slab beams were used for the shorter span of Bridge 1 in order to reduce construction duration while still using a cost effective solution. Precast NEXT beams were originally slated to be used for the longer span of Bridge 2 for the same reasons, but hydraulic requirements drove the superstructure of Bridge 2 to be shallower. CHA worked closely with the VTrans' project manager in evaluating a number of alternatives and provided feasibility summaries for VTrans' senior management evaluation. Ultimately heavy, shallow steel rolled beams were selected, but the six beams were separated into three innovative prefabricated bridge units each consisting of two rolled beams and a concrete deck poured at an off-site location to achieve the accelerated bridge construction schedule. During construction, these three units were lifted into place and rapid setting concrete was poured in between the units which had reinforcement bars protruding like a zipper between interior units.

CHA also designed and detailed nonstandard precast approach slabs with similar closure pours that greatly reduced construction time. Unique site conditions included the limited right-of-way width, a private residence, municipally-owned and maintained features located on the island created by the bifurcated reaches of the Gihon River, and one approach slab overhanging an existing U-wall designed as a moment slab with a fascia-mounted guardrail.

Key components of the project included avoiding right-of-way impacts and minimizing utility conflicts during construction. Unique modifications of the existing substructures were used to maintain embankments within the available right-of-way limits while reducing impact to adjacent property owners.

All these innovative, nonstandard details led to both bridges being constructed approximately quicker than the anticipated accelerated construction schedule.

Contact: Carolyn Cota, PE | 802-917-4891 | carolyn.carlson@vermont.gov

Client: Town of Vernon, VT | Central Park Road Culvert Replacement *(Vernon, VT)*

CHA completed the design and construction inspection for the replacement of a metal pipe arch culvert carrying Central Park Road over an unnamed brook. The replacement structure was a 14 ft. x 8 ft. precast concrete box culvert and included retention sills to replicate a natural stream bottom. The project also included a realignment of the upstream inlet to improve the brook alignment. The scope of services included survey, geotechnical investigations, hydraulic analysis, structural design, right-of-way, permitting (Agency of Natural Resources and USACE), bidding services, and construction inspection.

Contact: David Walker | 802-254-9428 | vernonhighway@gmail.com

Client: City of Burlington, VT | On-Call Agreement for Professional Engineering Services *(Burlington, VT)*

CHA provides transportation planning and traffic engineering support to the City of Burlington under this on-call contract. These services include reviewing traffic impact studies and site plans prepared for development applications. Tasks include providing input on scoping issues, conducting peer reviews of the technical submissions, coordinating with the City's DPW staff, and preparing written comments. Projects that have been reviewed under this agreement include:

- Hotel Champlain
- Cambria Hotel
- Cambria Rise Mixed-Use
- City Place
- Burton Hub Mixed-Use

Our review of these projects confirmed that the traffic impacts of these projects were appropriately identified and that the mitigation strategies were effective and considered local issues and needs.

Contact: Norm Baldwin, PE | 802-865-5826 | nbaldwin@burlingtonvt.gov

Client: VTrans | Fair Haven - Rutland Town NH SURF(64) *(Fair Haven to Rutland Town, VT)*

This pavement rehabilitation project is associated with the U.S. Route 4 four-lane limited-access highway. The highway extends from the New York/ Vermont border to its intersection with U.S. Route 7, which was designed under the VTrans' highway resurfacing services primary agreement. Reconstruction of the DOT 900-598N grade crossing, located in Rutland Town, is included in the scope of this project. In the section where the grade crossing is located, the high-speed divided expressway has a posted 65 MPH speed limit for vehicles, and it is located within the Rutland rail yard limits.

This grade crossing was unique for many reasons. At-grade highway/rail crossings on high-speed roadways are extremely rare. Although this crossing was assigned only one DOT number, there were grade crossing surfaces on each barrel, separated by a grassed median to create the divided highway. Since this crossing was located on a high-speed divided highway, an existing three-color traffic signal was present on each cantilever, which VTrans owns and maintains in addition to the regular highway/rail grade crossing active warning system. Each of these systems operates on separate controllers, although they are connected. During the design of the final plans, VTrans decided to replace the three-color traffic signal as part of the improvements at this location. The reconstruction includes a six-inch bituminous concrete pavement layer and 12 inches of crushed gravel placed on the existing compacted subgrade surface. The highway/rail grade crossing surface consists of a precast concrete panel system.

To execute the railroad agreement with Vermont Railway, Inc., CHA considered an additional challenge: the impacts of the Middlebury tunnel project on all rail traffic in this region of the state. The grade crossing is located within the Rutland rail yard limits, where additional rail traffic is directed due to the Middlebury tunnel project. This rerouting of train traffic limited the opportunity to provide exclusive track rights; as a result, the CHA team developed a construction sequencing strategy to reconstruct the grade crossing using two 36-hour closures over four stages. Each barrel would be constructed separately using work tasks bundled in a 20-hour initial phase and a 16-hour phase, which would allow installation of the precast concrete panel surface and returning of the track to Class I track standards.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: City of Burlington, VT | Pine Street and Lakeside Avenue Intersection Traffic Signal Design *(Burlington, VT)*

CHA provided engineering design services for a new traffic signal system at the intersection to replace outdated and non-compliant equipment. The project involved traffic data collection and traffic modeling analysis to evaluate alternative layouts and signal phasing/timing options. The signal was designed to optimize the reuse of the equipment for integration with a future planned roadway project that involved realignment and reconfiguration of the intersection approaches. The system included video vehicle detection, accessible pedestrian signals (APS), and sidewalk and ADA ramp design. Design services included signal design and specifications, contract documents, construction support during design, shop drawing reviews, and as-built drawings.

Contact: Norm Baldwin, PE | 802-865-5826 | nbaldwin@burlingtonvt.gov

Client: VTrans | Bennington Composite Rehabilitation *(Bennington and Village of North Bennington, VT)*

The Bennington NH 2966(1) and Bennington STP 2973(1) projects were advertised as a composite project totaling $5.0M and included rehabilitating approximately 5.9 miles of U.S. Route 7, VT Route 9, VT Route 67 and VT Route 67A. In addition to the conventional pavement rehabilitation, this project included reconstructing an existing grade crossing and development of a traffic management plan. Traffic engineering services provided as part of these assignments included evaluation and design of video vehicle detection systems and development of special provisions to support these technologies. This project included on-street bicycle accommodations, which consisted of shared travel lanes.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: VTrans | Rutland City – Ripley Road and Dorr Drive Bridge Replacements *(Rutland City, VT)*

2017 Vermont ACEC Engineering Excellence Merit Award Winner

The original Ripley Road bridge was a two-span, steel pony truss, one of only 87 truss bridges left in Vermont. To preserve its identity as a truss bridge, Ripley Road bridge was replaced with a two-span, galvanized steel pony truss with a span ratio virtually identical to the former structure. This approach achieved a longer-lasting structure that is aesthetically faithful to the historic 1928 bridge and satisfies State Historic Preservation Office requirements.

After contract plans were submitted, VTrans decided to combine the Ripley Road bridge with a VTrans in-house project (Dorr Drive bridge replacement). The scheduled completion of the Dorr Drive bridge became a high priority for the State of Vermont, and CHA assisted VTrans in developing composite plans for the two structures as well as special provisions and a combined engineer's estimate in a compressed period of time.

Maintaining access across Otter Creek to local businesses (including the College of St. Joseph campus) was critical to the construction process because these two bridges and another roadway (with height restrictions associated with a railroad underpass) are the only viable means to cross Otter Creek near Rutland. Bundling these two projects facilitated construction sequencing, minimized the disruption of vehicular traffic, optimized safety, reduced the overall length of construction required, and reduced the overall construction costs of both projects.

Concerns about maintaining access on each side of Otter Creek throughout the construction of these two bridge replacements contributed to the decision to construct the Dorr Drive bridge first because a prior decision was made to place a temporary bridge atop the failing Ripley Road bridge to extend its useful life. This temporary solution—a narrow alternating one-way operation controlled by traffic signals on all three bridge approaches—allowed Ripley Road bridge to provide truck access across Otter Creek until Dorr Drive bridge was replaced.

CHA's alignment and structure study for the Ripley Road bridge examined online and offline roadway geometrics and superstructure alternatives at the onset of the project. CHA also assisted VTrans with the bid analysis of the composite project and provided engineering support during construction.

This project is an example of an engineering team's commitment to identify and evaluate all aspects of a project and develop a solution through a cooperative partnership involving all parties and agencies, which strikes a balance between engineering ingenuity, historical integrity and fiscal responsibility.

Contact: Carolyn Cota, PE | 802-917-4891 | carolyn.carlson@vermont.gov

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Client: City of Burlington, VT | University Heights and Upper Main Street Traffic Evaluations *(Burlington, VT)*

CHA conducted a traffic study of the intersection of Main Street (U.S. Route 2) and University Heights at the UVM campus. This intersection is along a major arterial providing regional access to the City Center District and is a major pedestrian access point for the University. This study involved documentation of existing conditions and a comprehensive assessment of vehicle, pedestrian, and bicyclist mobility and safety. CHA provided traffic counts (for vehicles, pedestrians, and bicyclists), speed data, crash history analysis, capacity modeling and analysis, queue analysis, control device compliance studies, pedestrian/bicyclist origin-destination analysis, signal timing plan review and optimization, and traffic calming. CHA identified and evaluated a range of strategies to address the congestion and safety issues (including low-cost signal timing/phasing modifications, crosswalk enhancements, and larger capital improvements to expanded sidewalk facilities), and to increase queue storage capacity.

Contact: Laura Wheelock, PE | 802-338-2125 | lwheelock@burlingtonvt.gov

Client: VTrans | Marshfield-Danville NH PS19(1) Reclamation *(Marshfield, Cabot, and Danville, VT)*

This project consisted of full-depth reclamation of approximately 16.1 miles of U.S. Route 2, a principal arterial on the National Highway System in the towns of Marshfield, Cabot, and Danville. The project also included drainage improvements, superelevation corrections, guardrail installation, and signing and pavement marking plans following the *Manual on Uniform Traffic Control Devices (MUTCD)*. The project had a construction cost of approximately $26.4M and included the following:

- Design of the U.S. Route 2 and Cabot Road intersection reconfiguration and reconstruction which included aerial utility relocation and removing the grassed island in order to create a more conventional T-shaped intersection
- Design of the reconfigured park and ride facility located near the U.S. Route 2 and VT Route 15 intersection. This included reconfigurations of the raised traffic islands and reconfiguring the parking stalls for passenger vehicles, buses, and trucks
- Incorporated the design of the reconfigured commercial parking area located near the U.S. Route 2 and VT Route 15 intersection to provide access management; this included coordinating with the respective landowners and VTrans to develop a new configured parking area that maintained access to the respective businesses while preventing the unwanted cut-through traffic
- Design of horizontal and vertical alignments
- Development of roadway typical sections and paving order of operations notes and tables
- Superelevation design based on AASHTO guidelines
- Involved complicated iterations for over 125 curves including numerous nonstandard radii and reverse curves
- Design of guardrail based on AASHTO Roadway Design Guide using lengths of need based on cross-section analysis
- Creation of an inventory of existing culverts, inverts and depth of cover for use in determining replacement or repair needs
- Development of miscellaneous roadway details, paving details, and bridge transition details
- Evaluation of impacts to roadside features by projecting slope limits from the InRoads roadway model
- Extensive use of Bentley InRoads design software and application of AASHTO, MUTCD, and VTrans' standards

Contact: Brandon Kipp, PE | 802-224-6110 | brandon.kipp@vermont.gov

Client: City of Burlington, VT | Queen City Park Road Pedestrian Feasibility Assessment *(Burlington, VT)*

CHA conducted an assessment for the development of pedestrian facilities along the eastern side of Queen City Park Road from its intersection with Central Avenue near the entrance to Red Rocks Park to Austin Drive in the City of Burlington. This study assessed existing conditions including the existing pedestrian accommodations in this vicinity, roadway and drainage characteristics, and desired destinations for pedestrians. Potential impacts to existing utilities, drainage facilities, environmentally sensitive areas, and the City's right-of-way limits were assessed. Typical sections were developed and conceptual cost estimates for proposed pedestrian upgrades were generated for the four alternatives, as follows:

- Alternative 1 – Sidewalk adjacent to curb
- Alternative 2 – Sidewalk and grass buffer
- Alternative 3 – Shared-use path adjacent to curb
- Alternative 4 – Shared-use path and grass buffer

A recommendation was made and the alternative selected was chosen because it provides similar and additional benefits compared to the other three alternatives analyzed in this assessment. It provides the most available pedestrian pathway width while also providing adequate snow storage during the winter months. The additional benefit of the recommended alternative was that it serves as a multi-use space that can be utilized by both pedestrians and bicyclists while also providing separation between them and vehicular traffic.

Contact: Madeline Suender | 802-863-9094 | msuender@burlingtonvt.gov

Client: VTrans | West Rutland – Rutland STP FPAV(18) Composite Rehabilitation *(West Rutland, VT)*

This pavement rehabilitation project is associated with the U.S. Business Route 4 which extended from the respective U.S. Route 4 interchange ramp termini through the signalized intersection with VT Route 4A (Main Street) and extended down Rutland Road to the western Rutland City Class I limit totaling 2.4 miles and included coarse milling and paving with a leveling and a wearing course. This was part of a composite project which included the West Rutland STPG SGNL(50) project upgrade designed by VTrans which consisted of traffic signal modifications at the U.S. Business Route 4 (Rutland Road) and VT Route 4A (Main Street). This project also included an intersection reconfiguration with VT Route 4A (Main Street). The reconstruction of the DOT 248-922E grade crossing located in West Rutland is included in the scope of this project. The project had a construction cost of approximately $4.0M.

The key element of this composite project was the wholesale reconfiguration of the U.S. Business Route 4 and VT Route 4A (Main Street) intersection to remove the existing jug handle and eastbound slip lane transforming this entire intersection into a new gateway to the Town of West Rutland. In addition, the raised median island on U.S. Business Route 4 (Rutland Road) was truncated to allow truck-turning movements associated with the new configuration. Turn lane widening was also required to accommodate truck-turning movements on the U.S. Business Route 4 northbound approach to the new traffic signal. The West Rutland - Rutland STP PAV(18) Composite Rehabilitation and the West Rutland STPG SGNL(50) project western limit coincided with the West Rutland STP PC19(6) project's eastern limit. This project had a common limit with the West Rutland STP PC19(6) project which was concurrently constructed as part of CHA's project, which we referred to as Poultney-Fair Haven-West Rutland Composite Rehabilitation.

