

Qualifications for

# At-The-Ready Consultant Engineering Services for Municipalities: Design

Submitted to Vermont Agency of Transportation



March 9, 2020



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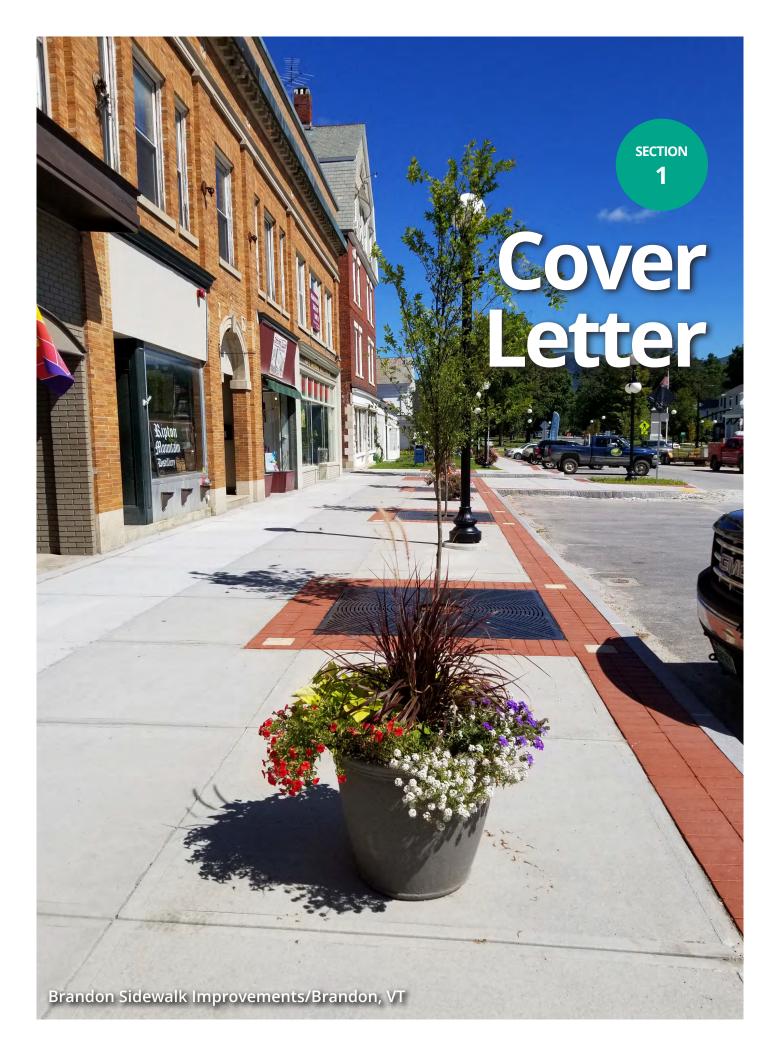
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March 9, 2020

Ms. Nydia Lugo, Technical Development Engineer Vermont Agency of Transportation Municipal Assistance Bureau 219 North Main Street Barre, VT 05641

#### RE: At-The-Ready Consultant Engineering Services for Municipalities: Design

Dear Ms. Lugo:

Municipalities across Vermont face challenges with maintaining infrastructure and improving the user experience. These challenges can be attributed to funding issues, manpower, location, or even weather related concerns. With the Vermont Agency of Transportation (VTrans) having the At-The-Ready contract mechanism, municipalities have a great opportunity to select a qualified consultant without having to administer a traditional procurement process. Having been a trusted project partner with VTrans for more than 35 years, and a current At-the-Ready contract holder, Fuss & O'Neill has the technical capacity and experience in Vermont to help municipalities upgrade their infrastructure.

VTrans is Fuss & O'Neill's top client, and our firm continues to invest in Vermont, both at a state and local level. We currently hold retainer contracts with VTrans for Highway, Safety and Design, Structures Engineering, Pavement Management, and At-the-Ready. We have a terrific understanding of the VTrans process, having completed many projects through their Municipal Assistance Bureau (MAB), and we enjoy working on local projects throughout Vermont. Through the At-the-Ready contract, Fuss & O'Neill is currently designing the Williston Road Cycle Track in South Burlington.

With more than 300 employees across New England, our team still has the resources of a large firm, with the responsiveness and attention of a smaller firm. This organizational structure allows us to both plan the appropriate staff and resources on long-term needs, while being able to react to time sensitive requirements as well. With in-house disciplines like transportation and roadway design, geotechnical engineering, bridge engineering, stormwater management, landscape architecture, and electrical engineering among others, our team is able to address more services internally, resulting in a streamlined project process. Our team will be led by Project Manager Patricia Shedd. Patricia has been exclusively serving VTrans since she started with the firm in 1998. A Vermont native, Patricia is invested both personally and professionally in the development of the State's built environment, and her commitment to help improve the facilities that serve Vermont is as strong as ever. She will be supported by a talented team of technical professionals that share her desire to continue to improve infrastructure throughout Vermont.

205 Billings Farm Road Suite 6B White River Junction, VT 05001

802.698.0370

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California Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Herein we detail qualifications that make Fuss & O'Neill uniquely qualified to support VTrans and municipalities throughout Vermont in the At-The-Ready contract. Please contact the undersigned with any questions.

Sincerely,

Porti un Shedd

Patricia Shedd Program Manager | Project Manager 603.668.8223 x2184 pshedd@fando.com

Philip Forzley, PE Principal-in-Charge | Vermont Office Manager 603.668.8223 x2117 pforzley@fando.com

# General Firm Information

SECTION

Redstone Trailway/East Longmeadow, MA



# **General Firm Information**

Fuss & O'Neill is a full-service engineering firm with a depth of staff and experience to complete any project – from initial design to final construction. Headquartered in Manchester, CT, our 300+ person firm has 8 regional offices throughout all 6 New England states. As we grow in size, we maintain our client-first philosophy. We work closely with all stakeholders to give life to a community's vision. Our professional staff maintains licenses and certifications across a wide range of engineering, planning, landscape architecture, design build, scientific, and manufacturing disciplines.

We place great emphasis on collaboration, both within the company and with our clients. We are guided by what is best for the client and the project, identifying project champions, naming project leaders, building project teams, and providing responsive service and quality deliverables. Our mission is to provide our clients with innovative and practical engineering, scientific, and planning solutions. It is what we have been doing since our firm was established in 1924, and what we remain committed to do.

### **Firm History**

Fuss & O'Neill was founded in 1924, and has been practicing engineering for nearly a century. In 2017, Fuss & O'Neill, acquired CLD Consulting Engineers, resulting in a more diverse, dynamic overall firm. Below are former firm names and dates of those incorporations:

Griswold Services, Inc. – 1925 to 1967 Griswold Engineering, Inc. – 1967 to 1971 Griswold & Fuss, Inc. – 1971 to 1977 Fuss & O'Neill, Inc. – 1977 to present

## **Main Point of Contact**

Patricia Shedd Associate, Highway Team Leader Fuss & O'Neill, Inc. 50 Commercial Street Manchester, NH 03101 603.668.8223 x2184 pshedd@fando.com





Over the years, Fuss & O'Neill has developed strong working relationships with various local and state transportation officials, and our firm has acquired a solid understanding of their respective standards for roadway design. Our engineers have all become well-versed in VTrans design standards, engineering documents, and specifications. We have worked with municipal personnel on large-scale projects such as the Pittsford-Brandon US Route 7 corridor for more than two decades, and we have worked on smaller projects, such as the Stowe Lower Main Street sidewalk project. No matter the size and scope of the assignment, Fuss & O'Neill will provide qualified personnel, that have been through the VTrans MAB design process, to deliver the quality, service and technical expertise that your project requires.

VTrans is Fuss & O'Neill's top client across the firm. We have a team solely dedicated to serving VTrans and projects that come through the Municipal Assistance Bureau (MAB). Our team has a great track record in helping municipalities navigate the VTrans process while delivering project solutions that meet the needs of their end-users.

Fuss & O'Neill's specialties include roadway and highway design, intersection and signal design, bicycle and pedestrian facility designs, bridge and culvert design and replacement, and additional transportation and traffic engineering projects. Our team also has extended in-house abilities that encompass right-of-way services, geotechnical engineering, environmental engineering and hazardous materials remediation, landscape architecture, and lighting design – all components that could contribute to municipal projects.

Along with all of our in-house capabilities, Fuss & O'Neill is teaming with local, talented, experienced sub-consultants to provide a comprehensive suite of services for the At-The-Ready contract. Fuss & O'Neill is teaming with EIV Technical Services for environmental permitting support, Vermont Survey and Engineering (VSE) for survey services, and Hartgen Archeological Associates for archeological and historic services.





# **Areas of Expertise**

# **Roadway Design and Safety Engineering**

Through our vast experience working on hundreds of roadway projects throughout New England, our transportation engineers have become wellversed in roadway geometry, drainage, traffic signal design, traffic calming, and context-sensitive design techniques from initial preliminary engineering design stages through the construction support phase. Our highway designers have handled assignments from the largest interstate highway improvements to small local road and intersection geometry.



Signals in Jericho Improve Safety Fuss & O'Neill designed signals at the intersection of VT 15 and Browns Trace Road in Jericho to meet the traffic and safety needs of the community.

Our engineers have design and field inspection experience with the construction of municipal infrastructure projects, as well as projects funded by various state programs in New Hampshire, Vermont, Maine, Connecticut, Massachusetts, and Rhode Island, allowing us to quickly adapt to the specific project needs of a municipality. Over the years we have developed strong working relationships with various local and state transportation officials and have acquired a solid understanding of their respective standards for roadway design. We evaluate each roadway project in a thorough manner before developing a design to address the needs and concerns of individual communities. We are able to evaluate an existing high-crash location, safety issue, or access management concern and integrate our highway design recommendations with proposed land use and regional transportation improvement strategies. Our roadway safety engineering experience includes designing safety elements such as guardrails, barrier systems, impact attenuators, breakaway sign supports, and other safety devices, as well as special treatments for difficult locations.

Over the years our firm has developed a strong working relationship VTrans, and have a solid understanding of their respective standards for roadway design. We evaluate each project before developing a design that includes context-sensitive solutions to address the needs and concerns of the individual communities. Fuss & O'Neill has the experience to evaluate existing accident/ safety issues or access management concerns and integrate our highway design recommendations with proposed land use and regional transportation improvement strategies.

Fuss & O'Neill has been providing construction administration and bidding services for state, municipal, and private projects throughout its history. Our construction services include communication with the public, full or part-time project inspection, running construction meetings, and erosion and sediment control inspections. We review and respond to contractor submittals, requests for information, quality control field test reports, and payment requests. We also develop design modifications, review proposal requests and change orders, prepare contract close-out information, and review/assemble record drawings.





# **Bicycle, Pedestrian Facilities and Rail Trails**

Greenways connect communities. They offer a break from the solitary and confined methods of traditional travel, creating a shared avenue to the natural environment. At Fuss & O'Neill, we combine our firsthand knowledge of regional trail networks with our decades of local site/civil engineering experience to develop greenways and rail trails, transforming underused space into safe and traversable destinations.

Fuss & O'Neill has planned, designed, and permitted some of the most progressive transportation solutions in the Northeast, while always adhering to state and environmental regulations. We design with the user in mind – creating suitable spaces for cyclists, walkers, runners, and those with special needs.



Route 127 Recreation Path Restoration Fuss & O'Neill repaired and replaced an eight foot wide section of the recreation path that suffered slope failure. The project involved removal of the failed pavement and subbase, and replacement and restoration in-kind with extruded polystyrene block as lightweight backfill.

Each greenway, while often providing connectivity to a larger system, has its own identity. Each must pair aesthetically with its natural surroundings. Our engineers and planners design with this compatibility in mind – looking for reuse and refurbishment opportunities and using natural, local, and sustainable materials whenever possible. With nature guiding our design path, the result is a natural fit.

## **Bridge and Culvert Engineering**

Fuss & O'Neill provides bridge engineering services to municipalities, state agencies, architects, industrial, and private clients for vehicular and pedestrian use. Projects range from inspection and evaluation of existing structures to the design of bridge repairs, rehabilitations, replacements, and new structures.

Utilizing a variety of construction materials, we pride ourselves on designing bridges, arches, and culverts that complement their surroundings while meeting the needs of our clients and community residents. Because of our extensive experience in this field, we are able to develop innovative, cost-effective solutions that minimize visual and physical impacts to the surroundings and achieve project goals. Our expertise includes repairs to concrete and steel bridge elements, rehabilitation of historic structures, single and multiple span bridges over waterways, roadways, interstate highways, and railroads, as well as a variety of steel trusses, stone and masonry arches, precast concrete boxes/arches/frames, timber, steel and pre-stressed concrete girders. We regularly incorporate staged construction techniques into our designs to maintain traffic during construction. We also perform type studies and load ratings and design temporary shorings and supports for construction activities.

As a multidiscipline engineering firm, we have the ability to coordinate survey, geotechnical engineering, utilities, wetlands, hydrologic/hydraulic engineering, roadway design, maintenance and protection of traffic, permitting, property impacts, and public outreach activities in order to develop designs and repairs that protect the environmental integrity of the location and bring the project to a successful conclusion.

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# Sub-consultant Partners, Roles and Qualifications

Fuss & O'Neill has teamed with the following sub-consultants for 20 years, and collectively our teams have delivered quality project solutions to VTrans and Vermont municipalities on a variety of projects. We continue to choose these firms, not only because of their familiarity with VTrans and the Agency's design process, but because we have great trust that they will provide the technical expertise on time and within budget. EIV and VSE hold their respective VTrans On-call contracts, and Hartgen has provided archeological and historic services on VTrans projects for decades. This is a seamless team, and the following shows our sub-consultants' outstanding qualifications and roles for this contract.

### EIV Technical Services Environmental Permitting

Contact: Jacqueline Dagesse 106 East Allen Street, #506 Winooski, VT 05404 802-497-3653 jdagesse@eivtech.com



EIV is a certified DBE in Vermont and was recently awarded a VTrans Environmental On-call contract which includes NEPA and all the services that would be necessary for roadway and traffic projects anticipated under this on-call. They routinely coordinate with VTrans, Federal and State Agencies for the purpose of obtaining environmental resource information to contribute in the development of responsible designs. They understand that this coordination can have a significant impact on the project schedule and we have been able to move projects through the permit application process ahead of project deadlines. EIV has led local concerns meetings, presented at environmental assessment public meetings and Act 250 Hearings. EIV and Fuss & O'Neill have collaborated together on projects for over 20 years, and Fuss & O'Neill is serving as a subcontractor on the recent VTrans Environmental On-call contract won by EIV.

EIV fully supports VTrans' commitment to develop projects that address the transportation needs of the public by providing transportation facilities which are safe, efficient and environmentally responsible. Within the last several years, EIV has conducted numerous natural resource assessments, and obtained permits for several large and complex VTrans projects, as well as municipal projects. Such projects include: The Pittsford-Brandon US Route 7 Roadway Reconstruction, South Burlington Cycle Track, South Burlington Stormwater Pond, Stowe Sidewalk Improvements and South Street in South Hero.

An additional benefit to including EIV Technical Services to the team is their drone capabilities. EIV began collecting drone images and time lapse videos nearly 10 years ago. EIV has a company drone and pilot with appropriate FAA licensing to collect these photos and video. These can be helpful on projects with many moving parts or a large footprint that is difficult to see from the ground.



### Vermont Survey and Engineering, Inc. Survey

Contact: Andrew McQueeney 79 River Street Montpelier, VT 05602 802-229-9138 amcqueeney@vermontsurvey.com



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. They provide survey services to engineering firms, architectural firms, environmental firms, utility companies and construction companies. Their 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.

Their extensive experience working on all types of VTrans projects have included projects for Highway, Bridges, Aviation, Rail, and Right of Way. Their 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 & General Services and right of way plans for the New Hampshire Department of Transportation. They have consistently delivered skilled personnel and expertise to the many VTrans projects, and are committed to continuing this relationship and quality product during this contract.

Vermont Survey and Engineering, Inc. (VSE) and Fuss & O'Neill have been teaming on projects for over twenty years. VSE's office is in Montpelier and they currently hold a VTrans on-call for survey services. We have always been able to count on them for a quick response and accurate data collection. VSE has provided title abstracting for multiple projects including Pittsford-Brandon roadway reconstruction, South Hero intersection, South Hero South Street, and Lunenburg box culvert. They have surveyed numerous projects for Fuss & O'Neill including a resurfacing project in St. Johnsbury. The project in St. Johnsbury had an aggressive deadline and both Fuss & O'Neill and VSE collected data together; VSE processed the data and provided a dtm for Fuss & O'Neill to use during the design.



### Hartgen Archeological Associates, Inc. Archeological and Historic

Contact: Elise Manning-Sterling P.O. Box 81 Putney, VT 05346 802-387-8524 emanning@hartgen.com



Hartgen is an award-winning provider of cultural resource management solutions serving the private and public sectors since 1973. Hartgen has completed over 5,000 projects throughout the Northeast for a diverse range of clients, including not-for-profit preservation groups and municipalities. Hartgen is among the largest cultural resource management firms in the Northeast and is widely respected for the quality of its services. Hartgen is headquartered in Rensselaer, New York, and maintains an office in Putney, Vermont.