The West Rutland STP PC19(6) project involved permanent lane reconfiguration and was constructed first. Thus, it was necessary to include interim pavement marking plans to align the with the new traffic pattern implemented on the STP PC19(6) project with the existing lane and shoulder configuration at the U.S. Business Route 4 and VT Route 4A; this was done in advance of the subsequent reconfiguration of this intersection to remove the existing jug handle and eastbound slip lane.

The proposed overhead sign structures were designed to correspond to the new intersection lane configuration approaches on the U.S. Route 4 northbound approach and the U.S. Route 4 westbound approach. This included both tri-chord overhead sign support structures and multiple type-B sign faces.

The highway-rail grade crossing surface consisted of a 171 LF precast concrete panel system. Additional upgrades also included removal and replacement of all signal heads located on the existing cantilever mast and arm with LED signal heads. Improved lines of sight within the railroad and highway right-of-way limits were also performed. Limited drainage improvements were provided near the highway-rail grade crossing surface.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: Putnam County, NY | Mill Road over Clover Creek *(Philipstown, NY)*

This project was a FEMA funded bridge replacement of Mill Road over Clove Creek in the Town of Philipstown. The previous bridge was destroyed by flooding and a temporary Bailey bridge was in place, supported on the original concrete abutments.

CHA evaluated design alternatives for the bridge replacement project. The evaluation considered two superstructure types and two substructure types. The preferred superstructure and substructure alternative selections were determined using the construction cost, which was limited to $851,000, as provided in the FEMA fact sheet. The fact sheet also required that the proposed bridge footprint closely match the existing bridge, resist future erosion and scour, maintain or increase the hydraulic opening, avoid permanent right-of-way impacts, and minimize environmental impacts.

Contact: Fred Pena, Commissioner of Highway and Facilities| 845-878-6331 | fred.pena@putnamcountyny.gov

Client: VTrans | Woodstock and Hartford Composite Rehabilitation *(Woodstock and Hartford, VT)*

The Woodstock NH PC21(5), Woodstock STP PC21(3), and Hartford STP PC21(4) projects were advertised as a composite project totaling $6.2M and included rehabilitating approximately 4.64 miles of U.S. Route 4, VT Route 106, VT Route 12 (Village and Town of Woodstock), and U.S. Route 4 and VT Route 14 (Town of Hartford). These were Class I roadways. Work performed under this composite project included coarse milling and paving a leveling course and wearing course, pavement markings, signs, upgrading sidewalk access ramps to comply with current ADA standards, and drainage rehabilitation. ***This project involved close coordination with the municipalities, concerned business owners, and residents to ensure that the disruption by the construction contractor to their business and residences during construction were minimized.*** Project provisions—including seasonal work and work restrictions for events with special local interest—were incorporated to ensure this outcome. The designers performed significant effort to maximize the number of marked parking stalls provided while complying with federal and state standards. In addition to the conventional pavement rehabilitation, this project included the development of a traffic management plan. The Hartford STP PC21(4) portion of the composite project incorporated strategic removal of raised traffic islands and intersection reconfiguration to reduce the crossing width to provide a safer environment for pedestrians through reduced crossing with and pedestrian pushbutton actuation while still accommodating the vehicles that use these roadways. The experiences of bicyclists and vehicle drivers were improved with these modifications at the signalized intersections. The project also included the removal of the overhead signs and their structures and traffic signal upgrades. Traffic engineering services provided included evaluation and design of video vehicle detection systems including advanced detection and stop bar detection. Additionally, this project included on-street bicycle accommodations, which consisted of shared travel lanes.

Contact: Matthew Bogaczyk, PE | 802-793-5321 | matthew.bogaczyk@vermont.gov

Client: City of Port Jervis, NY | Rehabilitation of East Main Street *(Port Jervis, NY)*

CHA was responsible for the preliminary through the final design of 0.35 miles of East Main Street (U.S. Route 6) from County Route 15 to Maple Avenue. CHA also provided construction administration and inspection services for this $24M project. The project involved widening East Main Street from two to three lanes, with the center lane marked as a two-way, left-turn lane. Five new traffic signals, including one with preemption at an existing fire station, were installed as part of this project. Existing storm drainage, curbing, and sidewalks were also replaced. Various side streets were realigned and reconstructed, and access improvements were implemented at the various businesses along this corridor.

CHA also designed and inspected three new bridges for this project: two box culverts that carry Clove Brook under East Main Street, and one steel stringer bridge which replaced the original historic steel through-truss carrying East Main Street over the Neversink River.

Contact: Jack Farr, Director of Department of Works| 845-858-4000 | dpwdirector@portjervisny.gov

Client: Warren County, NY | 13th Lake Road Culvert *(Johnsburg, NY)*

This LAFA project initially involved the full replacement of existing twin pipe culverts with a 19-foot-wide precast concrete, four-sided box structure under NYS's BridgeNY program. However, during the new structure's initial design, the existing pipes were washed out during a heavy storm event and, as a result, were replaced with a temporary bridge on a new vertical alignment. The proposed design was subsequently modified to meet the new existing conditions while still meeting the project schedule and maintaining the project's overall budget. The new structure was installed on a modified alignment to match the natural flow of the primary stream channel. CHA prepared all contract plans and documents and provided construction inspection services for the replacement structure.

Contact: Kevin Hajos, Superintendent of Engineering | 518-791-6556 | khajos@warrencountydpw.com

Client: City of Port Jervis, NY | East Main Street (Route 6) over the Neversink River and Clove Brook *(Port Jervis, NY)*

CHA was responsible for the preliminary through final design and construction inspection of East Main Street, including replacement design for three new bridges, two three-sided culverts that carry Clove Brook under East Main Street, and one steel stringer bridge that replaced the original steel through-truss that carries East Main Street over the Neversink River. The two three-sided culverts were each designed and constructed using Accelerated Bridge Construction (ABC) techniques, including installing the foundation piles through the existing roadway under traffic conditions and then the excavation and installation of the new precast culverts within separate three-day weekend closures.

Contact: Jack Farr, Director of Department of Works| 845-858-4000 | dpwdirector@portjervisny.gov

Client: VTrans | Brighton (Island Pond) STP PC19(1) Rehabilitation *(Brighton, VT)*

This Class I pavement rehabilitation project is associated with VT Route 105 and VT Route 114 in the town of Brighton. Project scope included reconstruction of the DOT 839-840W on Maple Street, DOT 839-639C on Middle Street, and DOT 839-638V on Cargill Road, including the removal and new installation of the grade crossing active warning system at DOT 839-840W and DOT 839-639C. All these crossings are located on the Sherbrooke Subdivision of the St. Lawrence and Atlantic Railroad owned by Genesee and Wyoming, Inc.

Maple Street: The proposed grade crossing improvements provided at DOT 839-840W presented a design challenge related to site constraints, including the two two-way approaches on Maple Street at the intersection with VT Route 114 (Railroad Street). This grade crossing included a mainline track and one siding track. The proposed grade crossing surface was constructed using bituminous concrete, and rail seal was placed adjacent to the track. Asphaltic approach material was placed on the field side of the mainline and siding tracks. The signal controller cabinet was replaced, including site grading to provide safe and efficient access. Appropriate signs and pavement markings were also provided in accordance with MUTCD.

Middle Street: The proposed grade crossing improvements provided at DOT 839-639C presented a design challenge related to site constraints, including the two two-way approaches on Middle Street at the intersection with VT Route 114 (Railroad Street). Other challenges included limited sight distance approaching the intersection and the presence of a residential driveway adjacent to the railroad right-of-way boundary. This grade crossing included a mainline track. The proposed grade crossing surface was constructed using bituminous concrete, and rail seal was placed adjacent to the track. Asphaltic approach material was placed on the field side of the mainline and siding tracks. The signal controller cabinet was replaced, including site grading to provide safe and efficient access. Appropriate signs and pavement markings were also provided in accordance with the MUTCD.

Cargill Road: The proposed grade crossing improvements provided at DOT 859-638V included a timber crossing due to the limited use associated with this low-volume roadway.

Due to St. Lawrence and Atlantic Railroad personnel's lack of familiarity with VTrans' rail program and procedures, extensive coordination was required to obtain approval of the project's design before obtaining the railroad agreement.

Contact: Brandon Kipp, PE | 802-224-6110| brandon.kipp@vermont.gov

Section F. | Resumes

Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation

Dale Gozalkowski, PE

Project Manager

Dale is a principal engineer with 33 years of experience, encompassing a wide variety of transportation projects. During his career, Dale has established a reputation within VTrans for consistently providing deliverables of unmitigated quality while being cognizant of schedule and budget constraints. His experience includes VTrans' legacy projects, such as the bi-state WWII Veterans Memorial Highway (Bennington-Hoosick) Western Segment, which followed the design standards, standard specifications, and permit requirements for each state's respective portion of the project and was designed, advertised, and constructed accordingly. Representative project experience includes:

Education

Clarkson University, NY, B.S. in Civil Engineering

Registrations & Certifications

Professional Engineer – VT, NY

Memberships & Affiliations

American Council of Engineering Companies

American Society of Civil Engineers

Number of Years at CHA:

33 years

Vermont Agency of Transportation

- Wilmington-Brattleboro NH 2971(1) Reclamation
- Marshfield-Danville NH PS19(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- Stockbridge-Bethel STP 2910(1) Reclamation
- Warren-Waitsfield STP 2506(1) Reclamation
- Berlin Composite Reclamation and Rehabilitation
- Bridgewater-Woodstock NH 2611(1) Reclamation
- Fair Haven NH HES 020-1(21) Intersection Reconfiguration
- Wilmington HES 010-1(38) VT Routes 9 & 100 Reconfiguration
- Tropical Storm Irene Engineering Assistance at Rutland ICC
- Lake Champlain Bridge Replacement
- Richmond Checkered House Bridge Widening Design Build
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Old Bennington Reconstruction of Monument Avenue
- Brighton STP PC19(1) Pavement Rehabilitation
- Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation
- West Rutland STP FPAV (18) Composite Pavement Rehabilitation
- Woodstock-Hartford Composite Pavement Rehabilitation
- Manchester STP 2970(1) Composite Rehabilitation
- Bennington NH 2966(1) and STP 2973(1) Composite Rehabilitation
- North Bennington STP 9646(1)S Water Street Improvements
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Swanton STP 2958(1) Rehabilitation
- St. Albans STP 2957(1) Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Essex (Essex Junction) STP 2956(1) Rehabilitation
- Old Bennington Reconstruction of Monument Avenue
- Rutland City Composite Rehabilitation
- Burlington City Composite Rehabilitation
- Fair Haven Composite Rehabilitation
- Manchester-Dorset NH 2608(1)S Rehabilitation
- Rutland-Burlington VTRY(54) Track Infrastructure Geotechnical Improvements

City of Burlington, VT

- Champlain Parkway
- Burlington BREP(3) Burlington Railyard Enterprise Project
- Pine Street at Lakeside Avenue Traffic Signal Replacement
- Queen City Park Road Pedestrian Facility Assessment
- University Heights and Upper Main Street Traffic Evaluations

Robert Faulkner, PE

Partner-in-Charge, Engineer-of-Record, Quality Manager

Rob has 37 years of experience in the design, management and construction administration, and inspection of state-owned and municipal highway, bridge, infrastructure, and site projects throughout New England. As the quality manager and a principal engineer, Rob has provided senior-level oversight and quality control reviews on dozens of complex transportation projects throughout New England. In addition to Rob's design background and experience, his background in construction administration, as well as serving as the resident engineer on transportation projects, has allowed him to obtain insightful perspective regarding the constructability of these types of projects as well.

Education

University of Hartford, CT, B.S. in Civil Engineering

Registrations & Certifications

Professional Engineer – VT, CT, MA, ME, MI, NH

Memberships & Affiliations

American Society of Civil Engineers

Number of Years at CHA:

27 years

Vermont Agency of Transportation

- Wilmington-Brattleboro NH 2971(1) Reclamation
- Marshfield-Danville NH PS19(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904(1) Reclamation
- Brighton STP PC19(1) Pavement Rehabilitation
- Manchester STP 2970(1) Composite Rehabilitation
- Bennington NH 2966(1) and STP 2973(1) Composite Rehabilitation
- Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation
- West Rutland STP FPAV (18) Composite Pavement Rehabilitation
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Swanton STP 2958(1) Rehabilitation
- St. Albans STP 2957(1) Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Essex (Essex Junction) STP 2956(1) Rehabilitation
- Johnson VT Route 100C Superstructure Replacements
- Brattleboro-Hinsdale BRF 2000(19)SC
- WW II Veterans Memorial Highway (Bennington-Hoosick) Western Segment
- Pittsford VTRY(12) Siding Construction
- Rutland-Burlington VTRY(54) Track Infrastructure Geotechnical Improvements
- Clarendon Gorge Trailhead Enhancement

City of Burlington, VT

- Champlain Parkway
- Pine Street at Lakeside Avenue Traffic Signal Replacement

Town of Vernon, VT

- Tyler Hill Road Culvert Replacement
- Central Park Road Culvert Replacement
- Huckle Hill Road Culvert Replacement

Brattleboro DPW, VT | Cooke Road Bridge Replacement

Town of Jamaica, VT, Tropical Storm Irene Emergency Services

Town of Wardsboro, VT, Boardman Loop Road Bridge Replacement

Jim Shields, IE

Lead Highway Engineer

Jim is a senior highway engineer with 28 years of experience in transportation engineering and planning. Jim has extensive experience on a wide range of roadway projects for multiple state agencies and municipal clients, encompassing intersection reconfigurations, roadway corridor reconstruction, and interchange reconfigurations. He has worked almost exclusively on VTrans projects over the past 20 years and has been involved with some of VTrans' most challenging projects. Jim is well-versed in NEPA policy and regulations, Act 250, and VTrans' policies, permitting, procedures, and design standards. Representative project experience includes:

Education

Roger Williams University, RI, B.S. in Civil Engineering

Registration & Certification

Engineer-in-Training – NY

Memberships & Affiliations

American Society of Highway Engineers

Number of Years at CHA:

23 years

Vermont Agency of Transportation

- Wilmington-Brattleboro NH 2971(1) Reclamation
- Marshfield-Danville NH PS19(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- Stockbridge-Bethel STP 2910(1) Reclamation
- Warren-Waitsfield STP 2506(1) Reclamation
- Berlin Composite Reclamation and Rehabilitation
- Bridgewater-Woodstock NH 2611(1) Reclamation
- Fair Haven NH HES 020-1(21) Intersection Reconfiguration
- Wilmington HES 010-1(38) VT Routes 9 & 100 Reconfiguration
- Tropical Storm Irene Engineering Assistance at Rutland ICC
- Lake Champlain Bridge Replacement
- Richmond Checkered House Bridge Widening Design Build
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Old Bennington Reconstruction of Monument Avenue
- Brighton STP PC19(1) Pavement Rehabilitation
- Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation
- West Rutland STP FPAV (18) Composite Pavement Rehabilitation
- Woodstock-Hartford Composite Pavement Rehabilitation
- Manchester STP 2970(1) Composite Rehabilitation
- Bennington NH 2966(1) and STP 2973(1) Composite Rehabilitation
- North Bennington STP 9646(1)S Water Street Improvements
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Swanton STP 2958(1) Rehabilitation
- St. Albans STP 2957(1) Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Essex (Essex Junction) STP 2956(1) Rehabilitation
- Old Bennington Reconstruction of Monument Avenue
- Rutland City Composite Rehabilitation
- Burlington City Composite Rehabilitation
- Fair Haven Composite Rehabilitation
- Manchester-Dorset NH 2608(1)S Rehabilitation

City of Burlington, VT

- Champlain Parkway
- Pine Street at Lakeside Avenue Traffic Signal Replacement
- Queen City Park Road Pedestrian Facility Assessment

Brian Healey, PE

Project Engineer

Brian has 17 years of experience in highway and bridge design, throughout New England including some complex VTrans highway and bridge projects. He has been involved with all aspects of federal-aid projects, including preliminary design, environmental studies, developing design approval documents, public outreach, right-of-way acquisitions, final design, and construction support. Representative project experience includes:

Education
Clarkson University, NY, B.S. in Civil Engineering

Registration & Certifications
Professional Engineer – NY

Memberships & Affiliations
American Society of Civil Engineers, Chi Epsilon, ASHE

Number of Years at CHA:

17 years

Vermont Agency of Transportation

- Jamaica-Winhall STP 2904(1) Reclamation
- Rutland City Composite Rehabilitation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Berlin Composite Reclamation and Rehabilitation
- Bethel VT Route 12 over Gilead Brook Bridge Replacement
- Ryegate Interstate 91 Culvert Replacement
- Lake Champlain Bridge Replacement
- Richmond Checkered House Bridge Widening Design-Build

NYS Department of Transportation | NYS Route 5S (Oriskany Street) Safety Project

City of Schenectady, NY | Erie Boulevard Reconstruction and Complete Streets

Town of Bethlehem, NY | Delaware Avenue Hamlet Streetscape

City of Albany, NY | Central Avenue Corridor Improvement

City of Cohoes, NY | Bridge Avenue Bridge over the Fifth Branch of the Mohawk River

City of Rensselaer, NY | Route 20 Bicycle/Pedestrian Transportation Improvements

Delaware County, NY | Arbor Hill Road

Onondaga County, NY | Old Route 5 Paving Project

City of Port Jervis, NY | East Main Street over the Neversink River

Dutchess County, NY

- Dutchess Rail Trail
- Harlem Valley Rail Trail

Jack Scudder, PE

Project Engineer

Education

State University of New York Polytechnic Institute, NY, B.S. in Civil Engineering Technology

Registrations & Certifications

Professional Engineer – ME

Number of Years at CHA:

8 years

Jack's eight years of experience have been concentrated on several VTrans projects, including pavement rehabilitation and reconstruction. Jack has been responsible for roadway modeling using InRoads design software, ADA-compliant design, bicycle facility design, pavement marking and sign design, and EPSC plans. He is very familiar with VTrans' policies, protocols, and procedures, including plan development, CADD standards, bid documents (including special technical provisions), and construction cost estimating. He has experience preparing environmental permitting materials for state and federal agencies and documents supporting NEPA. He also has knowledge and expertise in state and federal highway noise analysis, abatement procedures, and the measurement of noise impacts using sound level meter equipment. Jack has also prepared engineering assessments for the INDOT asset management program to develop and evaluate transportation improvement alternatives and facilitate INDOT's decision-making process and risk management from concept through design hand-off. He also has conducted inspections and prepared stream bank erosion assessments along transmission lines for Orange & Rockland Utilities. Representative project experience includes:

Vermont Agency of Transportation

- Wilmington-Brattleboro NH 2971(1) Reclamation
- Marshfield-Danville NH PS19(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- Rutland City NH PC24(1) Rehabilitation
- Swanton STP 2958(1) Rehabilitation
- St. Albans STP 2957(1) Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Essex (Essex Junction) STP 2956(1) Rehabilitation
- Pittsford VTRY(12) Siding

City of Burlington, VT

- Champlain Parkway
- Queen City Park Road Pedestrian Facility Assessment
- Burlington BREP(3) Railyard Enterprise Project

Port of Coeymans, NY | Port Coeymans Battery Storage Noise Study

Indiana Department of Transportation | On-Call Pavement Design

City of Carmel, IN | College Ave (96th St. to 106th St.) Reconstruction & Roundabout

Indiana Department of Transportation | Crawfordsville Small Structures

Port Authority of NY & NJ | 65th Street Railyard Rehabilitation

City of Albany, NY | Lark Street Infrastructure Project

Education

Jawaharlal Nehru Technological University, India, B.T. in Civil Engineering

Cornell University, NY, M.E. in Civil Engineering

Harvard Business Analytics Program, Executive Certificate

Registrations & Certifications

Professional Engineer - NY, CT, RI, MA

IMSA Traffic Signal Technician

Professional Traffic Operations Engineer

Professional Transportation Planner

Memberships & Affiliations

Transportation Research Board (TRB), Regional TSMO Committee (ACP10) – Data for Operations Subcommittee Member, 2022 – Present

TRB, Traffic Simulation (ACP40) – SimSub Subcommittee Member, 2022 – Present

Women in Construction Ambassador – New York Build

Institute of Transportation Engineers

2021 Rising Stars in Civil + Structural Engineering Award

Number of Years at CHA:

3 years

Shravya Markandeya, PE, PTOE, PTP, IMSA II

Lead Traffic Engineer

Shravya has 15 years of experience designing and leading traffic engineering and transportation planning projects, including arterial and intersection traffic analyses, feasibility studies, developing transportation management plans, traffic signal design, traffic impact studies, work zone traffic control design and analysis, traffic control devices, data analytics, and accident and safety analyses. She has also served as a quality assurance/quality control engineer and reviewed numerous projects as a consultant to various municipalities. Representative project experience includes:

Vermont Agency of Transportation
- Rutland City NH PC23(1)
- Montpelier STP 2950(2)

City of Burlington, VT | Champlain Parkway

New York State Department of Transportation
- I-287 Interchange 8E Reconstruction Project (Westchester County, NY)
- Traffic Signal Replacement Project (6 Counties, 30 Locations)
- Accelerated Bridge Program
- New York State Route 17 Transportation Corridor Study
- Upgrade of Route 17 (Exit 122 to Exit 131 to Interstate I-86)
- Region 10, D90001 | Replacement of Carlls Straight Path Bridge over I-495

Triborough Bridge and Tunnel Authority, NY
- Feasibility Study for the Addition of Ramps at the Throgs Neck Bridge
- Robert F. Kennedy Toll Plaza Rehabilitation (Bronx, NY)
- Henry Hudson Toll Plaza Reconstruction (New York, NY)
- Bronx Whitestone Bridge BW89 & BW89C Projects

Port Authority of New York & New Jersey
- LaGuardia Airport Redevelopment Program
- GWB Intelligent Transportation System Replacement of Signs and Field Devices Project
- JFK ITS Master Plan operational scenarios

Connecticut Department of Transportation
- Project No. 15-382 CLE Interchange Modifications Assignment
- Niantic River Bridge, East Lyme

Greenwich Historical Society, CT | Parking and Traffic Study (2016)

Rhode Island Department of Transportation
- Project Bridge Group 35
- Preservation for Bridges of RIDOT Bridge Group 18A (Multiple Municipalities)

Massachusetts Department of Transportation
- Complete Streets Design Program, Pleasant Street Pedestrian & Bicycle Improvements
- Complete Streets Design Program, Route 140
- Somerville – Webster Avenue Project

New Hampshire Department of Transportation | FE Everett Turnpike Widening

Jay Patel, PE

Senior Traffic Engineer

Jaykrushna "Jay" Patel is a transportation engineer with a background in civil transportation engineering. He has extensive experience with preparing traffic impact studies, Signals warrant studies, date collection, pedestrian/bicycle analysis, capacity and level of service analysis, trip generation analysis, traffic demand management studies, parking analysis, reviewing municipality traffic impact studies and accident analysis. He is proficient in Highway Capacity Software, Synchro/SimTraffic, AutoCAD, Auto Turn, ParkCAD and GuideSIGN. Jay is very familiar with the transportation design standards including MUTCD, HCM, AASHTO, ITE Trip Generation Handbook, City Environmental Quality Review (CEQR New York) and New York state Environmental Quality Review Act (SEQRA). Representative project experience includes:

Vermont Agency of Transportation

- Rutland City NH PC23(1)
- Montpelier STP 2950(2)

City of Burlington, VT | Champlain Parkway

City of Columbus, OH | Downtown Signal Retiming

Town of Thompson, NY | Town Designated Engineer

Connecticut Department of Transportation | Tomlinson Bridge Preservation

*__New York State Department of Transportation |__ Nassau Events Center EAF Traffic Study and Additional Services

New York City Department of Transportation (NYCDOT)

- *Penn Plaza Pedestrian Improvement Study
- *ESA Atlantic Avenue Safety Study
- *L-Train Closure Traffic Engineering Support (with New York City Transit)
- *Columbia University Manhattanville Campus Design
- *Javits Center Expansion Study
- *Rehabilitation of the BQE Triple Cantilever
- *Belt Parkway Bridges, PM/REI-Fresh Creek Basin Bridge (with the NYSDOT)
- *Barclays Center at Atlantic Yards (with Forest City Ratner Companies)

Port Authority of New York and New Jersey

- *LaGuardia Airport Ingress and Egress Improvement Study
- *JFK Airport Redevelopment Program

*__New Jersey Department of Transportation and Passaic County |__ Main Avenue Local Concept Development Studies

*__New Jersey Department of Transportation and Township of Nutley, NJ |__ HLR/ON3 Redevelopment Traffic Analysis

Education

New Jersey Institute of Technology, M.S. in Civil Engineering

L.D. College of Engineering, India, B.E. in Civil Engineering

Registrations & Certifications

Professional Engineer – NY, VA

Memberships & Affiliations

Institute of Transportation Engineers

Number of Years at CHA:

2 years

** Performed with prior firm*

Nick Schwartz, RLA, LEED AP

Lead Landscape Architect

Nick has over 30 years of experience in planning, landscape architecture, and construction. He leads CHA's landscape architecture team on several different project types focusing on sustainability, resiliency, and community development. Part of his project focus includes pedestrian circulation/ADA compliance on urbanized street systems, on- and off-road bicycle circulation and accommodation, landscape/habitat design, visual impact assessment, and visualizations/animations for community engagement. Recently, Nick led the team developing a full-length, drive-thru animation of the Champlain Parkway as part of the City of Burlington's community outreach. Representative project experience includes:

City of Burlington, VT | Champlain Parkway

New York State Department of Transportation

- NYS Route 5S (Oriskany Street) Safety Project
- Commercial Vehicle Inspection Facility
- Schodack Rest Area
- NY Route 5 (Lakeshore Road) Reconstruction
- Hoosick Street (NY Route 7) Reconstruction & Widening
- Routes 52 & 55 Reconstruction & Safety Improvements
- US Routes 9 & 20 Urban Roadway Reconstruction
- Lake Avenue Reconstruction

City of Albany, NY

- Central Avenue Corridor Improvement
- Delaware Avenue Reconstruction
- Hudson River Way Pedestrian Bridge.
- North Pearl Street
- South Pearl Street
- Lark Street
- County Route 52 (Elm/Cherry Avenue) Reconstruction.

City of Rensselaer, NY

- Reconstruction of Broadway
- Route 20 Bicycle/Pedestrian Transportation Improvements

City of Schenectady, NY | Nott Terrace/Veeder Avenue Linkage Study.