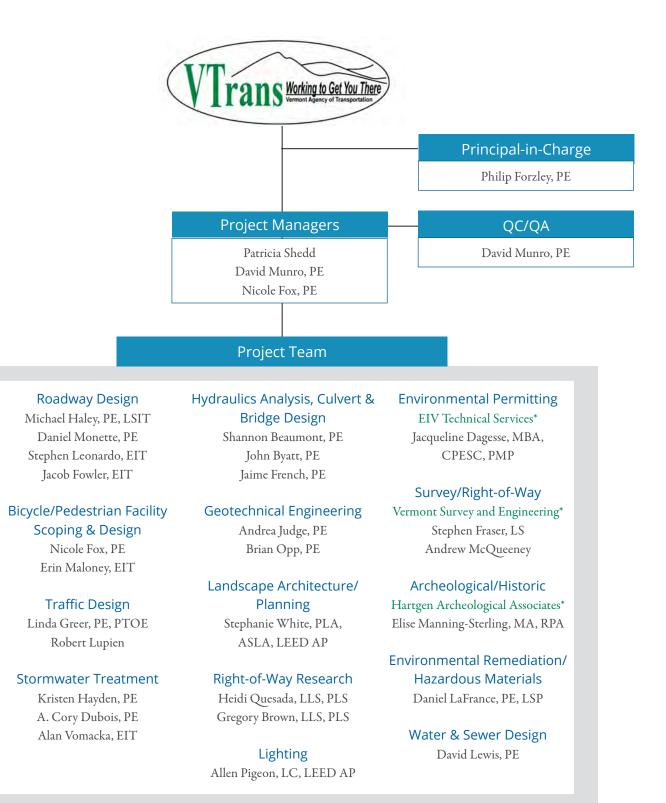
Hartgen is composed of a staff of 20 well-qualified, experienced professionals and includes 36 CFR 61 qualified archeologists, architectural historians, laboratory staff, documentary researchers, GIS specialists, and support personnel, many of whom have worked together as a team for a decade or more. The staff's individual professional backgrounds and their shared experiences in the field are the foundation of Hartgen's growth and success. Their staff is well-versed in cultural resource regulations including Section 106 of the National Historic Preservation Act (NHPA), Vermont Act 250, Section 14.09 of the New York State Historic Preservation Act, and the State Environmental Quality Review Act (SEQRA). Hartgen's team includes staff members trained in HAZWOPER (29 CFR 1910.120), the Native American Graves Protection and Repatriation Act (NAGPRA) training, and remote sensing methods.

Hartgen's experiences cover all phases of cultural resource management, including Archeological Resource Assessments (ARA), Phase IA, IB, II and III archeological investigations; National Register eligibility assessments, architectural history; HABS/HAER documentation; historical deed and document research; tribal consultation; design and presentation of public information signs, pamphlets, and exhibits; and public outreach.

Fuss & O'Neill has been teaming with Hartgen for more than 20 years on projects including the South Burlington Kennedy Drive stormwater pond, which is currently being designed.



# **Organizational Chart – Design Services**

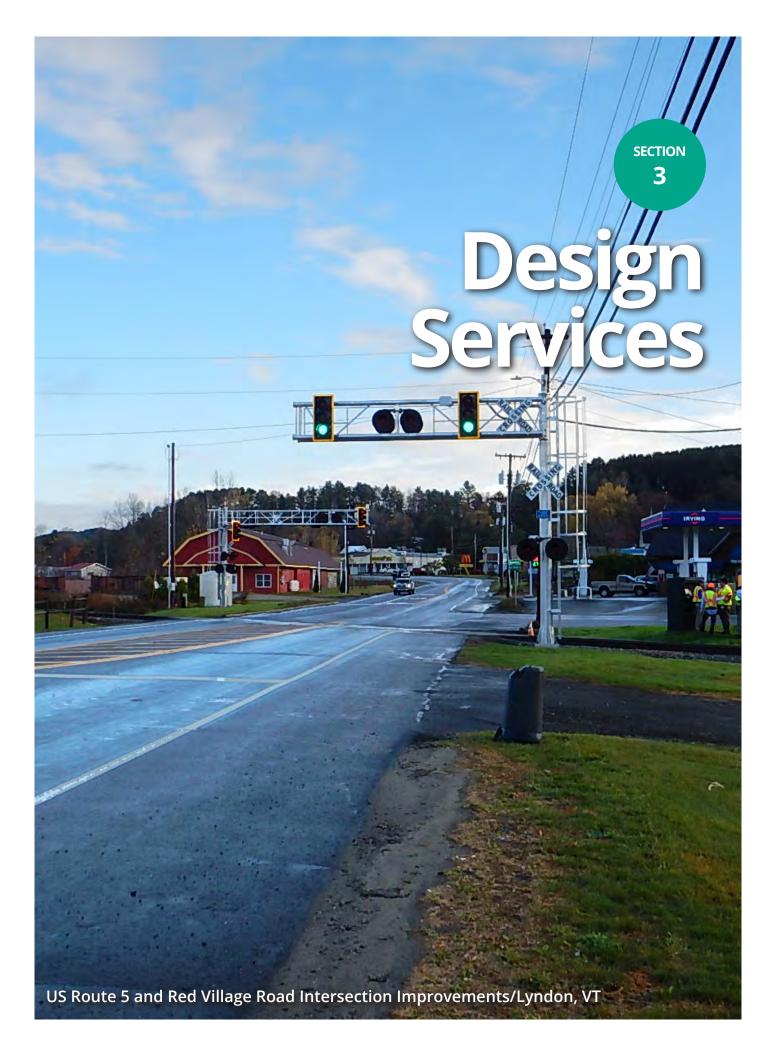




# **Availability Chart – Design Services**

The following is an availability chart for the VTrans At-The-Ready Contract. Our team is dedicated to providing exceptional service and technical expertise on VTrans and VTrans MAB projects, and will dedicate the appropriate resources to exceed project requirements. With a staff of more than 300 company-wide, our team has a wide range of engineering capacity to lean on when needed. Additional personnel, identified on the organizational chart, will be utilized as they are needed to manage and execute assignments.

Name	Role	Availability		
Philip Forzley, PE	Principal-in-Charge	5%		
Patricia Shedd	Program/Project Manager	50%		
David Munro, PE	QC/QA Manager, Project Manager	50%		
Nicole Fox, PE	Bicycle/Pedestrian Facility Scoping & Design, Project Manager	50%		
Michael Haley, PE, LSIT	Roadway Design	50%		
Daniel Monette, PE	Roadway Design	50%		
Linda Greer, PE, PTOE	Traffic Design	25%		
Kristen Hayden, PE	Stormwater Treatment	50%		
Shannon Beaumont, PE	Hydraulics Analysis, Culvert & Bridge Design	50%		
Andrea Judge, PE	Geotechnical Engineering	25%		
Stephanie White, PLA, ASLA, LEED AP	Landscape Architecture/Planning	25%		
David Lewis, PE	Water and Sewer Design	25%		





# **Section 3: Design Services**

# 1. Qualifications and Experience of Firm

Fuss & O'Neill has been providing roadway design services for state, Federal, municipal, and private sector clients throughout New England for decades. Our most recent experience has involved a wide variety of projects for VTrans, NHDOT, MaineDOT, MassDOT, CTDOT, RIDOT, U.S. Forest Service, municipalities and private clients. Projects have included full reconstruction of roadways in urban villages to reclaim projects along Vermont State Routes, large and small box culvert replacements, sidewalks, rail trails, signalizing intersections, signing projects, and large and small bridge replacements. Because we work with a variety of clients, we are able to see a variety of processes used by these clients. Our Highway Team is diligent about sharing information on our project experiences with the goal of continually looking at ways to improve our service. Additionally, our team has been working with VTrans for more than 35 years, giving us a strong understanding of the Agency's processes, procedures, and expectations on projects. We work on projects through the Municipal Assistance Bureau (MAB), as we work in conjunction with Town personnel and VTrans staff to deliver high-quality design solutions on projects across Vermont.

Our team can provide all the services necessary for the types of projects anticipated in this contract as well as other specialty services such as Act 250, title research, signal design and traffic modeling, bicycle and pedestrian facilities, water system design, sewer system design, landscape and lighting design, structural design including retaining walls, box culverts and large bridges, hydrology and hydraulics design. Fuss & O'Neill also has in-house services such as geotechnical engineering, environmental engineering, landscape architecture, and lighting design that helps us streamline project delivery.

### 2. Relevant Project Examples

Fuss & O'Neill has extensive internal design and engineering capabilities, and collectively we have a thorough knowledge of the VTrans process. On the next page is a table that showcases a variety of our design capabilities and projects that we have completed, largely in Vermont, but also other projects throughout the region that show extended capabilities. On subsequent pages, you will find brief examples of project experience that includes a summary of our experience, and client contact information.