City of Schenectady, NY | Erie Boulevard Reconstruction Complete Streets

Town of Bethlehem, NY | Sidewalk/Bikeway Feasibility Study

Town of Malta, NY | Transportation Linkage Plan

City of Watertown, NY | Public Square Streetscape

Town of Halfmoon, NY | Champlain Canal Towpath Trail

Village of Port Jefferson, NY | Meadow Parking Lot Pedestrian Walkway

City of Newburgh, NY | Robinson Avenue Reconstruction

Albany County, NY | Albany Shaker Road & Watervliet Shaker Road Reconstruction

City of Cohoes, NY | North Mohawk Street Reconstruction

Connecticut Department of Transportation | Putnam Bridge Walkway Feasibility Study

Capitol Region Council of Governments, CT | Route 6 Corridor Study

Education

State University of New York at Cobleskill, NY, A.A.S. in Landscape Development

SUNY College of Environmental Science and Forestry, NY, B.L.A. in Landscape Architecture

Registrations & Certifications

Registered Landscape Architect - CT, MA, ME, NJ, NY, RI

LEED Accredited Professional

Memberships & Affiliations

American Society of Landscape Architects

Council of Landscape Architects Registration Boards

Number of Years at CHA:

27 years

Mickey Dames

Principal Engineering Technician Designer

Mickey has 16 years of experience including numerous VTrans pavement rehabilitation, full-depth pavement, railroad design, and bridge rehabilitation and replacement projects. He is responsible to ensure that contract plans are developed in accordance with VTrans' CADD standards. Relevant experience includes:

Education

Hudson Valley Community College, NY, CADD Certificate

Number of Years at CHA:

11 years

Vermont Agency of Transportation

- Marshfield-Danville NH PS19(1) Reclamation
- Wilmington-Brattleboro NH 2970(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- Stockbridge-Bethel STP 2910(1) Reclamation
- Berlin Composite Reclamation and Rehabilitation
- Lake Champlain Bridge Replacement
- Richmond Checkered House Bridge Widening Design Build
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Johnson VT Route 100C Superstructure Replacements
- Lake Champlain Bridge Replacement
- West Rutland STP FPAV (18) Composite Pavement Rehabilitation
- Woodstock-Hartford Pavement Rehabilitation
- Manchester STP 2970(1) Composite Rehabilitation
- Bennington NH 2966(1) and STP 2973(1) Composite Rehabilitation
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Ryegate IM 091-2(80) Rock Catchment
- Lyndon IM 091-3(51) Rock Catchment
- Rutland Town STP 0163(5) Grade Crossing Reconstruction
- Pittsford STP 2033(33) Grade Crossing Reconstruction
- Pittsford STP 2033(32) Grade Crossing Reconstruction
- Brandon STP 2033(31) Grade Crossing Reconstruction
- Barre City M6000(30) Berlin Street Grade Crossing Reconstruction
- Rutland-Burlington VTRY(54) Track Infrastructure Improvement
- Pittsford VTRY(12) Siding Construction
- Morrisville-Stowe State Airport, Runway 1-19 Reconstruction

City of Burlington, VT

- Champlain Parkway
- Burlington BREP(3) Burlington Railyard Enterprise Project

Josh Heald

Senior Engineering Technician Designer

Josh has 10 years of experience concentrated on numerous VTrans projects including pavement rehabilitation, full-depth pavement reclamation, rock catchment, and bridge replacements. He provides technical assistance with all CADD related applications for our engineering staff and has been responsible for ensuring that contract plans are developed per VTrans' CADD Standards and design practices. Relevant experience includes:

Education

Hudson Valley Community College, NY, A.A.S. in Civil Engineering

Number of Years at CHA:

10 years

Vermont Agency of Transportation

- Wilmington-Brattleboro NH 2971(1) Reclamation
- Marshfield-Danville NH PS19(1) Reclamation
- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- North Hero-Grand Isle Movable Bridge Replacement
- Brighton STP PC19(1) Pavement Rehabilitation
- Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation
- West Rutland STP FPAV (18) Composite Pavement Rehabilitation
- Hartford STP PC21(4) Pavement Rehabilitation
- Manchester STP 2970(1) Composite Rehabilitation
- Bennington NH 2966(1) and STP 2973(1) Composite Rehabilitation
- North Bennington STP 9646(1)S Water Street Improvements
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Swanton STP 2958(1) Rehabilitation
- St. Albans STP 2957(1) Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Essex (Essex Junction) STP 2956(1) Rehabilitation
- Rutland City Composite Rehabilitation
- Burlington City Composite Rehabilitation
- Ryegate IM 091-2(80) Rock Catchment
- Lyndon IM 091-3(51) Rock Catchment
- Burlington HES 5000(18) Subsurface Utility Exploration

City of Burlington, VT

- Champlain Parkway
- Pine Street at Lakeside Avenue Traffic Signal Replacement
- Queen City Park Road Pedestrian Facility Assessment

Matthew Mokey, PE

Lead Project Engineer – Railroad Design

Matthew has 19 years of experience with transportation engineering projects and will lead any track and rail/highway grade crossing design projects. He will also assist with coordination efforts needed with the operating railroads on any other work categories advanced under this primary agreement. Throughout his entire career, he has been actively involved with VTrans projects and has extensive work experience and contacts throughout the railroad industry. Matthew is also a certified railroad contractor safety trainer. Representative project experience includes:

Vermont Agency of Transportation

- Barre City M6000(30) Berlin Street Grade Crossing Reconstruction
- Rutland-Burlington VTRY(3) Continuous Welded Rail (including four highway-rail grade crossings)
- Rutland-Burlington FRTII(24) Continuous Welded Rail (including a highway-rail grade crossing)
- Rutland Town STP 0163(5) Grade Crossing Reconstruction
- Pittsford STP 2033(33) Grade Crossing Reconstruction
- Pittsford STP 2033(32) Grade Crossing Reconstruction
- Brandon STP 2033(31) Grade Crossing Reconstruction
- Leicester STP 2033(29) Grade Crossing Reconstruction
- Pittsford STP 2033(30) Grade Crossing Reconstruction
- Middlebury STP 2035(20) Grade Crossing Reconstruction
- Salisbury STP 2035(21) Grade Crossing Reconstruction
- Salisbury STP 2034(22) Grade Crossing Reconstruction
- Fair Haven-Rutland Town NH SURF(64) Rehabilitation
- Cavendish-Shrewsbury NH 2975(1) Grade Crossing Reconstruction (with three highway-rail grade crossings)
- Brighton STP PC19(1) Pavement Rehabilitation
- St. Johnsbury-Lyndon STP 2936(2) Grade Crossing Reconstruction (with six highway-rail grade crossings)
- Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation
- West Rutland STP FPAV(18) Composite Pavement Rehabilitation
- Barre City NH 2961(2) Grade Crossings Reconstruction
- Pittsford VTRY(12) Siding Construction
- Montpelier STP 2950(1) Grade Crossings Reconstruction
- Middlebury-Ferrisburgh NH SURF(55) Grade Crossings Design
- Rutland City Composite Rehabilitation
- Fair Haven Composite Rehabilitation
- Essex (Essex Junction) NH 2956(2) Rehabilitation
- Berlin Composite Reclamation and Rehabilitation
- Manchester STP 2970(1) Rehabilitation
- Bennington Composite Rehabilitation
- Chester-Springfield-Rockingham-Windsor STP 2952(1) Rehabilitation
- Castleton Composite Rehabilitation
- Manchester-Dorset NH 2608(1)S Rehabilitation
- St. Albans STP 2957(1) Rehabilitation

City of Burlington, VT | Champlain Parkway (including Home Avenue and Flynn Avenue highway-grade crossing reconstructions)

Education

Syracuse University, NY, B.S. in Civil Engineering

Registrations & Certifications

Professional Engineer – NY, RI

ERailSafe

Amtrak Contractor Safety & Awareness

Certified CSX Railroad Contractor Safety Trainer

Memberships & Affiliations

American Railway Engineering & Maintenance of Way Association

Number of Years at CHA:

19 years

Kris Detlefsen, PE, CPESC

Lead Project Engineer – Hydraulics Design

Kris is a principal hydraulics design engineer with 26 years of experience and specialized experience in hydrologic and hydraulic applications. He has been involved in various projects, including bridge scour assessments, dam-break modeling, floodplain evaluations, erosion prevention and sediment control planning, and watershed studies. His expertise in hydrologic and hydraulic applications has been beneficial to CHA's success on several previous VTrans projects, including Richmond Checkered House Bridge Widening Design-Build; Bennington, VT Route 9 over Roaring Branch Micropile Underpinning; WWII Veterans Memorial Highway (Bennington Bypass) Western Segment; and Bethel, VT Route 12 over Gilead Brook project. Additionally, he developed a hydraulic model of Otter Creek, as required by FEMA, for the Wallingford Bridge over Otter Creek. CHA successfully navigated the technical and coordination challenges such that the required CLOMR was approved simultaneously with a revised FIS, which allowed the project to be advertised at least one year earlier than it would have otherwise. Kris also recently led the hydraulic analysis required for the Special Flood Hazard Area (SFHA) associated with the Potash Brook impaired waterway for the Champlain Parkway project in the City of Burlington. His responsibilities for this RFP will include a hydraulic review of any proposed work that affects hydraulic openings of bridges and participation in the hydraulic aspects of the design of scour countermeasures should they be required. Representative project experience includes:

Vermont Agency of Transportation

- Richmond Checkered House Bridge Widening Design-Build
- Bennington VT Route 9 over Roaring Branch Micropile Underpinning
- Wallingford Pedestrian Bridge Adaptive Re-use
- Bethel VT Route 12 over Gilead Brook Bridge Replacement
- St. Johnsbury Depot Hill Road over Passumpsic River Bridge Replacements
- WW II Veterans Memorial Highway (Bennington Bypass) Western Segment
- Brattleboro-Hinsdale Connecticut River Crossing
- Morrisville-Stowe State Airport, Runway 1-19 Reconstruction

City of Burlington, VT | Champlain Parkway

Brattleboro Department of Public Works, VT | Replacement of Cooke Road Bridge

Town of Vernon, VT

- Tyler Hill Road Culvert Replacement
- Sak Road Culvert Replacement

Town of Wardsboro, VT | Three Bridge Replacements

New Hampshire Department of Transportation

Education

Utah State University, UT, M.S. in Civil & Environmental Engineering

SUNY College of Environmental Science and Forestry, NY, B.S. in Natural Resource Engineering

Registrations & Certifications

Professional Engineer – NY, ME, GA

Certified Professional in Erosion & Sediment Control (CPESC)

Memberships & Affiliations

American Society of Civil Engineers

Association of State Dam Safety Officials

Number of Years at CHA:

26 years

Charlie Symmes, PE

Lead Project Engineer – Geotechnical Design

Charlie has spent 23 years working in the geotechnical engineering field on transportation and civil engineering projects. His expertise includes settlement and bearing capacity analyses, slope stability modeling, dam inspections and analyses, and designing deep foundations and earth retaining systems. Charlie coordinates subsurface investigations and prepares geotechnical reports. He has managed many VTrans geotechnical projects under geotechnical term agreements and as part of specific project assignments. Representative project experience includes:

Education

Rensselaer Polytechnic Institute, NY, Geotechnical Engineering Graduate Coursework

Virginia Polytechnic Institute & State University, VA, B.S. in Civil Engineering

Registrations & Certifications

Professional Engineer – VT, NY, CT, GA, ME, VA

Memberships & Affiliations

American Society of Civil Engineers

Geo Institute

Number of Years at CHA:

23 years

Vermont Agency of Transportation

- Rochester ER STP 0162(21) Reclamation
- Brandon-Goshen ER STP 0162(22) Reclamation
- Jamaica-Winhall STP 2904 (1) Reclamation
- Richmond Checkered House Bridge Widening Design-Build
- North Hero-Grand Isle Movable Bridge Replacement
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Johnson VT Route 100C Superstructure Replacements
- Lake Champlain Bridge Replacement
- Bennington VT Route 9 over Roaring Branch Micropile Underpinning
- Wallingford Pedestrian Bridge Adaptive Re-use
- Pittsford VTRY(12) Siding Construction
- Rutland-Burlington VTRY(54) Track Infrastructure Geotechnical Improvements.
- WW II Veterans Memorial Highway (Bennington Bypass) Western Segment
- Taylor Street Bridge Rehabilitation
- St. Johnsbury Depot Hill Road over Passumpsic River Bridge Replacements
- Searsburg-Wilmington Bridge Replacements

City of Burlington, VT | Champlain Parkway

Town of Wardsboro, VT | Three Bridge Replacements

Canadian Pacific Railway/D&H

- Slope Remediation at MP 124.58
- Westport, NY | Howard Siding
- Whitehall, NY | Slope Stabilization Projects
- Ganesvoort, NY | Emergency Services
- Ticonderoga, NY | Slope Stabilization

Jason Gorman, PE, PMP

Lead Project Engineer – Utility Design

Jason has 25 years of experience as a project engineer and project manager on complex environmental and energy projects, including managing projects from conceptual design, permitting, and final design through construction. His experience includes securing state and federal permits for complex natural gas, electrical transmission, and utility projects that present unique challenges due to sensitive environments and regulatory coordination. Jason also has experience coordinating with utilities to relocate and replace utility lines and meet the utility and regulatory design standards. Representative project experience includes:

Education

State University of New York at Cortland, NY, B.S. in Physics

Registrations & Certifications

Professional Engineer – NY

Project Management Professional

Memberships & Affiliations

American Society of Civil Engineers

Number of Years at CHA:

25 years

Vermont Agency of Transportation

- WW II Veterans Memorial Highway (Bennington-Hoosick) Western Segment
- Searsburg/Wilmington Bridge Replacements
- West Rutland Bridge over Clarendon Creek

Vermont Gas Systems, Inc. | Phase 1 VGS Amendment – Engineering Support

New York State Department of Transportation | Batchellerville Bridge over the Sacandaga Reservoir

New York Power Authority | On-site Project Management for Submarine Cable Replacement Project

Massachusetts Department of Transportation | Route 141 over Chicopee River

National Grid – Northborough, MA | MWRA 8(m) Permit Help

Reed & Reed, Inc. | Seneca Lake Submarine Cable Replacement

UGI Utilities, Inc. | Luzerne County (Jaycee Drive) Engineering services

Orange & Rockland Utilities, Inc.