	Project	Intersection Improvements	Roadway Reconstruction	<b>Bicycle/Pedestrian Facilities</b>	Box Culvert Replacement	Drainage/Stormwater	Hydraulic Analysis	Landscape Design	Lighting	ROW Plans or Titles	Signage Design	Slope/Ledge Stabilization	Parking Design	Traffic Control/TMP	Traffic Modeling/Analysis	Water/Sewer Coordination	Advertise/Bid/Construction
ion	Pittsford NH 019-3(491) Segment 1 US 7 Conceptual Design & ROW		•							•							
truct	Pittsford NH 019-3(492) Segment 2 US 7 Roadway Reconstruction	•	•	•		•	•	•	•		•			•	•	•	
const	Pittsford NH 019-3(493) & (494) Segment 3 & 4 US 7 Roadway		•		•	•				•	•						
ר Red	Brandon Segment 5 US 7 Roadway Reconstruction	•	•		•	•				•	•			•		•	•
ction	Brandon NH 019-(496) Segment 6 US 7 Roadway Reconstruction	•	•	•		•	•	•	•	•	•		•	•	•	•	•
erse	Colchester HES NH 5600(14) Exit 16 Roadway Reconstruction									•							
Complex Roadway/Intersection Reconstruction	Jericho STP HES 030-1(21) VT 15 Intersection	•	•		•	•	•				•			•	•		•
dwa	Lyndon STP 0113(65) US 5 Roadway Reconstruction	٠	•	•	•	•	•		•		•			•	•	•	
k Roa	Six Corners Roundabout, Springfield, MA	•	•	•		•		•						•	•		
plex	South Hero STP HES 028-1(22) US 2 Intersection	•	•		•	•	•				•			•	•		
Con	The "X" Corridor Roundabout, Springfield, MA	•	•	•		•		•						•	•		
	Bakersfield STP SCRP(11), VT 108 Drainage	•	•			•	•				•			•			
	Barrett Box Culvert, Lyman, ME				•		•			•				•	•		•
	Bradbury Box Culvert, Hollis, ME				•		•							•	•		•
	Brattleboro NHG SIGN (53), I-91 Signing										•			•			•
ects	Cavendish-Weathersfield ER STP 0146(14), VT 131 Reclamation	•	•		•	•					•	•		•	•	•	•
Proj	Glen Ellis Recreation and Parking Area, Jackson, NH			•									•				•
ement Projects	Interstate Renumbering Signing, Statewide, VT										•						•
	Londonderry-Chester STP PS19(10), VT 11 Reclamation		•								•			•			•
Asset Improv	Lunenburg NH CULV(27), US 2 Box Culvert		•		•	•	•			•	•			•	•		•
Asset	Lyndon STPG SGNL(48), US 5 Traffic Signal	•									•			•	•		•
	South Burlington STP BP17(9) Cycle Track and Pedestrian Path			•		•		•	•	•	•			•			
	South Burlington TAP TA18(7) Stormwater Pond					•				•				•			
	Wallingford-Rutland NHG SIGN (68), US 4 Signing										•			•			•
	Burlington Route 127 Recreation Path Restoration			•								•					
s	Pittsford-Brandon Scoping Study		•														
Studies	Stowe, VT Sidewalk Study			•													
S	Stowe, VT Intersection and Speed Studies	٠															



# US Route 7, Segment 6 Roadway Reconstruction

#### Brandon, VT

Fuss & O'Neill provided the conceptual, preliminary, right-of-way and final design of this one-mile-long complex urban VTrans Municipal Assistance Bureau (MAB) project. We worked with the Town and local groups to incorporate input in order to best meet the community's needs.



This project included the complete roadway design including streetscape, landscape design, development of traffic control plans, design of a comprehensive closed drainage system, replacement of sewer and water systems, utility relocations, permitting, and the development of contract plans and specifications. We designed the temporary traffic control plans to accommodate two lanes of traffic during construction to minimize the impacts to existing landscape features and to maintain the overall feel of the downtown area during construction. During construction, we responded to contractors' request for information and design assistance for unforeseen circumstances such as a deteriorating bridge deck. Our team has worked on all six segments of the Pittsford-Brandon corridor over the last 20+ years.

Client Contact: David Atherton, Town Manager, Town of Brandon, VT, 802-247-3635, datherton@townofbrandon.com



# South Street Improvements

Fuss & O'Neill provided a design for South Street that sought to improve vehicular, pedestrian, and bicyclist safety. The VTrans MAB project included a combination of full-depth construction and reclamation of the existing pavement.

Our team analyzed the effects of lowering Frechettes Hill by as much as 5 feet to meet AASHTO criteria. The impacts to adjacent historic properties combined with ledge just below the pavement made this option impractical. The roadway was widened to provide 9-foot travel lanes and 2-foot paved shoulders. The project provided appropriate signage to guide bicyclists from South Hero Village to the Allen Point Access Road; and provided clearly defined vehicular lanes for motorists to minimize conflicts between vehicles, bicyclists and pedestrians. Fuss & O'Neill provided hydraulic design, bicycle and pedestrian facility design, NEPA documents, stormwater discharge permit, preliminary plans and held a public informational meeting, right-of-way (ROW) plans, contract plans and construction bid documents.

Client Contact: Ande DeForge, VTrans, 802-595-6657, ande.deforge@vermont.gov



# VT Route 100 Sidewalk Improvements

Stowe, VT

For this VTrans MAB project, Fuss & O'Neill provided the design for 1,200 feet of sidewalk on Lower Main Street (Route 100).



The design included the realignment of River Road, the connection of the recreation path to the sidewalk, access management, and aerial utility relocation. Drainage improvements were designed to avoid impacts to the Town's water and sewer connections and minimized impacts to the adjacent properties. Fuss & O'Neill also presented at public meetings, developed the right-of-way plans, contract plans, cost estimates, bid documents, and construction administration.

Client Contact: Harry Shepard, PE, Public Works Director, Town of Stowe, VT

802-253-8770, hshepard@townofstowevermont.org



### US Route 2/VT 314 Intersection Improvements South Hero, VT

This complicated intersection project involved the addition of a left turn lane on US Route 2 for vehicles turning onto VT Route 314. The curbed island was extended to narrow the width of the adjacent commercial drive opening.

The improvements utilized a raised apron which accommodates truck turning movements and discourages smaller vehicles from rolling through the intersection. The project was complicated by a box culvert 300 feet from the intersection that needed to be replaced. The ferry departs about every 15 minutes with a significant number of commercial vehicles so two-way traffic must be maintained at all times. There was a retaining wall 50 feet from the box culvert that could not be moved thus the box culvert had to be designed significantly longer than was ultimately required. Fuss & O'Neill provided public outreach and stakeholder meetings, development of intersection alternatives, preliminary and final design, and stormwater permitting. Our team also anticipates performing an Environmental Site Assessment (ESA) on the project in the near future.

Client Contact: Michael Lacroix, VTrans, 802-371-9528, michael.lacroix@vermont.gov





### VT15 and Browns Trace Road Jericho, VT

Fuss & O'Neill prepared the design for a roadway reconstruction and widening of approximately a third of a mile of VT Route 15 to address a growing trend in westbound rear-end crashes on VT Route 15, and to increase visibility for drivers.

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As part of widening, our team designed a new left-turn lane and installed a signal at the intersection in order to improve safety. A closed drainage system and bituminous curbing was installed to mitigate existing erosion issues and to separate offsite flows from roadway runoff for stormwater treatment. An existing box culvert was replaced and upsized to accommodate extreme storm events and mitigate existing flooding issues. Fuss & O'Neill coordinated public meetings, including coordination with affected property owners, meetings with Town and regional officials, and public presentations. Fuss & O'Neill provided VTrans with a drainage model to appropriately size the box culvert and downstream channel and completed the traffic analysis to provide one-way alternating traffic with a temporary signal for the installation of the box culvert. Fuss & O'Neill also completed the traffic signal design.

Client Contact: Erin Parizo, PE, VTrans, 802-828-2046, erin.parizo@vermont.gov



### Roaring Brook Road Bridge Replacement Barton, VT

Fuss & O'Neill performed a complicated replacement of a 26foot span concrete T-beam bridge over Roaring Brook in Barton. The project went through the VTrans MAB process.

The replacement bridge consisted of 45-foot long NEXT-D beams on integral abutments with driven H-Piles. The substandard existing roadway and driveway adjacent to the bridge complicated the project. Many improvements were made while staying within the existing right-of-way. Modifications to the NEXT-D beams were made to accommodate a superelevation transition of the roadway over the bridge. The bridge was part of the Accelerated Bridge Program and was closed for four weeks for construction.

Client Contact: Todd Sumner, PE, VTrans, 802-917-2755, todd.sumner@vermont.gov



### Scoping, Speed, and Intersection Studies Stowe, VT

Fuss & O'Neill prepared Intersection Feasibility Studies for the intersections of VT-100/Moscow Road and VT-100/West Hill Road, as well as a Speed Study for VT-100/ West Hill Road in collaboration with the Town of Stowe and the Lamoille County Planning Commission.



The project was kicked off in May 2016 and the final reports were delivered in November 2016. Each of these feasibility studies considered a range of alternatives sensitive to the conditions at each site. A roundabout was selected at Moscow Road and a traffic signal in conjunction with a speed reduction was recommended at West Hill Road due to historic impacts and sight distance restrictions. Our team engaged the public with informational sessions, and we performed traffic analyses. **Client Contact: Rob Moore, Regional Transportation Planner, Lamoille County Planning Commission,** 802-851-6347, rob@lcpcvt.org



### Williston Road Cycle Track and Sidewalks South Burlington, VT

The City of South Burlington has been working towards creating a City Center District with an efficient transportation network that supports pedestrians, cyclists, and public transportation while accommodating automobiles.

Fuss & O'Neill has collaborated with the City to design a two-way paved cycle track, a four foot wide landscaped area, and a six foot wide concrete sidewalk. The section of Williston Road between Dorset Street and Midas Drive is a small portion of the City Center vision. However, there is a significant amount of vehicular traffic and narrow shoulders that make this section of road undesirable for many bicyclists. The cycle track, sidewalks, lighting, and landscaping improvements will increase the attractiveness of the area from a "typical" city street to a multimodal environment that can accommodate various types of users. **Client Contact: Jonathan Kaplan, PE, VTrans, 802-498-4742, jon.kaplan@vermont.gov** 



# Kennedy Drive Pond 7 Expansion

South Burlington, VT Fuss & O'Neill is providing the conceptual, preliminary and final design for a stormwater treatment expansion and retrofit project through the VTrans Municipal Assistance Bureau.



This project includes the expansion and retrofit of an existing stormwater pond on Kennedy Drive to a subsurface gravel wetland. Additional stormwater runoff from the roadway surfaces of Airport Drive, Williston Road and Kennedy Drive that currently bypasses the existing pond and outlets directly into Potash Brook (stormwater impaired) and ultimately Lake Champlain will be redirected to the upgraded gravel wetland. The gravel wetland will have the approximate look and function as a natural wetland, with high efficiency for removing sediments, nutrients and other pollutants commonly found in stormwater runoff. The need for this project was identified through the Potash Brook Flow Restoration Plan. Fuss & O'Neill is designing the gravel wetland, closed drainage system improvements, traffic control plan, and is working with EIV to complete the required permitting. **Client Contact: Thomas DiPietro, Deputy Director of Public Works, City of South Burlington** 

802-658-7961 x6108, tdipietro@sburl.com



# Roadway Reconstruction and Pavement Reclamation

As part of this 9-mile pavement reclamation project, Fuss & O'Neill worked with the Town of Cavendish and VTrans to design a relocation for a sewer impacted by construction of a new box culvert to replace the existing undersized dry laid stone box culvert.

The project consisted of cold planing, reclaiming, and paving the roadway as well as design of a slope stabilization with a soil nailed retaining wall, ledge removal, riverbank restoration, box culvert, new drainage, underdrain, signing and guardrail. The project extends from VT Route 103 to VT Route 106 through the Towns of Cavendish and Weathersfield. Proposed riverbank restoration along steep slopes eroded by Tropical Storm Irene required close coordination with the Vermont Agency of Natural Resources.

Client Contact: Brandon Kipp, VTrans, 802-224-6110, brandon.kipp@vermont.gov



### 3. Key Personnel Overview

Every project we work on requires a team effort. For this Municipal Assistance Bureau (MAB) contract, we have assembled professionals that understand your development process and project goals, and are ready to work with you to develop comprehensive solutions. Resumes for all key personnel follow.



Philip Forzley, PE Principal-in-Charge Phil is the White River Junction, Vermont Office Manager, a Vice President at Fuss & O'Neill, and will serve as Principal-in-Charge for this contract. Phil has more than 35 years of consulting experience, and will allocate the appropriate technical resources for every assignment of this contract.



Patricia Shedd Program/Project Manager Patricia will serve as Program Manager for this contract. When a task order is assigned, Patricia will work with VTrans to understand its requirements to ensure that the right personnel work on the project. Patricia has been working exclusively for VTrans since 1998, and nobody has a better understanding of the VTrans process.



Nicole Fox, PE Project Manager, Bicycle/Pedestrian Facility Scoping & Design A transportation engineer with 20 years of relevant experience, Nicole will serve as a Project Manager on VTrans projects. Her specialty is bicycle, pedestrian and trail projects, as she managed the Delaware and Hudson Rail Trail project in Southwestern Vermont.



Michael Haley, PE, LSIT Roadway Design

Mike is a familiar face to VTrans, as he is an important member of our team. Wellversed in all aspects of roadway design, Mike is an invaluable resource for his ability to shift gears and solve problems on any assignment. A conscientious designer, Mike works with VTrans staff to find solutions to any problem.



David Munro, PE QA/QC and Project Manager Dave has been a tremendous asset on VTrans projects, and will serve as QA/ QC Manager for this contract. He will work to deliver the highest level of quality and constructability on every project. Dave has been working exclusively for VTrans since 1997, and has an exacting understanding of the VTrans process.



Daniel Monette, PE Roadway Design Daniel is a civil engineer based in our White River Junction office. Having worked with many public clients, Dan has strong knowledge in municipal infrastructure, utility design, environmental engineering, site design, roadway design, heavy civil construction projects, and land use permitting.



### **Creating Works of Life**



Linda Greer, PE, PTOE Traffic Design Originally a roadway engineer, Linda collaborates with clients and Fuss & O'Neill's transportation and community development teams to implement traffic control plans that work. Linda led the traffic planning and design for complex traffic control designs in Royalton and Berlin.



Kristen Hayden, PE Stormwater Treatment Kristen has a passion for stormwater design, and she has extensive experience designing stormwater and roadway projects throughout New England. She has worked with State Departments of Transportation, including having helped the Rhode Island DOT develop their Stormwater Manual. She completed stormwater design for projects in Lyndon and South Burlington.



Shannon Beaumont, PE Hydraulic Analysis and Structural Design Shannon is a talented structural engineer who is our internal go-to resource for hydraulic analysis. She has worked on projects in South Hero and Cavendish, as well many others during her more than 15 years with the firm. For this contract, Shannon will be responsible for coordinating hydraulic needs for any task orders.



Andrea Judge, PE Geotechnical Engineering Throughout her career, Andrea has completed a wide range of geotechnical engineering projects of varying scale and complexity. She brings a strong practical background to the team, providing expertise in construction engineering, constructability reviews, and preparation of technical specifications.

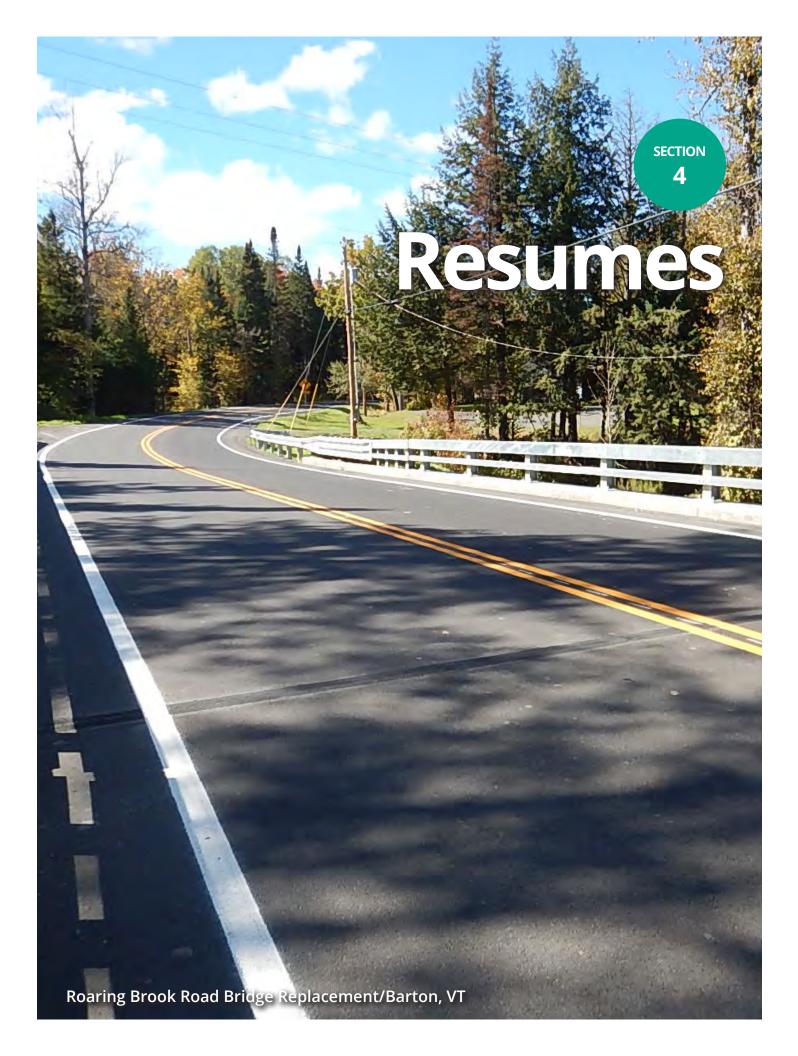


### Stephanie White, PLA, ASLA, LEED AP

Landscape Architecture/Planning Stephanie has been involved in all facets of the site design and implementation process. Her expertise ranges from sophisticated planting designs, park master planning, housing, education facilities, and, most recently, new urbanism techniques. She is currently working on our South Burlington Cycle Track project.



David Lewis, PE Water and Sewer Design Dave is an expert in water and sewer design and construction inspection, with more than 30 years of field experience. He brings practical experience to every design. Dave coordinates with utility companies and contractors to ensure that designs are implemented properly. He recently designed the reconfiguration of a gravity sewer on VT Route 131 in Cavendish.









# **Philip Forzley, PE**

# Principal-in-Charge | Vice President | Office Manager

"As far as engineers go, I'm a serious people person. I love learning about clients' needs, figuring out the best path to the solution, putting a team together, and executing the work to fulfill that need."

PForzley@fando.com

800.286.2469 x5235

#### EDUCATION

BS, Biology - 1981 University of Connecticut BS, Civil Engineering - 1984 University of Connecticut MS, Civil Engineering - 1997 University of Connecticut

### LICENSES & REGISTRATIONS

Professional Engineer NH Professional Engineer MA Professional Engineer CT Professional Engineer VT

Phil manages design teams and actively participates in project design. He has completed a variety of civil and environmental engineering projects that include dam engineering, hydrology and hydraulics, site planning and engineering, stormwater management, wastewater treatment and disposal, construction services, and regulatory compliance. He provides services to local and state government entities, public and private school systems and universities, industries, and land developers.