- Old Ridge Road Project (Warwick Expansion)
- O&R Monhagen Avenue in Middletown, NY

New England Gas Company | Tauton River Crossings/Gas Distribution Main Replacement Project

Seneca Meadows, Inc. | Gas Pipeline Relocation

Chris Einstein, PWS

Lead Environmental & Natural Resources Scientist

Chris has 34 years of experience in community planning, site planning, regulatory compliance, and wetland delineation. His experience includes managing and preparing comprehensive plans, state and federal environmental impact statements, zoning analysis, and wetland delineation, permitting, and mitigation. Chris has broad experience working and coordinating with both the public and private sectors, and he has successfully brought many controversial projects to consensus and closure Representative project experience includes:

Vermont Agency of Transportation

- Richmond Checkered House Bridge Widening Design-Build
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Wallingford Pedestrian Bridge Adaptive Re-use
- WW II Veterans Memorial Highway (Bennington Bypass) Western Segment
- Ryegate Interstate 91 Culvert Replacement
- Old Bennington Reconstruction of Monument Avenue
- Highway Resurfacing Services Program
- Morrisville-Stowe State Airport, Runway 1-19 Reconstruction

City of Burlington, VT | Champlain Parkway

Town of Vernon, VT | Tyler Hill Road Culvert Replacement

New York State Department of Transportation

- Commercial Vehicle Inspection Facility
- Accelerated Bridge Program Phase 1B Design-Build
- Route 32 over the Mohawk River

Massachusetts Department of Transportation | Route 141 over Chicopee River

Ogdensburg Bridge & Port Authority, NY | Track, Bridge and Grade Crossing Improvements

Albany County, NY | Pictuay Road Over Coeymans Creek Bridge Replacement

City of Cohoes, NY | Bridge Avenue Bridge over the Fifth Branch of the Mohawk River

City of Port Jervis, NY | East Main Street (Route 6) over the Neversink River

Norfolk Southern Corp. | Franklin County Regional Intermodal Facility

Education

SUNY College of Environmental Science and Forestry, NY, M.S. in Resource Management

SUNY College of Environmental Science and Forestry, NY, B.S. in Environmental Science

Alfred State College, NY, A.S. in Math & Sciences

Registrations & Certifications

Professional Wetland Scientist

NS Railroad Worker Safety Training

CSX Railroad Worker Safety Training

Memberships & Affiliations

American Planning Association

Society of Wetland Scientists

Board of Governors, NYS Wetlands Forum

Number of Years at CHA:

28 years

Samantha Miller, PE

Environmental & Natural Resources Scientist

Samantha has 11 years of experience providing engineering services for environmental projects. Her experience to date includes performing environmental monitoring, construction observation services, remediation system designs, bulk storage tank inspections, developing site management plans, and regulatory negotiation and coordination. Samantha has worked on various regulated sites, including petroleum and chemical remediation sites, tank cleanup sites, solid waste facility closures, and vapor intrusion mitigation projects. Representative project experience includes:

Former Coyne Textile | Brownfield Cleanup Project in Syracuse, New York

Niagara County Refuse Disposal District, NY | Landfill Capping Project in Lockport, New York

Oneida Indian Nation | Phase I Environmental Site Assessments in Madison and Oneida Counties, NY.

Confidential Client | Geotechnical Engineering Services for Planned Pipe Rack and RTO

Environmental Permitting and Compliance

- **Syracuse Community Hotel Restoration Company, LLC |** Hotel Syracuse Phase – ESA Update
- **McGuire Development Co. |** Little Apple Dunkirk Site – Due Diligence & Survey
- **Confidential Client |** Riverbend Site Redevelopment

Education

Clarkson University, NY, M.S. in Engineering Management

SUNY College of Environmental Science and Forestry, NY, B.S. in Environmental Engineering

Registration & Certification

Professional Engineer – NY, FL

Certified Professional in Erosion & Sediment Control (In Training)

Memberships & Affiliations

Air and Waste Management Association

Number of Years at CHA:

11 years

John Greaves, PWS, CWB

Environmental & Natural Resources Scientist

John has 22 years of professional experience in wildlife, vegetation, wetland delineation, ecological inventories, threatened and endangered species surveys, habitat creation, habitat management, wetland mitigation, stream assessment, environmental screenings, and environmental permitting. Specialties include identification and natural history of wildlife, vegetation and ecological communities, biodiversity, environmental impact assessment, climate change, and environmentally sensitive design. Representative project experience includes:

Education

State University of New York at Cobleskill, NY, B.S. in Wildlife Management

Hudson Valley Community College, NY, A.A.S. in Criminal Justice

Registrations & Certifications

Certified Wetland Scientist - NH

US Fish & Wildlife Service Recognized Small Whorled Pogonia Surveyor

Memberships & Affiliations

New York State Wetlands Forum

New York Flora Association

The Wildlife Society

Number of Years at CHA:

22 years

Vermont Agency of Transportation

- Ripley Road over Otter Creek Bridge Replacement
- Ryegate Interstate 91 Culvert Replacement
- Highway Resurfacing Services Program
- Morrisville-Stowe State Airport, Runway 1-19 Final Design
- Morrisville-Stowe State Airport, Runway 1-19 Rehabilitation
- Morrisville-Stowe State Airport, Runway Improvements EA
- Morrisville-Stowe State Airport, Master Plan Update
- Morrisville-Stowe State Airport, Runway 1-19 CA/CI

City of Burlington, VT | Champlain Parkway

Town of Vernon, VT | Huckle Hill Road Culvert Replacement

New York State Department of Transportation

- Commercial Vehicle Inspection Facility
- Route 32 over the Mohawk River
- Ithaca Maintenance Facility

New York State Thruway Authority

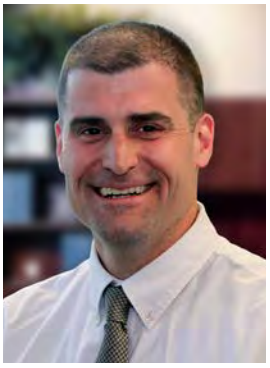
- Albany Corridor Needs Assessment and Widening
- Interchange 23 to Interchange 24 Reconstruction and Widening
- Slingerlands Bypass Extension

City of Schenectady, NY | Eire Boulevard Reconstruction and Complete Streets

City of Port Jervis, NY | Rehabilitation of East Main Street

City of Rensselaer, NY | U.S. Route 20 Bicycle/Pedestrian Transportation Improvements

City of Watertown, NY | State Street Infrastructure & Utility Improvements



Bryan Busch, PE

Engineer-of-Record (Structures)

Bryan has 29 years of extensive experience leading design teams and managing complex transportation and bridge projects involving rehabilitation, replacement, and new construction throughout New England. Many projects within the past decade have employed Accelerated Bridge Construction (ABC) techniques in design-bid-build or design-build procurements. They have included the use of self-propelled modular transporters (SPMTs). Brian has played an integral role in the firm's development of expertise in ABC technologies for various DOTs. He has been a contributor and lecturer at ABC workshops in Massachusetts, Florida, and Utah. Bryan serves on the MassDOT Bridge Manual Committee and plays an integral role in successfully executing several high-profile MassDOT projects. He has worked on DOT projects for several states for over 20 years designing both concrete and steel bridges. His extensive knowledge of design and constructability, combined with a strong background in accelerated bridge construction (ABC), has allowed him to develop a resume of successful projects for many state DOTs and other public clients Representative project experience includes:

Massachusetts Department of Transportation

- Commonwealth Avenue Bridge Replacement
- Summer Street Bridge
- North Washington Bridge Street Bridge
- Preliminary Design and Owner's Representative, 93Fast14 Bridge Replacement Project (Design-Build and ABC Project)
- I-195/Route 79 Interchange Reconstruction Project (Design-Build)
- Bridge Manual Committee
- I-91 Viaduct Rehabilitation
- Mountain Road over Hartwell Brook
- Route 24 over Taunton River
- Lakeway Drive over Onota Lake
- Main Street over Quoboag River
- Florida Road over Assabet River
- Route 202 over B&M Railroad, Holyoke, MA
- Fast 14 Bridge Replacement Project
- I-91 over Union Street and Broad Street
- State Route 2 over Deerfield River
- Old State Highway over Westfield River
- Rehabilitation of the I-91 Viaduct in Springfield, MA

Rhode Island Department of Transportation

- Construction Engineering and Prefabrication Support & Transport

Education

University of Connecticut, M.S. Structural Engineering

University of Connecticut, B.S. Civil Engineering

Registrations & Certifications

Professional Engineer – VT, NY, CT, MA, RI, MI

FHWA 80-Hour Bridge Inspection

Memberships & Affiliations

American Society of Civil Engineers

American Institute of Steel Construction

Number of Years at CHA:

25 years

Jeff Najdowski, PE, SE

Lead Structures Engineer

Jeff is a senior structural engineer with 28 years of comprehensive experience in bridge design, a practical knowledge of the construction industry and a thorough comprehension of contractor means and methods. This combination of skill sets provides an invaluable technical resource for developing innovative structural details, efficient project planning, and construction cost estimates.

Jeff has led the project engineers on many VTrans projects since 2012. The projects below are a representative sample of his experience, but a few projects are worth highlighting in more detail. In addition to his proficiency and knowledge of VTrans' manuals, practices, and standards, Jeff has performed extensive transportation structures work for a variety of clients, primarily including NYSDOT and Illinois DOT, as well as MaineDOT, MassDOT, many counties, and contractors on design-build efforts. These projects consist of a wide range of structures: straight and curved bridges; single and multi-span bridges; precast concrete, steel multi-girder, and truss bridges; culverts; rail trail bridge rehabilitations; and a massive retaining wall in the Hudson River. These experiences have allowed him to engage with many different types of projects and clients and to consider various solutions for each project. Representative project experience includes:

Vermont Agency of Transportation

- Rutland Ripley Road over Otter Creek Bridge Replacement
- Johnson, VT Route 100C Superstructure Replacement
- Proctor VTRY(10) Rail Bridge Rehabilitation
- Pittsford VTRY(11) Rail Bridge Rehabilitation
- Bethel, VT Route 12 over Gilead Brook Replacement
- Ryegate Interstate 91 Culvert Replacement

City of Burlington, VT | Champlain Parkway

Albany County, NY | CR 53 (Jericho Road) over the CSX Selkirk Rail Yard Bridge Removal

Albany County Airport Authority, NY | Ramp Bridge over Access Roads

Putnam County, NY | Mill Road Over Clove Creek

Warren County, NY | Thirteenth Lake Road Culvert

City of Troy, NY | Seawall Stabilization of Hudson River Retaining Wall

Dutchess County, NY | Harlem Valley Rail Trail Rehabilitation

Education

University of Illinois at Urbana-Champaign, IL, B.S. in Civil Engineering (Structural Emphasis)

Registrations & Certifications

Professional Engineer – NY, OH, IL, HI

Structural Engineer – IL

Memberships & Affiliations

Association for Bridge Construction and Design

Number of Years at CHA:

11 years

Nick Bennett, PE

Assistant Lead Structures Engineer

Nick has over 14 years of experience in the design and inspection of bridge structures, in addition to his early years as a geotechnical engineer. His experience in design includes calculations of bridge elements associated with both new and rehabilitated structures, load ratings, developing detailed construction plans and estimates and performing shop drawing reviews. His field experience includes being a team leader for the inspection of all types of bridge structures, ranging from single-span masonry steel-multi girder stream crossings to fracture-critical truss spans and newer modified network tied arch designs.

Working under the direction of Lead Structures Engineer Jeff Najdowski, Nick has been the lead engineer on various VTrans projects, including the Johnson VT Route 100C bridges, Proctor and Pittsford rail bridge load ratings, and Englesby Culvert along the Champlain Parkway for the City of Burlington. The last project was challenging because of the very compressible soils beneath the large box culvert, which involved detailing granular rock columns and settlement platforms to reduce settlement. Representative project experience includes:

Education

Northeastern University, MA, B.S. in Civil Engineering

Registrations & Certifications

Professional Engineer – VT, NY

NETTCP Subsurface Inspector

Erosion & Sediment Control Inspector

Memberships & Affiliations

Board Member of Association for Bridge Construction & Design

American Society of Civil Engineers

Order of the Engineer

Number of Years at CHA:

14 years

Vermont Agency of Transportation

- Pittsford VTRY(12) Siding Construction
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Johnson VT Route 100C Superstructure Replacements
- Proctor VTRY(10) Rail Bridge Rehabilitation
- Pittsford VTRY(11) Rail Bridge Rehabilitation
- Lake Champlain Bridge Replacement
- Jericho Pedestrian Bridge
- Bethel, VT Route 12 over Gilead Brook Bridge Replacement

City of Burlington, VT | Champlain Parkway

City of Port Jervis, NY | East Main Street over the Neversink River

New York State Department of Transportation | Route 32 over the Mohawk River

New York State Thruway Authority | Reconstruction of I-90

Albany County, NY | CR 53 (Jericho Road) over the CSX Selkirk Rail Yard Bridge Removal

City of Cohoes, NY | Bridge Avenue Bridge over the Fifth Branch of the Mohawk River

Maine Department of Transportation | Scour Plans of Action EAST

Massachusetts Department of Transportation | Bridge No N-21-002 Route 122 over Blackstone River

New Hampshire Department of Transportation | Spaulding Turnpike – Newington/Dover

Iana Headley-Kroll, PE

Senior Structures Engineer

Iana has 20 years of experience in the evaluation and design of bridge structures. She is experienced with all aspects of bridge design, including complex modeling, steel and concrete superstructure design, and construction support services.

Iana has been the lead engineer for a wide variety of structure projects for many clients, including East Main Street over the Neversink River for Port Jervis, discussed earlier in this proposal. She has presented that project at multiple conferences, including the Statewide Conference on Local Bridges in NY. Her skills have been utilized for VTrans projects involving construction scheduling, complex design, layouts, and details. She performed design, reviews, and conceptual planning for portions of projects listed below Representative project experience includes:

Education

The University of the West Indies, B.S. in Civil Engineering

Registration & Certification

Professional Engineer – NY

Memberships & Affiliations

American Society of Civil Engineers

Association of Professional Engineers of T & T

Association of State Dam Safety Officials

Association for Bridge Construction & Design

Number of Years at CHA:

17 years

Vermont Agency of Transportation

- Richmond Checkered House Bridge Widening Design-Build
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Johnson VT Route 100C Superstructure Replacements
- Jericho Pedestrian Bridge
- Bethel VT Route 12 over Gilead Brook Replacement

New York State Department of Transportation

- Accelerated Bridge Program Phase 1B Design-Build
- Route 32 over the Mohawk River
- Region 9, 2006-2007 Biennial and Interim Bridge Inspections
- Route 211 over the Wallkill River
- Glenridge Road Reconstruction (Route 50 to Route 146)
- Peer Review of Amsterdam Pedestrian Bridge
- Route 209 over the Neversink River Bridge Replacement

City of Port Jervis, NY | East Main Street over the Neversink River

Albany County, NY | Old Ravena Road over CSX (North Bridge)

Albany County Department of Public Works, NY | Pictuay Road Over Coeymans Creek Bridge Replacement

City of Albany, NY | New Pedestrian Bridge over Manning Boulevard

City of Cohoes, NY | Bridge Avenue Bridge over the Fifth Branch of the Mohawk River

Delaware County Department of Public Works, NY | CR 2 Over Bagley Brook

Columbia County, NY | Replacement Bridge over Roeliff Jansen Kill

Dutchess County, NY | Dutchess Rail Trail

Antonio D'Elia, PE

Junior Structures Engineer

In the seven years since graduating with a Master's in Engineering degree, Antonio has quickly proven himself to be a capable engineer who efficiently assists project engineers with many aspects of bridge design. In his time at CHA, he has designed both single and multi-span structures as part of various bridge replacement and rehabilitation projects. He also has experience in bridge load ratings, sign structure analysis, steel detailing, and culvert design.