Phil's primary strength is management of projects that involve multiple disciplines, and he frequently coordinates design services with architects, construction managers, and other project team members. PROFESSIONAL AFFILIATIONS Assoc of State Floodplain Mgrs New England Water Env Assoc Water Environment Federation American Society of Civil Engineers

#### **EXPERIENCE**

15 years with Fuss & O'Neill 36 years Professional Experience

#### **REPRESENTATIVE PROJECTS:**

CT DEEP Multidisciplinary On-Call Engineering Services, Various Locations, CT

MADCR Conservation and Recreation On-Call Engineering Services, Various Locations, MA

Quality Assurance and Inspection Services, Reservoir Dam, Walpole, NH

Emergency Inspection Services, Mill Pond Dam, Walpole, NH

Filley Park Pond Renovation, Town of Bloomfield, CT

Drainage and Flooding Review of Private Properties, Various Towns and Cities in CT

Third-party Review Services for the Town of Watertown Inland Wetlands Agency and Planning and Zoning Commission, Watertown, CT

Flood Mitigation Design Projects, City of Milford, CT





# **Patricia Shedd**

# Program/Project Manager

"I engineer a cost effective solution to improve the safety and mobility in the community regardless of the mode of transportation. I also volunteer with Engineers Without Borders to bring clean and plentiful water supply to villages. Whether it's local or thousands of miles away, there is no better feeling than being part of a team that has improved the lives of others."

pshedd@fando.com

800.286.2469 x2184

#### EDUCATION

AS, Civil Engineering Technologies - 1986 Vermont Technical College

**PROFESSIONAL AFFILIATIONS** Women in Transportation

Seminar (WTS) ACEC - VT Engineers Without Borders - NH Professional. Chapter

#### 22 years with Fuss & O'Neill 34 years Professional Exper

**EXPERIENCE** 

34 years Professional Experience

Patricia is the Highway Team Lead and Senior Project Manager in our Manchester, NH office. and has been involved in a diverse range of traffic and transportation projects as well as survey and civil/site designs. She is responsible for the project planning, scheduling, client coordination, subconsultant coordination, and project overview for a variety of VTrans projects. Patricia has developed close working relationships with personnel in VTrans' Highway, Safety & Design, Municipal Assistance Bureau, Pavement Management and Right-of-Way Sections.

Patricia has worked on all aspects of roadway design including horizontal geometry, vertical alignments, guardrail, superelevation, drainage, signing, pavement markings, EPSC plans, temporary traffic control plans, developing Right-of-Way plans, developing cost estimates and obtaining stormwater discharge permits. She has been involved in meetings with Selectboards, Public 502 Hearings, the Act 250 process, and Necessity Hearings.

#### **REPRESENTATIVE PROJECTS:**

Williston Road Cycle Track and Sidewalk Project, City of South Burlington, VT

Kennedy Drive Stormwater Pond 7, City of South Burlington, VT

VT Route 100 Sidewalk Project, Stowe, VT

US Route 7 Improvements, VTrans, Pittsford (Segment 2)

South Street Improvements, South Hero, VT

VT Route 15 Intersection Improvements, VTrans, Jericho, VT

US Route 5 Full Depth Reconstruction, VTrans, Lyndon, VT

US Route 2/VT Route 314 Intersection, VTrans, South Hero, VT

VT Route 14 Culvert Replacement, VTrans, Barre Town, VT

Roaring Brook Road Culvert Replacement, VTrans, Barton, VT





# **David Munro, PE**

QC/QA Manager, Project Manager

"It is such a rewarding experience to see my ideas on paper constructed in the real world and in knowing that I have helped to solve a problem and, ultimately, improved public safety, accessibility, and the everyday travel experience."

dmunro@fando.com

800.286.2469 x2189

EDUCATION

BS, Civil Engineering - 1994 University of Vermont LICENSES & REGISTRATIONS Professional Engineer VT Professional Engineer NH **PROFESSIONAL AFFILIATIONS** NH Society of Professional Engineers EXPERIENCE

22 years with Fuss & O'Neill 25 years Professional Experience

David is a Senior Transportation Engineer and has extensive knowledge of AASHTO and state-specific design standards and is responsible for ensuring quality submittals. He does this by providing continual design guidance and support to the project engineers working on highway design projects and by thorough review of plans and documents before submittal.

Dave possesses exceptional MicroStation and InRoads skills and is directly responsible for maintaining and enforcing CAD standards. Dave has worked on all aspects of roadway design including scoping, horizontal geometry, vertical alignments, superelevation, pavement design, drainage, stormwater treatment, utility coordination, guardrail layout, right-of-way plans, pavement marking, and signing. His responsibilities have encompassed all aspects of the design and production of highway plans including typical sections, plans, profiles, cross sections, quantity take-offs, cost estimating and contract documents.

#### **REPRESENTATIVE PROJECTS:**

US Route 7 Improvements Scoping Project, VTrans, Pittsford-Brandon, (Segments 1-6) VT

US Route 7 Improvements, VTrans, Pittsford-Brandon (Segment 5), VT

US Route 7 Improvements, Brandon (Segment 6), VT

VT Route 15 Intersection Improvements, VTrans, Jericho, VT

VT Route 108 Drainage Improvements, VTrans, Bakersfield, VT

South Street Improvements, South Hero, VT

VT Route 100 Sidewalk Project, Stowe, VT

VT Route 14 Box Culvert Replacement, VTrans, Barre Town, VT

I-91/I-93 Safety Improvement Projects, VTrans, Various Locations, VT

US Route 7 Bridge No. 114 Repairs, Town of Brandon, VT





# **Nicole Fox, PE**

# Bicycle/Pedestrian Facility Scoping & Design, Project Manager

"My focus in transportation engineering is to use creative solutions to improve safety and mobility for all modes of travel. I enjoy solving puzzles and working out the best design solutions for challenging situations. I see what we do as a way to serve our communities while fulfilling client needs."

nfox@fando.com

800.286.2469 x2121

#### EDUCATION

BS, Civil Engineering - 1999 University of Florida LICENSES & REGISTRATIONS Professional Engineer ME

Professional Engineer NH Professional Engineer VA Professional Engineer VT **PROFESSIONAL AFFILIATIONS** Women in Transportation Seminar (WTS)

#### EXPERIENCE

11 years with Fuss & O'Neill 21 years Professional Experience

Nicole is a Senior Transportation Engineer with experience in all phases of transportation design and planning. Her practice includes roadway, intersection, pedestrian, and bicycle facility design, crash analyses, corridor studies, and traffic control plans.

Nicole is a skilled listener and excels at fostering open communication between clients, agencies, and other consultants. As a good communicator and team leader, she has excellent project management skills and experience managing municipal and state projects .

#### **REPRESENTATIVE PROJECTS:**

Delaware & Hudson Rail Trail Resurfacing, Southwestern VT

VT Route 100 Sidewalk Design, Stowe, VT

Feasibility and Scoping Study, Stowe, VT

South Street Improvements, South Hero, VT

ME Routes 26/11 Intersection Improvements, MaineDOT, Mechanic Falls/Poland, ME

Roadway Design for Goffs Falls Road Bridge Replacement, Manchester, NH

Brock Street Reconstruction, Rochester, NH

Roadway Approach Design for South New Boston Road over South Branch Piscataquog River Bridge Replacement, Francestown, NH

Roadway Engineering, I-93 Exit 4A Environmental Impact Statement (EIS), Londonderry and Derry, NH





# **Michael Haley, PE, LSIT**

# Roadway Design

"I've always been interested in the how and why of things; How does this work? Why does it work? Why does it *not* work? Is there a more efficient way to make it work better? Being an engineer lets me ask those questions. The process of developing solutions is fun and it is very satisfying to be able to solve those questions over the life of a project."

mhaley@fando.com 800.286.2469 x2156

#### **EDUCATION**

BS, Civil Engineering - 2002 Clarkson University

MS, Civil Engineering - 2006 California State Polytechnic Univ., Pomona

#### LICENSES & REGISTRATIONS

Professional Engineer VT Professional Engineer NH Professional Engineer CA Land Surveyor in Training NH PROFESSIONAL AFFILIATIONS National Society of Professional Engineers NH Society of Professional Engineers

#### EXPERIENCE

12 years with Fuss & O'Neill 17 years Professional Experience

#### **REPRESENTATIVE PROJECTS:**

Williston Road Cycle Track and Sidewalk Project, City of South Burlington, VT

Culvert Replacement, VTrans, Lunenburg, VT

VT Route 100 (Lower Main Street) Sidewalk Project, Stowe, VT

US 7 Roadway Improvements, Brandon (Segment 2), VTrans, Pittsford, VT

US 7 Roadway Improvements, Brandon (Segment 3), Pittsford, VT

US 7 Roadway Improvements, Brandon (Segment 4), Pittsford-Brandon, VT

US 2/VT 314 Intersection Safety Improvement Project, VTrans, South Hero, VT

South Street Improvements, South Hero, VT

US Route 5 Roadway Reconstruction, VTrans, Lyndon, VT

seventeen years of experience designing a variety of highway and site development projects ranging from paving and overlay to full depth reconstruction to curb and sidewalk projects. His primary area of expertise is in the development of 3D roadway design models, but he is well versed in all aspects of roadway design. Mike's career path has taken him from New York to California and finally to New England where his focus is now on Vermont highway design projects. He has served as a resident engineer on a number of construction projects which has further enhanced his design skills. Mike is known for being a reliable problem solver who has a commitment to producing quality designs for clients.