For recent VTrans projects, Antonio has been the primary, junior engineer assisting the lead engineer for all aspects of the Proctor, Pittsford, and Johnson projects, including performing load ratings, bridge rehabilitation details, superstructure design, and the many various day-to-day calculations that support an effective project plan. Representative project experience includes:

Vermont Agency of Transportation

- Proctor VTRY(10) Rail Bridge Rehabilitation
- Pittsford VTRY(11) Rail Bridge Rehabilitation
- Johnson VT Route 100C Superstructure Replacements

New York State Department of Transportation

- Accelerated Bridge Program Phase 1B Design-Build
- Route 211 over Wallkill River
- NY 25 over NY 107 Bridge Rehabilitation
- Route 32 over the Mohawk River

New York State Thruway Authority

- MP 191.32 over Flat Creek
- MP 58.43 over Route 207 Bridge Replacement

Warren County, NY | Thirteenth Lake Road Culvert

City of Port Jervis, NY | East Main Street (Route 6) over the Neversink River

City of Troy, NY | Seawall Stabilization Project

City of Schenectady, NY | Kings Road Bridge over Amtrak Bridge Replacement

Education

Rensselaer Polytechnic Institute, NY, M.E. in Civil Engineering

Rensselaer Polytechnic Institute, NY, B.S. in Civil Engineering

Registration & Certification

Professional Engineer – NY

Memberships & Affiliations

Association for Bridge Construction and Design

Number of Years at CHA:

7 years

Phil Roth

Principal Engineering Technician Designer

Phil has over 30 years of experience in detailing, designing, and drafting bridge projects. He has managed the CADD functions and performed almost all CHA's drafting for all VTrans structures and rail bridge projects for over a decade. Phil's prior experience with a steel detailer affords him the insight and judgment to produce highly constructible bridge plans. Representative project experience includes:

Education

Hudson Valley Community College, NY, A.A.S. in Civil Engineering

Memberships & Affiliations

Association for Bridge Construction and Design

Number of Years at CHA:

16 years

Vermont Agency of Transportation

- Proctor VTRY(10) Rail Bridge Rehabilitation
- Pittsford VTRT(11) Rail Bridge Rehabilitation
- Rutland Ripley Road over Otter Creek Bridge Replacement
- Wallingford Pedestrian Bridge Adaptive Re-use
- Bethel, VT Route 12 over Gilead Brook Bridge Replacement
- Bridge 44 – US Route 2 over I-89
- Bennington, VT Route 9 over Roaring Branch Micropile Underpinning
- Jericho Pedestrian Bridge
- Johnson VT Route 100C Superstructure Replacements
- Richmond Checkered House Bridge Widening Design-Build
- Lake Champlain Bridge Replacement
- Ryegate Interstate 91 Culvert Replacement

Town of Rockingham, VT

- Replacement of Bartonsville Covered Bridge
- Worrall Covered Bridge

New York State Department of Transportation

- Accelerated Bridge Program Phase 1B Design-Build
- Route 211 over Wallkill River
- NY 25 over NY 107 Bridge Rehabilitation
- Route 32 over the Mohawk River

Putnam County, NY | Mill Road Over Clove Creek

Warren County, NY | Thirteenth Lake Road Culvert

City of Port Jervis, NY | East Main Street (Route 6) over the Neversink River

Albany County, NY

- CR 253 Superstructure Replacement over NSRR Tracks
- Pictuay Road Over Coeymans Creek Bridge Replacement
- Old Ravena Road over CSX (North Bridge)

City of Cohoes, NY | Bridge Avenue Bridge over the Fifth Branch of the Mohawk River

City of Schenectady, NY | Kings Road Bridge over Amtrak Bridge Replacement

Patrick Weitlauf, PE

Project Engineer

Patrick has six years of experience in traffic engineering, including traffic operations analysis, intersection design, and safety analysis. He routinely uses MicroStation V8i, Synchro, HCS, SIDRA, and other associated programs in his work. Representative project experience includes:

Vermont Agency of Transportation

- Rutland City NH PC24(1) Rehabilitation

City of Burlington, VT, Champlain Parkway

Indiana Department of Transportation

- Traffic Capacity and Operations and Safety Analysis Traffic Capacity and Operations and Safety Analysis
- Safety Studies —15 High-Crash Intersections and Roadway Segments
- Safety/Planning Studies — 4 Locations
- I-65 MOT Queue Analysis
- U.S. 31 Corridor Feasibility Study
- U.S. 31 & Division Road Study Preliminary Engineering Study
- U.S. 36/SR 67 Limited Access, New 4th Leg Intersection and New Split Tee Intersections
- SR 3 and SR 46/CR 250W Intersection Improvements

City of Indianapolis — Department of Public Works, IN

- Market Street West Redevelopmenet — Signs, Lighting, Pavement Markings, Signal Design
- East Market Street Reconstruction
- Central Canal Towpath Extension
- Safe Routes to Transit (IndyGo Red Line, North & South Sections)
- Safe Routes to Transit South

City of Carmel, IN, 146th Street Feasibility Study

City of Fishers, IN, Southeastern Parkway and Cyntheanne Road Roundabout

Hamilton County Highway Department, IN, 146th Street Feasibilty Study

Experience Prior to CHA:

Intersection Improvement and Signal Design, 3rd and Eastern Parkway

Statistical Comparison of Pneumatic Tube and Radar Technical Report

U.S. 60 and I-265 Corridor Analysis, Short Term and Long Term Solutions

Cane Run Road Repaving Design Project

Education

University of Louisville, KY, M.E. in Civil Engineering

University of Louisville, KY, B.S. in Civil Engineering

Registrations & Certification

Professional Engineer: IN, OH

Number of Years at CHA:

6 Years

Matthew Kowalski, IE

Assistant Project Engineer

Education

Clarkson University, NY, B.S. in Civil Engineering and Environmental Engineering

Registrations & Certifications

Engineer-in-Training: NY

Number of Years at CHA:

4 Years

Matt has four years of experience in highway traffic and drainage design in Vermont, New York, New Jersey, Indiana, and Georgia. Representative project experience includes:

Vermont Agency of Transportation

- Rutland City NH PC24(1) Rehabilitation
- Wilmington-Brattleboro NH 2971(1) Reclamation

City of Burlington, VT, Champlain Parkway

Schenectady County, NY, Guilderland & Helderberg Pavement Preservation. Assistant engineer responsible for preliminary and final design services for the mill and fill of Guilderland Avenue and Helderberg Avenue. Design services for this one-mile project included plan production, pavement design, construction/ reconstruction of ADA-compliant pedestrian facilities, signing and striping, construction staging, work zone traffic control, quantity and cost estimating, and project submission documents. Matt was also responsible for the field scoping of existing pedestrian facilities to determine ADA compliance.

Town of East Greenbush, NY, U.S. 9 and 20 Sidewalk Reconstruction. Assistant engineer responsible for preliminary and final design services for the box-widening and new sidewalk construction along US Routes 9 and 20. Design services for this 0.5-mile project included plan production, construction and reconstruction of ADA-compliant pedestrian facilities, drainage improvements, construction staging, work zone traffic control, quantity and cost estimating, and project submission documents.

Middlesex County, NJ, Grant Avenue over Bound Brook Tributary. Assistant engineer responsible for preliminary design services for the small structure replacement of culvert 2-C-5632 in South Plainfield. Matt provided the roadway support for this project. He was responsible for plan production, drainage improvements, utility relocations, work zone traffic control, soil erosion and sediment control, utility relocations, quantity/cost estimating, and project submission documents.

Indiana Department of Transportation, INDOT 6897 Crawfordsville SR 32 and SR 341 Small Structures and Bridges. Assistant engineer responsible for Stage 1 design services for the small structure replacement of structure 032-054-27.02 on SR 32 in Crawfordsville. Matt provided roadway support for the project. He was responsible for plan production, pavement design, roadway grading, and quantity/ cost estimating.

Indiana Department of Transportation, On Call Scoping Reports. Engineer-in-training responsible for producing pavement scoping reports for state routes throughout the Greenfield District. The purpose of these reports is to recommend a pavement rehabilitation alternative that addresses the deficiencies of the roadway. Matt was responsible for the following scoping report materials: existing conditions, roadway history, utilities and railroads, traffic, crash data, design considerations, ADA compliance, and cost estimates.

Sandeep Das, IE

Assistant Project Engineer

Sandeep has 20 years of experience as an engineer in the traffic and transportation industry. His experience includes transportation planning, travel demand forecasting, travel delay reduction analytics, design review, quality control, regulatory standards review, and cost estimation. Sandeep has served in a variety of roles on multiple job sites including inspector, quality controller and on-site consultant with tasks including traffic data collection and analysis, project drawings design, construction scheduling, and maintenance of traffic at all stages of a project. Sandeep has had high involvement on projects related to diverse infrastructure facilities focusing mainly on NYC airports and is familiar with sustainable transportation policies. His representative project experience includes:

Education

Columbia University, NY, MPA in Urban and Social Policy

Michigan State University, MI, M.S. in Civil Engineering

Indian Institute of Technology (IIT), India, B.Tech in Civil Engineering

Registrations & Certifications

Engineer-in-Training: NY

Number of Years at CHA:

1 Year

Vermont Agency of Transportation

- Rutland City NH PC24(1) Rehabilitation

Port Authority of New York and New Jersey

- Traffic Standard Details for the PANYNJ

John F. Kennedy International Airport, Queens, NY

- JFK Terminal 5 Frontage Analysis
- JFK Terminal 5 & 6, Jetblue
- JFK Terminal 8 & 9, American Airlines
- JFK Taxiway A and Taxiway B Bridges Strengthening
- JFK Cargo Service Road - Phase II
- JFK Revisions to Airport Sign System (JFKIA & PANYNJ joint project)
- JFK General Traffic Engineering Services (JFKIA & PANYNJ joint project)

LaGuardia International Airport, Queens, NY

- LGA Parking Study
- LGA AirTrain Feasibility Study

Newark International Airport, Newark, NJ

- EWR Terminal A Redevelopment

Port Authority Bus Terminal, New York, NY

- New, ADA-Compliant Bus Gates

Manhattan Transit Authority, New York, NY

- Fulton Street Transit Center
- 2nd Avenue Subway

Parking and Transportation Planning Study, Lower Manhattan Street Management, NYCDOT, New York, NY

Lincoln Tunnel Safety Improvements, New York and New Jersey

Juvena Ng, IE

Assistant Engineer

Juvena has 16 years of experience as an engineer in the transportation industry. Her experience includes transportation data analysis, travel demand modeling, integrated land use and transportation modeling, urban freight systems, freight planning, transport planning strategies and master planning, highway and interchange design, and traffic safety analysis. Juvena has been involved in large culvert inspections for NYSDOT Regions 8 and 9, and she is experienced in AutoTURN, AutoCAD and Civil 3D. Representative project experience includes:

Vermont Agency of Transportation

- Rutland City NH PC24(1) Rehabilitiation

Indiana Department of Transportation

- Traffic Capacity and Operations and Safety Analysis
- U.S. 136 Corridor Study from Ronald Reagan Pkwy Connector to I-465

City of Indianapolis Dept. of Public Works, IN, Pogues Run - Brookside Park.

City of Columbus, OH

- Downtown Signal Retiming
- Livingston Avenue Pedestrian Safety Study

New York State Dept. of Transportation, I-590 Bridge Replacement

Albany County, NY, New Karner Road Corridor Improvements

Town of Bethlehem, NY, Town Designated Transportation Engineer

Warren County Dept. of Public Works, NY, Corinth Road over Clendon Brook.

Experience Prior to CHA:

National Cooperative Highway Research Program DC, NCHRP 08-111 Effective Decision-Making Methods for Freight-Efficient Land Use

New York State Dept. of Transportation, Regions 8 and 9, Large Culvert Inspections

NYSERDA/NYSDOT, Trusted Vendor Program to Support the Off-hour Delivery Program

Kigali Redevelopment Board, Rwanda, Kigali City Detailed Master Plan

Kigali City Council, Rwanda, Kigali City Detailed Master Plan

Mumbai Transformation Support Unit, India, Mumbai Metropolitan Regional Concept Plan

Tourism Development and Investment Company, Abu Dhabi, Saadiyat Accommodation Village

Nparks, Singapore, East Coast Park Redevelopment Traffic Impact Assessment

Land Transportation Authority, Singapore, Travel Smart Consultancy Services

Education

University of Leeds, United Kingdom, M.S. in Transport Planning

National University of Singapore, Singapore, B.E. in Civil Engineering

Registrations & Certifications

Engineer-in-Training: NY

Experience Details

Research: 4 Years

International Experience (outside of North America): 8 Years

Number of Years at CHA:

1 Year

Emily Timber, RLA

Landscape Architect | Project Manager

Education

SUNY College of Environmental Science and Forestry, NY, M.L.A. in Landscape Architecture

Denison University, OH, B.A. in Environmental Studies and Biology

Registrations & Certifications

Registered Landscape Architect: NY

Memberships & Affiliations

President Elect - New York Upstate Chapter of the American Society of Landscape Architects

American Society of Landscape Architects

Number of Years at CHA:

8 Years

Emily has nine years of comprehensive landscape architecture experience. As a member of CHA's Planning and Landscape Architecture technical group she supports the site planning and design, landscape planting and construction, and visual impact assessment services offered by CHA. Emily has conceptual and detailed stream restoration experience. Most recently, she developed and oversaw the planting of an extensive native planting design for a daylighted stream corridor. Additional experience includes vegetative screening design and stormwater wetland design. Representative project experience includes:

City of Burlington, VT, Champlain Parkway

Buffalo Sewer Authority, NY, Landscape and Site Improvements on Bird Island Campus

New York Power Authority, NYS Canals Western NY Embankment Restoration

City of Albany, NY, Albany Pool Joint Venture Team

- Reflection and Learning Garden
- Tree Survey

Albany Water Board, Albany, NY

- Patroon Creek Daylighting and Tivoli Lake Flood Mitigation Concept Development
- Washington Park Lake Shoreline Improvement Study

Onondaga County Dept. of Parks and Recreation, NY, West Shore Trail Design

New York State Office of General Services, Landscape Architectural Services for the New York State Fair Grounds

Albany County Airport Authority, NY, NEPA and Ecological Services

Dormitory Authority of NYS, Amsterdam Pedestrian Access Feasibility Study

Greater Asheville Regional Airport Authority, NC, Environmental Assessment for Passenger Terminal Building Expansion

Town of Bellingham, MA, South Main St. & Mechanic St. Intersection

Capitalize Albany Corporation, Downtown Albany Feasibility Study Update

John M. Corcoran & Co., Weymouth - Multi-family Residential

Applegreen

- Molly Pitcher and Woodrow Wilson Rest Stops
- Brookdale South Curb-Out Improvements
- Joyce Kilmer Curb-In Improvements
- Vauxhall Curb-Out Improvements
- James Fenimore Cooper Curb-Out Improvements
- Joyce Kilmer Curb-Out Improvements
- Walt Whitman Curb Out

Diane Tirinato

Landscape Designer

Diane has over four years of experience in multidisciplinary planning and landscape architecture. As a member of the land development team, she supports the group with site planning and concept design, landscape planting, visual impact assessment services offered by CHA. Representative project experience includes:

Albany County Airport Authority, Proposed Hangar and Expanding Terminal

Applegreen

- Molly Pitcher and Woodrow Wilson Rest Stops
- Brookdale South Curb-Out Improvements
- Joyce Kilmer Curb-In Improvements
- Vauxhall Curb-Out Improvements
- James Fenimore Cooper Curb-Out Improvements
- Joyce Kilmer Curb-Out Improvements
- Walt Whitman Curb Out

New York State Thruway Authority, I-90 Syracuse

City of Duluth, GA, Main Street Pocket Park

Massachusetts Department of Transportation, Bellingham Middle School

New York State Dept. of Transportation, Canton Street Bridge

Albany Water Board, Hackett Boulevard Green Infrastructure 2020 Program Update

Putnam County Department of Highways, NY, Fair Street (CR 60) Reconstruction

Education

SUNY College of Environmental Science and Forestry, NY, B.L.A. in Landscape Architecture

Registrations & Certifications

NYS Erosion & Sediment Control Training Certificate

Memberships & Affiliations

Eastern Section Chair - New York Upstate Chapter of the American Society of Landscape Architects

American Society of Landscape Architects

Years at CHA:

2 Years

Samuel Huntress

Landscape Designer

Samuel has three years of professional experience in landscape design. His experience includes translating design plans, grading, site evaluation, and creating design concepts and rendered plans. Samuel has been responsible for the implementation of design plans on various scales from residential to public projects. His representative project experience includes:

Rensselaer County, NY, 99 Troy Road, Master Plan and Memorial Plaza

New York State Office of Parks, Recreation, and Historic Preservation

- Exterior Renovations of Regional Headquarters (Belmont, NY)
- Gericke Barn Rehab-Clay Pit Ponds (Staten Island, NY)

Champlain Hudson Power Express, Various Upstate NY Locations

City of Troy, NY, Landscape Term Agreement

Dario Designs, Beacon Street, Brookline, MA

Herb Chambers, Boston Honda, Boston, MA

LIDL, Norcross, GA, Store 1517 Norcross (4990 Jimmy Carter Blvd.)

QuikTrip, 7250 Remote Travel Center

Town of Winthrop, MA, Landscape Design on Revere Street

Education

University of Massachusetts Amherst, MA, B.S. in Landscape Architecture

Number of Years at CHA:

1 Year

Section G. | Subconsultants

Manchester STP 2970(1) Composite Rehabilitation | VTrans

Section G. | Subconsultants: Vermont Survey and Engineering, Inc.

Vermont Survey and Engineering, Inc.
79 River Street, Suite 201
Montpelier, VT 05602

Contact: Andrew McQueeney
Email: amcqueeney@vermontsurvey.com
phone: 802.229.9138 | fax: 802.229.9130

Former firm names and year established:

- Vermont Survey and Engineering, Inc., 1992
- Vermont Survey Consultants, Inc., 1984
- Aquatec Survey Corporation, 1982

VERMONT SURVEY AND ENGINEERING, INC. (VSE) is a New England-based Land Surveying firm, first incorporated in 1982. VSE's client base encompasses federal, state, and municipal agencies, as well as commercial, industrial, and residential developers. VSE provides survey services to engineering firms, architectural firms, environmental firms, utility companies, and construction companies. VSE's professional staff includes land surveyors licensed in Vermont, New Hampshire, and New York. Right-of-way services primarily focus on highway design and related activities for state and municipal agencies, including the preparation of right-of-way plans and associated title abstracting. Surveying services include geodetic control and topographic, hydrographic, boundary retracement, ALTA/ACSM, and construction layout surveys.

VSE's extensive experience working on all types of VTrans projects has included projects for highways, bridges, aviation, rail, and right-of-way. Services cover topographic survey, establishing and setting control, creating right-of-way plans, and boundary retracement plats. VSE has provided boundary surveys for Vermont Department Buildings and General Services and right-of-way plans for the New Hampshire Department of Transportation. The firm has consistently delivered skilled personnel and expertise to the many VTrans projects, and is committed to continuing its relationship and quality product during this contract.

Section G. | Subconsultants: Hartgen Archeological Associates, Inc.

Hartgen Archeological Associates, Inc.,
1744 Washington Avenue Extension
Rensselaer, NY 12144

Post Office Box 81
Putney, VT 05346

Contact: Thomas Jamison
Email: amcqueeney@vermontsurvey.com
phone: 802.387.6020 | fax: 802.387.8524

Former firm names and year established:

- Hartgen Archeological Associates, Inc., 1973

HARTGEN ARCHEOLOGICAL ASSOCIATES, INC., founded in 1973, has grown to become the largest privately-owned cultural resource management firm in the northeast and a recognized leader in the field. The company provides a full range of services which help clients to comply with the requirements of Section 106 of the National Historic Preservation Act, the National Environmental Policy Act, Vermont Act 250 processes, the Vermont Agency of Transportation (VTrans), and the Federal Highway Administration (FHWA) regulations. Hartgen has extensive experience conducting cultural resource projects for federal, state, municipal, and private clients.

Hartgen has completed over 1,000 archeological studies, historic preservation reviews, and architectural studies throughout Vermont including over 430 for VTrans. The firm's experience in Vermont includes all phases of cultural resource management including ARAs, Phase IA, IB, II, and III archeological investigations; National Register eligibility synopses and architectural history; HABS/HAER documentation; historical deed and document research; historical map research; development of archeological research designs and master plans; artifact cataloging, design, and presentation of public educational signs, pamphlets, and exhibits; and writing and publication of research reports including presentation of results at scholarly and public meetings where appropriate. Hartgen's experience encompasses the range of projects typically undertaken by VTrans, such as highway, bridge, and aviation projects. Clients include engineering firms, private organizations, museums, municipal state governments, and federal agencies.

Hartgen's staff includes over 30 well-qualified, experienced professionals, including archeologists, an architectural historian, laboratory staff, documentary researchers, CAD/GIS designers, and editorial and administrative personnel, many of whom have worked together as a team for years. The staff's individual professional backgrounds and their shared experiences in the field are the foundation of Hartgen's growth and success. The staff is well versed in cultural resource regulations including Section 106 of the National Historic Preservation Act (NHPA). Project oversight is provided by in-house 36 CFR 61 qualified Principal Investigators. Hartgen has also has staff certified in health and safety operations at hazardous materials (HAZMAT) sites and in the Native American Graves Protection and Repatriation Act (NAGPRA).

Vermont Survey and Engineering, Inc.

Surveyors and Civil Engineers

79 River Street, Suite 201, Montpelier, Vermont 05602
(802) 229-9138, info@vermontsurvey.com

Andrew McQueeney – Principal/Project Manager

Number of years with firm: 31

Mr. McQueeney has been involved with engineering and surveying since 1985. Before joining Vermont Survey and Engineering, Inc. in 1991, he was employed by McDonald-Sharpe Surveyors and Engineers of Old Saybrook, CT. As CAD Manager, he is responsible for developing AutoCAD, MicroStation and InRoads deliverables as well as overseeing CAD work of others. He has been using AutoCAD software since 1991 and Bentley Systems and Intergraph software since 1998. A Principal of the company since 2009, Mr. McQueeney now coordinates the activities of the field crews and office staff, and acts as Project Manager for the majority of VTrans projects that VSE is involved with.

Mr. McQueeney has been VSE Project Manager for the following VTrans projects:

Structures Projects

Bennington ER BHF 010-1(45)
Bethel BHF 0241(38)
Cavendish ER BRF 0146(13)
Corinth BRO 1447(29)
CULV032-CULV033 Statewide
Fairfield BRO 1448(38)
Hyde Park STP CULV(26)
Lincoln FAS 0188(TH1)
Lunenburg NH CULV(27)
New Haven FAS 0183(TH2)
North Hero-Grand Isle BHF 028-1(26)
Plymouth ER BRS 0149(5)
Rockingham BRF 0126(12)
Ryegate IM CULV(28)
Waterbury IM 089-2(43)
Woodstock BHO 1444(52)

Roadway Projects

Andover-Chester STP 016-1(28) SC
Bakersfield STP SCRP(11)
Brandon-Rochester ER STP 0162(21)
Guilford-Rockingham IM SIGN(44)
Marlboro-Brattleboro NH 010-1(46) SC
Milton IM 089-3(66)
Morristown STP HES 030-2(28)
Randolph-Northfield STP 0187(10) SC
Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

Professional Affiliations/Education
A.A.S. Surveying and Forestry - Paul Smith's College
Hazardous Waste Operations & Emergency Response OSHA 29 CFR 1920.120

Vermont Survey and Engineering, Inc.

Surveyors and Civil Engineers

79 River Street, Suite 201, Montpelier, Vermont 05602
(802) 229-9138, info@vermontsurvey.com

Stephen Fraser, LS – Principal/Project Manager

VT LS #527
NH LS #971
NY LS #050855

Number of years with firm: 18

Mr. Fraser has been involved with engineering and surveying since 1971. Before joining Vermont Survey and Engineering, Inc. in 2005, he was employed for twenty-five years by the City of Barre as a mapping and surveying specialist. During this period, his responsibilities included maintaining water, sewer, and surface utility maps; GIS mapping using ArcInfo 8.0.3; project design and deed research; municipal surveying and construction layout; assisting all departments with their mapping needs; assisting the public regarding all aspects of property ownership; and E 911 liaison.

Since joining Vermont Survey, Mr. Fraser has served as Project Manager for survey and right-of-way efforts associated with a twenty-five mile power transmission project in western Vermont, which includes plat preparation and title research on approximately 150 properties. He is also Manager-In-Charge of deed research, property surveys, and plat preparation and is an accomplished AutoCAD operator.

Mr. Fraser has been involved with the following VTrans projects:

Bennington Bypass North NH F 019-1(5)
Bennington AV-FY 15-010
Brandon NH 019-3(496)
Burlington MEGC M 5000(1)
CULV032-CULV033 Statewide
East Montpelier-Marshfield-Plainfield HPRC(1)
Essex-Westford HPRC(2)
Hartford STP 0113(59)S
Hartford STP BIKE(62)
Hartford STP EH09(15)
Hartford STP EH10(18)
Middlebury AIR 04-3181
Morristown STP HES 030-2(28)
South-Hero STP HES 028-1(22)
South Hero STP SHST(1)
Williston STP HES 5500(12)

Professional Affiliations/Education
A.A.S. Civil Engineering Technology (Surveying Major) – VT Technical College
Vermont Society of Land Surveyors
New Hampshire Land Surveyors Association
New York State Association of Professional Land Surveyors

Vermont Survey and Engineering, Inc.

Surveyors and Civil Engineers

79 River Street, Suite 201, Montpelier, Vermont 05602
(802) 229-9138, info@vermontsurvey.com

Matthew Yefchak – Senior Crew Chief

Number of years with firm: 22

Mr. Yefchak began his career at VSE as a field assistant on a survey crew. He has steadily progressed through the years and has been a Party Chief since 2004. He has experience in highway construction layout, 3-dimensional topographic surveys, boundary surveys, and as-built surveys. Matt has taken responsibility for implementing a quality control plan for VSE, which has standardized the way in which all field crews collect and report data. This effort has improved the quality of VSE's work, and resulted in cost savings for our clients.

Mr. Yefchak has been involved with the following VTrans projects:

Structures Projects

Bennington ER BHF 010-1(45)
Bethel BHF 0241(38)
Cavendish ER BRF 0146(13)
Corinth BRO 1447(29)
CULV032-CULV033 Statewide
Fairfield BRO 1448(38)
Hyde Park STP CULV(26)
Lincoln FAS 0188(TH1)
Lunenburg NH CULV(27)
New Haven FAS 0183(TH2)
North Hero-Grand Isle BHF 028-1(26)
Plymouth ER BRS 0149(5)
Rockingham BRF 0126(12)
Ryegate IM CULV(28)
Waterbury IM 089-2(43)
Woodstock BHO 1444(52)

Roadway Projects

Andover-Chester STP 016-1(28) SC
Bakersfield STP SCRP(11)
Brandon-Rochester ER STP 0162(21)
Guilford-Rockingham IM SIGN(44)
Marlboro-Brattleboro NH 010-1(46) SC
Milton IM 089-3(66)
Morristown STP HES 030-2(28)
Randolph-Northfield STP 0187(10) SC
Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

Vermont Survey and Engineering, Inc.

Surveyors and Civil Engineers

79 River Street, Suite 201, Montpelier, Vermont 05602
(802) 229-9138, info@vermontsurvey.com

Matthew Backman – CAD Operator/ROW Agent/Survey Party Chief

Number of years with firm: 23

Mr. Backman began his career at VSE as a field assistant on a survey crew. He has steadily progressed through the years and has been a Survey Party Chief since 2006. He has experience in highway construction layout, 3-dimensional topographic surveys, boundary surveys, and as-built surveys. As an experienced CAD Operator, Matt has been lead draftsman on several Right-Of-Way projects for VTrans and the NH DOT.