Mike is a Transportation Engineer with more than





# **Daniel Monette, PE**

# Roadway Design

"Civil Engineering is a noble profession, requiring ingenuity and creativity to produce something beneficial to society. Science and mathematics are required to answer complex questions; however, on-site, real world experience teaches us to be practical in our designs."

dmonette@fando.com

800.286.2469 x2215

#### EDUCATION

BS, Civil Engineering - 2008 University of Vermont

Daniel is a project engineer and designer for Fuss &

O'Neill's White River Junction, Vermont office. He has

invaluable construction engineering and field experience

on widespread projects throughout New England. This

him to prepare complicated utility and site design plans

for a diverse range of projects. In addition, Daniel has expertise in the development of permitting packages and

bid documents for submittal to federal, state, and local regulatory agencies. These efforts have led him to develop

a strong working knowledge in municipal infrastructure,

utility design, environmental engineering, civil/site design,

roadway design, heavy civil construction projects, and land

experience, combined with technical design skills, enables

LICENSES & REGISTRATIONS

Professional Engineer MA Septic Designer NH Septic Designer VT Professional Engineer NH Professional Engineer VT PROFESSIONAL AFFILIATIONS American Society of Civil Engineers

#### EXPERIENCE

5 years with Fuss & O'Neill 11 years Professional Experience

#### **REPRESENTATIVE PROJECTS:**

Parking Design and Permitting, Glen Ellis Day-Use Recreational Scenic Area and Parking, White Mountain National Forest Service, Jackson, NH

Design and Permitting, Goose Pond Road Reconstruction, Lyme, NH

Feasibility and Roadway Relocation Design, River Road Settlement Analysis, Lyme, Lyme, NH

Survey Design, Bowen Brook Timber Sale, USDA Forest Service, Benton, NH

Cheney Street Sidewalk Design, Newport, NH

Sidewalk Design, School Street & Beech Street, Newport, NH

Roadway Design, Indigo/Tunnel Stream Timber Harvest Specified Road Construction Project, USDA White Mountain National Forest Service, Benton, NH

Brookside Drive Culvert Replacement, New London, NH

Ray School Site Design, Parking Areas, Site Walkways, Site Access, Site Utilities and Drainage, Hanover SAU70, Hanover, NH

use permitting.





# Linda Greer, PE, PTOE

# Traffic Design

"Family summer vacations meant driving to Ohio to visit my grandmother, each time changing the route for different points of interest. Going from rural highways to metropolitan cities, I realized how roadways changed with traffic demand. Fascinated by traffic moving through the intertwining interstate junctions led me to a career that combines traffic and roadway design, always working to achieve roadway infrastructure to meet society's changing needs." Igreer@fando.com 800.286.2469 x2182

#### EDUCATION

BS, Civil Engineering - 1997 North Carolina State University LICENSES & REGISTRATIONS

NHDOT LPA Labor Comp Professional Traffic Operations Engineer Professional Engineer ME Professional Engineer NH PROFESSIONAL AFFILIATIONS American Public Works Assoc Inst Transportation Engineers ACEC - NH ACEC - ME EXPERIENCE

5 years with Fuss & O'Neill 22 years Professional Experience

Linda leads Fuss & O'Neill's Traffic Team based in the Manchester, NH office. She has extensive experience working collaboratively with State Departments of Transportation, taking projects from conceptual design through final construction plans. She also has a history of successfully delivering projects with timeline constraints to meet funding or construction schedules. The foundation of Linda's career as a Roadway Engineer was built by combining traffic analysis with construction field experience. Linda's specialty is her ability to develop comprehensive traffic control and maintenance plans on complex roadway, highway and bridge projects.

#### **REPRESENTATIVE PROJECTS:**

Traffic Management, I-89, Exit 3, VTrans, Royalton, VT

Traffic Management, I-89, Exit 7, VTrans, Berlin, VT

Lyndon Intersection Improvement, VTrans, Lyndon, VT

North-South Road Roundabout Design, OVP Management, North Conway, NH

Route 1 Sidewalk Design, Camden-Rockport, ME

Route 236 and Vine Street Intersection Reconstruction, South Berwick, ME

Route 125 and Massachusetts Ave. Intersection Improvements, MassDOT, North Andover, MA

Route 125 Reconstruction/Rehabilitation, MaineDOT, Lisbon, ME

Route 4 Reconstruction, Strong, ME

Traffic Control Plan, Route 4/5/202 (Bartlett's Bridge Road) over Bartlett's Brook, Lyman, ME

Route 26/Route 121 Intersection Realignment, Oxford, ME





# Kristen Hayden, PE

### Stormwater Treatment

"My job allows me to combine my love of math and the great outdoors, which ensures that each roadway I design harmonizes both of these elements without compromise."

khayden@fando.com

800.286.2469 x2162

EDUCATION

BS, Civil Engineering - 2002 University of Vermont LICENSES & REGISTRATIONS NHDOT LPA Labor Comp NH Professional Engineer NH Professional Engineer VT

#### EXPERIENCE

7 years with Fuss & O'Neill 18 years Professional Experience

Kristen supervises and develops roadway and drainage designs for several large-scale highway projects. She has extensive experience in stormwater and roadway design for municipal and state projects and has an understanding of stormwater regulations in New England, while being proficient in MicroStation and InRoads.

Kristen has led design teams on projects utilizing her fully developed understanding of plan development combined with her technical background and practical experience she makes sound engineering decisions. She also has extensive experience in several states and multiple civil engineering disciplines and has participated in and guided projects from conceptual inception through contract plans.

#### **REPRESENTATIVE PROJECTS:**

Stormwater Management, Williston Road Cycle Track and Sidewalk Project, City of South Burlington, VT

Stormwater Management and Permitting, Kennedy Drive Stormwater Pond 7, City of South Burlington, VT

Linear Stormwater Manual, RIDOT, Statewide, RI

VT Route 15 at Browns Trace Intersection Improvements, VTrans, Jericho, VT

Drainage System Design, US Route 5, VTrans, Lyndon, VT

VT Route 15/VT Route 15A Intersection Improvements, VTrans, Morristown, VT

US Route 5 Roadway Reconstruction, VTrans, Putney, VT

Closed Drainage System Design, Route 16/27 Rehabilitation, MaineDOT, Kingfield, ME

Route 125 and Massachusetts Ave. Intersection Improvements, MassDOT, North Andover, MA





# Shannon Beaumont, PE

Hydraulic Analysis, Culvert and Bridge Design

"I fell into engineering in college. The courses were intriguing and combined all my strengths into one fascinating package. I've never looked back."

sbeaumont@fando.com

800.286.2469 x2167

EDUCATION BS. Civil Engineering

BS, Civil Engineering - 2002 Tufts University LICENSES & REGISTRATIONS

Professional Engineer NH Professional Engineer VT Professional Engineer MA **PROFESSIONAL AFFILIATIONS** American Society of Civil Engineers Structural Engineers of NH EXPERIENCE

18 years with Fuss & O'Neill 18 years Professional Experience

Shannon is a Senior Project Engineer in our Manchester, NH office. Her management experience includes working directly with clients, overseeing the technical aspects of projects, directing the activities of staff engineers, and coordinating with the non-structural disciplines associated with projects. Her years of technical experience include the design of steel, reinforced concrete, and precast concrete structures, bridge ratings and bridge inspections. She is an experienced hydraulics engineer and is proficient at sizing bridges and culverts using accepted methods to calculate flood flows and elevations, including the use of the Army Corps of Engineers Hydraulic Modeling Program HEC-RAS. She is familiar with various aspects of roadway design including horizontal and vertical profiles and drainage design.

#### **REPRESENTATIVE PROJECTS:**

Culvert Design, US Route 2/VT 314 Intersection Improvements, VTrans, South Hero, VT

Culvert Design, VT 131 Roadway Improvements, VTrans, Cavendish-Weathersfield, VT

Structural Design, US Route 2 over Hudson Brook, VTrans, Lunenburg, VT

Structural Design, Signage Project, VTrans, Hartford-Royalton, VT

Structural Design, Signage Project, VTrans, Rockingham-Hartford, VT

VT Route 2B over the Lamoille Rail Trail, St. Johnsbury, VT

Hydraulics Design, TH 65 Over the 2nd Branch of the White River, Randolph, VT

US Route 7 over Furnace Brook Bridge Replacement, Pittsford, VT

Roaring Brook Road Over Roaring Brook Bridge Replacement, Barton, VT





# Andrea Judge, PE

# Geotechnical Engineering

"The best part of my work at Fuss & O'Neill is seeing our designs in construction after the trials of design. I strive to work collaboratively with Contractors and Owners to develop practical solutions to challenges that invariably arrive during construction."

ajudge@fando.com

800.286.2469 x4581

#### **EDUCATION**

BS, Civil Engineering Technologies - 2004, Dawson College LICENSES & REGISTRATIONS Professional Engineer MA

BE, Civil Engineering - 2008 Concordia Univeristy - Quebec

Through her career, Andrea has completed a wide range of geotechnical engineering, dam engineering improvement and removal projects of varying scale and complexity. Andrea brings a strong practical background to the team, providing expertise in construction engineering, constructability reviews, and preparation of technical specifications. Typical projects have included dam removal and improvement design, dam construction administration services, design of building foundations for vertical construction, waterfront, and bridge structures.