Mr. Backman has been involved with the following VTrans projects:

Structures Projects

Bennington ER BHF 010-1(45)
Bethel BHF 0241(38)
Cavendish ER BRF 0146(13)
Corinth BRO 1447(29)
CULV032-CULV033 Statewide
Fairfield BRO 1448(38)
Hyde Park STP CULV(26)
Lincoln FAS 0188(TH1)
Lunenburg NH CULV(27)
New Haven FAS 0183(TH2)
North Hero-Grand Isle BHF 028-1(26)
Plymouth ER BRS 0149(5)
Rockingham BRF 0126(12)
Ryegate IM CULV(28)
Waterbury IM 089-2(43)
Woodstock BHO 1444(52)

Roadway Projects

Andover-Chester STP 016-1(28) SC
Bakersfield STP SCRP(11)
Brandon-Rochester ER STP 0162(21)
Guilford-Rockingham IM SIGN(44)
Marlboro-Brattleboro NH 010-1(46) SC
Milton IM 089-3(66)
Morristown STP HES 030-2(28)
Randolph-Northfield STP 0187(10) SC
Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

HARTGEN archeological associates inc

BRANT W. VENABLES, PHD, RPA
Project Manager

EDUCATION:

Binghamton University
Doctor of Philosophy, Anthropology, May 2018

Master of Arts, Anthropology, May 2013

Ithaca College
Bachelor of Arts, Anthropology, May 2009, Magna Cum Laude, Honors in Anthropology

EXPERIENCE:

2022 St. Johnsbury LaPierre Solar (HAA# 5883-21), St. Johnsbury, Caledonia County, VT
Conducted a Phase IB archeological investigation on a 5.25-acre property overlooking the Passumpsic River. While several 19th-century cut nails were found on the eastern side of the property, no other artifacts or features were discovered, and no further archeological work was recommended. Duties included supervising the investigation, interpreting the results, and writing the report.
Project sponsor: Norwich Solar

2022 South Burlington Stormwater (HAA# 5869-11), South Burlington, Chittenden County, VT
Conducted an archeological resource assessment for a stormwater system upgrade for four areas in South Burlington, totaling 129 acres. Through background research and field inspection, it was determined that two of the four areas had a low to moderate sensitivity for precontact and historic sites and were recommended for Phase IB testing. Duties included conducting the field inspections, interpreting the results, and writing the report.
Project sponsor: Fitzgerald Environmental Services

2022 Beaver Brook Dam Removal (HAA# 5725-21), Wilmington, Windham County, VT
Conducted a Phase IB archeological investigation of a proposed earthen dam removal impacting an 8.85-acre property. The remains of the dam and an adjacent sawmill/sugar house were mapped and photographed, and shovel tests in five-meter intervals were excavated near these remains, though the footprint of the sawmill structure was excluded (as per VDHP). No significant artifacts were found and and no further archeological work was recommended. Duties included assisting in the investigation, interpreting the results, and writing the report (currently in draft).
Project sponsor: Connecticut River Conservancy

2007-2020 Hamlet of Enfield Falls, Ithaca, NY
Created and maintained extensive Excel spreadsheets of artifacts excavated from multiple residential and business structures from the 19th century community of Enfield Falls. Assisted in the preparation and writing of numerous reports submitted to New York State Parks. Head of laboratory photography.
Project sponsor: Cornell University

2010, 2014-2017 The Eight Square Schoolhouse, Ithaca, NY
Co-led preliminary subsurface testing of coal midden at rear of the National Register schoolhouse (1827). Directed subsequent shovel testing and excavations of what was determined as a sheet midden in the front yard area of site. The yard area excavation location and strategy was based off of a ground penetrating radar survey conducted by faculty and students from Ithaca College. Instructed public archaeology program participants in excavation methods, artifact identification, and site protection ethics.
Project Sponsor: The History Center in Tompkins County

2012 John Moore Farm Site, Binghamton, NY
Graduate Assistant for Binghamton University field school excavating pre-contact Native American site. Instructed undergraduate participants in excavation methods. Handled daily logistics of unloading/loading field equipment and cross-checked artifact bags field inventory with archaeology lab records at the end of the workday.
Project Sponsor: Binghamton University

2011 Newtown Battlefield, Elmira, NY

HARTGEN archeological associates inc

WALTER R. WHEELER
Senior Architectural Historian

EDUCATION:

Rensselaer Polytechnic Institute
Bachelor of Architecture May 1987
Bachelor of Science, Building Science, May 1986

QUALIFICATIONS:

36 CFR Part 61 Qualified Architectural Historian

SPECIAL TRAINING:

Architectural History Consultant Training
VDHP, Montpelier, VT, April 2019.

Vermont Community Development Program Qualified Professionals Training
VDHP, Montpelier, VT, September 2016.

Evaluating Significance of Historic and Archeological Resources Workshop
Vermont College, Montpelier, VT, May 2001
Historic Preservation Consultant training and Section 106 training

PROFESSIONAL EXPERIENCE:

June 1999 – Present — Senior Architectural Historian
Hartgen Archeological Associates, Inc.
Oversee and prepare architectural resource surveys, including pre-assessments, literature reviews and historical documentation; field reconnaissance; report and proposal preparation. Responsible for preparing documents to be reviewed by VAOT, VDHP, and USACOE, for SEQR, Section 106 and NEPA. Preparation of reports generated under ACT 250 and the FCCs Nationwide Programmatic Agreement, including preparation of forms 620 and 621.

November 1992 – June 1999 — Architectural History Consultant
Identified, analyzed, and assessed historic structures; researched and wrote for exhibitions and publications including Historic Structures Reports; executed drawings in connection with restoration projects. Clients included Rensselaer County Historical Society; Robert Pierpont, both in Troy, NY; towns of Durham and Oak Hill, NY; Albany Institute of History and Art; Metropolitan Museum of Art; the New York Public Library, and John G. Waite Associates, Albany, NY.

May 1984—November 1992 — Junior Architect
Worked for the Office of the New York State Architect, Wagoner & Reynolds, and in the office of Robert N. Pierpont as a Junior Architect. Responsible for restoration projects including the Governor's Mansion, the New York State Capitol, and Wilborn Temple (all in Albany, NY), and the Knickerbocker Mansion, in Schaghticoke, NY.

PRINCIPAL PUBLICATIONS:

2020 "Post-Colonial New World Dutch Framing Innovations and the Development of the Balloon Frame," in James W. P. Campbell et al eds., *Proceedings of the Seventh Annual Conference of the Construction History Society.* Cambridge, England: The Construction History Society.

2016 "Magical Dwelling: Apotropaic Building Practices in the New World Dutch Cultural Hearth," in Christiane Bis-Worch and Claudia Theune, eds., *Ruralia XI: Religion, Cults & Rituals in the Medieval Rural Environment.* Leiden, Netherlands: Sidestone Press, 373-396.

2010 "Once adorned with quaint Dutch tiles...: A Preliminary Analysis of Delft Tiles Found in Archaeological Contexts and Historical Collections in the Upper Hudson Valley," in Penelope Ballard Drooker and John P. Hart, eds., *Soldiers, Cities and Landscapes: Papers in Honor of Charles L. Fisher.* New York State Museum Bulletin 513, 107-150. Albany, NY: New York State Museum.

2009 *Architects in Albany*. Diana S. Waite, editor. Albany, NY: Mt Ida Press/ Historic Albany Foundation. Contributed two biographical essays.

2005 *The Encyclopedia of New York State*, Peter Eisenstadt, editor. Syracuse, NY: Syracuse University Press, 2005. Author of entries "Philip Hooker," "Archimedes Russell," "Upright and Wing Houses," "Cobblestone Architecture," "Empire State Plaza," and "Architects and Architecture of Syracuse and Central New York."

2000 *The Marble House in Second Street: Biography of a Town House and its Occupants, 1825-2000*. Troy, NY: Rensselaer County Historical Society.

1993 *A Neat Plain Modern Stile: Philip Hooker and His Contemporaries, 1796-1836.* University of Mass. Press, Amherst, Mass.

HARTGEN archeological associates inc

BRIAN L. KNIGHT, M.S.
Architectural Historian

EDUCATION:

The University of Vermont
Master of Arts, Historic Preservation, May 1997

The University of Vermont
Bachelor of Arts, Political Science May 1993

EXPERIENCE:

Hartgen Archaeological Associates, Rensselaer, NY
Architectural Historian, 2022-Present

Brian Knight Research
Historic Preservation Consultant, 1997-Present

PROJECTS:

2022 *Newfane STP BP21 (18) Scoping Study, Newfane, VT*
Conducted an Historic Resources Identification Assessment
Project Sponsor: DuBois & King, Inc

2022 *Pittsford Tap TA 20 (19)*
Conducted an Historic Resources Identification Assessment
Project Sponsor: DuBois & King, Inc

2022 *Castleton TAP TA 20(2) Scoping Study, Castleton, VT*
Conducted an Historic Resources Identification Assessment
Project Sponsor: Fuss & O'Neill, Inc

2022 *Bennington High School Tax Credit, Bennington, VT*
Assisted in preparation of Parts 1-3 of Rehabilitation Investment Tax Credit Application
Project sponsor: Hale Resources

2022 *Shelburne Shipyard, Shelburne, VT*
Researched and prepared National Register nomination
Project sponsor: Town of Shelburne

2022 *Maple Corner, Calais, VT*
Researched and prepared National Register nomination
Project sponsor: Town of Calais

2022 *Vermont Sanitarium/Vermont Police Academy, Pittsford, VT*
Prepared a Historic Structures Report
Project sponsor: State of Vermont

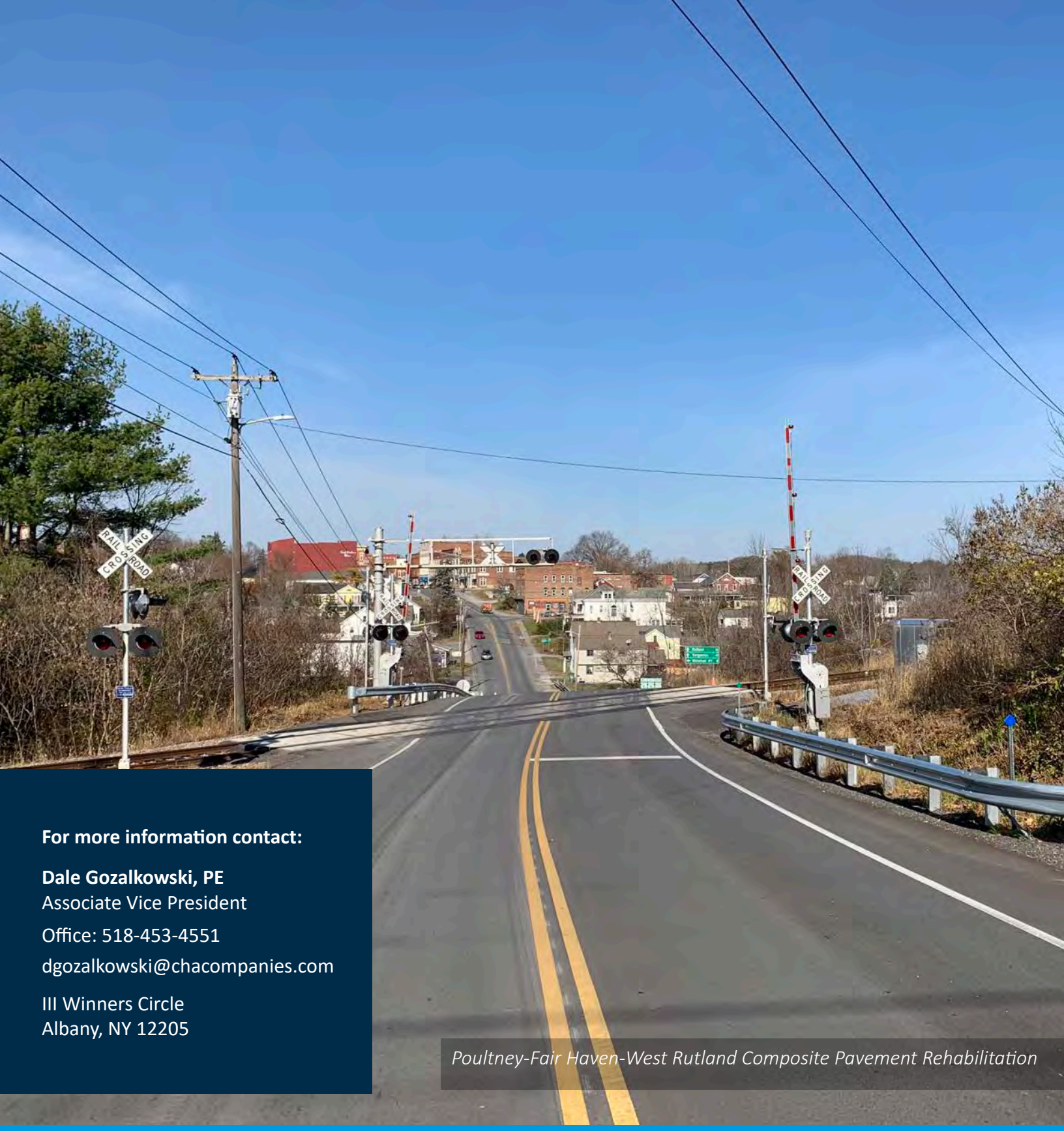
2022 *Wallace Dam/Reynolds Dams, Dorset, VT*
Prepared a Historic Resources Documentation Package for two dams
Project sponsor: Poultney Mettowee Natural Resources Conservation District

2021 *Arlington Common, Arlington, VT*
Conducted a Section 106 Review and prepared a VARI Form
Project sponsor: Arlington Arts Enrichment Program

2021 *Roxbury Fish Hatchery, Roxbury, VT*
Researched and prepared National Register nomination
Project sponsor: Vermont Department of Fish and Wildlife

PUBLICATIONS:

Snowboarding in Southern Vermont: From Burton to the US Open (2018): Documents the birth of east coast snowboarding in southern Vermont and the evolution of the sport from the fringe to the mainstream; *No Braver Deeds: The Northshire in the Civil War* (2004): Documents the soldiers of the Equinox Guards during the Civil War.



Poultney-Fair Haven-West Rutland Composite Pavement Rehabilitation

For more information contact:

Dale Gozalkowski, PE
Associate Vice President

Office: 518-453-4551

dgozalkowski@chacompanies.com

III Winners Circle
Albany, NY 12205