#### American Society of Certified Engineering Technicians Associated State Dam Safety Officials

**PROFESSIONAL AFFILIATIONS** 

#### EXPERIENCE

4 years with Fuss & O'Neill 12 years Professional Experience

#### **REPRESENTATIVE PROJECTS:**

Blackstone Roadway Rehabilitation Project, Massachusetts Department of Transportation, Blackstone, MA

Central Bridge Project, Rhode Island Department of Transportation, Barrington, RI

Roadway Drainage Improvements, Johnson and Whales University, East Providence, RI

Emergency Roadway Repairs, RIDOT - Nate Whipple Highway, Cumberland, RI

78 Fountain Street, Nordblom Company, Providence, RI

Meeting House Road Bridges, Massachusetts Department of Transportation, Pelham, MA

Lanesborough Bridge Repair Project, Massachusetts Department of Transportation, Lanesborough, MA

Lawton Valley Reservoir Dam Investigations and Repairs, City of Newport, Portsmouth, RI





# Stephanie White, RLA, CNU-A, LEED AP

Landscape Architecture/Planning

"What is most rewarding about my job is being able to create memorable and enjoyable places that have positive impacts in the way we live, work and play."

swhite@fando.com

800.286.2469 x3005

EDUCATION

BS, Landscape Architecture -2001 University of Massachusetts at Amherst LICENSES & REGISTRATIONS Reg Landscape Architect CT LEED-AP Reg Landscape Architect MA Reg Landscape Architect NH Reg Landscape Architect RI

Stephanie is a Project Manager with Fuss & O'Neill's design studio. With more than 19 years of experience, she has been involved in all facets of the site design and implementation process. Her expertise ranges from sophisticated planting designs, park master planning, housing, education facilities, and, most recently, new urbanism techniques. She is a licensed landscape architect and an accredited professional with the Congress of New Urbanism and U.S. Green Building Council. Stephanie holds a Bachelor of Science in Landscape Architecture from the University of Massachusetts Amherst.

Stephanie has been a team member on two award-winning design projects recognized by the American Society of Landscape Architects. With a keen sense of design and attention to detail, she seeks to deliver creative and sustainable solutions to every design challenge. PROFESSIONAL AFFILIATIONS American Society of Landscape Architects Congress for New Urbanism Council of Landscape Arch. Registration Board

#### EXPERIENCE

9 years with Fuss & O'Neill 19 years Professional Experience

#### **REPRESENTATIVE PROJECTS:**

Landscape Architecture, Williston Road Cycle Track and Sidewalk Project, City of South Burlington, VT

North Street Streetscape Improvements, City of Pittsfield, MA

Montgomery Mills Redevelopment, Windsor Locks CT

Downtown Complete Streets, Windsor Locks, CT

Master Planning, Filley Park, Town of Bloomfield, CT

Town Green Revitalization and Roundabout, Town of Bloomfield, CT

WaterFire Arts Center Redevelopment, Providence, RI

Master Planning, Hamden Center Town Park, Hamden, CT

Master Planning, Sears Park, Town of East Hampton, East Hampton, CT

Everett Parks Assessment, City of Everett, Everett MA:

Cass Park Pond Upgrades, Woonsocket, RI





# **David Lewis, PE**

# Water and Sewer Design

"Evaluating existing infrastructure for updated use is interesting since it often sheds light on how original designers and builders approached the initial problem. Now with the availability of improved materials, along with advances in design practice, allow us to offer different solutions for the current project."

dlewis@fando.com

800.286.2469 x2139

#### **EDUCATION**

BS, Forest Resource Engineering - 1988, State University of New York Col- Environment ME, Construction Management - 1999, State University of New York Col.-Buffalo LICENSES & REGISTRATIONS NHDOT LPA Labor Comp NH Professional Engineer NH

Professional Engineer ME

#### EXPERIENCE

21 years with Fuss & O'Neill 31 years Professional Experience

David has decades of experience providing municipal, civil, and geotechnical engineering services for both public infrastructure and private development projects. Design and permitting work has included rural and urban roadway design, solid and industrial waste landfills, sewers, and pump stations. He has provided field consultation to owners, designers, and construction managers during both design and construction phases.

#### **REPRESENTATIVE PROJECTS:**

Sewer Design, VT Route 131 Sewer Reconfiguration, Cavendish, VT

Water and Sewer Design, US Route 7 Bridge over Furnace Brook, Pittsford, VT

Brandon Segment 6 Water and Sewer Replacement, VTrans, Town of Brandon, and Brandon Fire District No. 1, Brandon, VT

Route 125 and Massachusetts Avenue Utility Reconstruction, North Andover, MA

Water Main Relocation, McClelland Farm Road Bridge Replacement, MassDOT, Deerfield, MA

Water Main Replacement, Route 183 (Park Street) over Housatonic River Bridge Replacement, Great Barrington, MA

Resident Engineering, Granite Street Reconstruction, Manchester, NH

Central Square Sidewalk Reconstruction, Safe Routes to School, NHDOT and Town of Troy, NH



# **Jacqueline Dagesse**

MBA, CPESC, PMP Environmental Engineer 9 Years with EIV 12 Years of Experience



# **EXPERIENCE**

#### ENVIRONMENTAL ENGINEER EIV TECHNICAL SERVICES, WINOOSKI, VERMONT

Ms. Dagesse supports civil and transportation projects with environmental permitting and design services. Her expertise includes natural resource assessments, hydraulic analysis, culvert design, erosion prevention and sediment control design and inspection, aquatic organism passage recommendations, and wastewater system design. She routinely performs environmental compliance inspections on civil projects. She has a great working relationship with local, state and federal regulators. She has experience with these regulators for the following: Army Corp. of Engineers (ACOE) Section 404 and Section 401, NEPA documentation, Title 19 Stream Alterations Consultation, Act 250, RTE Takings Permit, Construction Stormwater Permit 3-9020, Section 106 coordination, Operational Stormwater Permit 3-9015, VT Wetlands Permit, and coordination of local concerns meeting.

# **PROJECT EXPERIENCE**

• Bethel BHF 0241(38) - Located in Bethel, VT along VT Route 12, this \$6.4M bridge project includes replacing an existing bridge, constructed in 1928, with a new 364-foot-long bridge. Ms. Dagesse is providing environmental services for this two-year long project, functioning in the role of Erosion Prevention and Sediment Control (EPSC) Specialist, ensuring compliance with the Individual Construction Stormwater permit. Other responsibilities include providing feedback on appropriate best management practices and coordination with the Vermont state stormwater regulator.

 St. Albans SCAPSTA-C project – Ms. Dagesse provided environmental compliance oversight for the VELCO St. Albans Substation, St. Albans TAP Substation, and TAP transmission line project. Work at the St. Albans substation included replacement of the control building, two power transformers, switcher with the 115kV breaker, and the protection and control system. At the St. Albans TAP substation, the following was installed: a 115kV steel switch stand and operated switch, steel structure to facilitate tap line termination, and remote control equipment in control building. At the tap line, three pole structures on the west side of the tap station were removed and replaced, and an existing switch was removed.

# **EDUCATION**

University of Vermont, Masters of Business Administration (MBA)

University of Vermont B.S. Engineering Management, Concentration in Civil Engineering

### **CERTIFICATIONS & TRAINING**

Certified Professional in Erosion Prevention and Sediment Control (CPESC)

Project Management Professional (PMP) by the Project Management Institute

10hr OSHA certification



# Scott Hance, ISA

Arborist / Environmental Inspector 6 Years with EIV 25 Years of Experience

# **EXPERIENCE**

#### ARBORIST/ENVIRONMENTAL INSPECTOR, EIV TECHNICAL SERVICES, WINOOSKI, VT

Mr. Hance is a certified arborist who has provided planting and landscape feedback during design review and has consulted on VTrans projects during construction. Additionally, he has supported the VTrans Environmental Section with review and feedback on standard details and the 2018 specifications. During construction, Mr. Hance ensures that appropriate species are installed as required. He is able to identify and prevent issues from occurring in the field.

Mr. Hance is a certified wetland scientist and field naturalist. This expertise, combined with his understanding of environmental permitting, enables him to provide quality environmental oversight for transportation and utility projects under construction. He has also served in the role as Environmental Monitor and EPSC Specialist, required by individual wetland and stormwater permits respectively.

# **PROJECT EXPERIENCE**

#### Provided environmental inspections on the following VTrans projects:

- Bennington BRF 1000(16)
- Bradford CMG PARK(33)
- Burke BRF 0269(13)
- Cambridge BRO 1448(39)
- Castleton BRF 015-2(10)
- Corinth BRO 1447(29)
- Royalton BRS 0147 (13)
- Morristown STP F 029-1 (2)
- Jericho STP FTBR (3)
- Putney CMG PARK (26)
- Cambridge STP 030-2 (27)
- Charlotte FEGC 019-4 (20)
- Mount Holly STP 0133 (8)
  Highgate BO 1448 (43)
- Highlyate BO 1446 (43)
- Duxbury BF 013-4 (47)
  Charlotte FEGC 019-4 (20)
- Waterbury IM 089-2 (43)/CI
- Wardsboro BRF 013-1 (22)
- Bristol HES 021-1 (28)
- Woodford ER NH 010-1 (47)
- Richmond CMG PARK (31)

- Rockingham BRF 0126 (12)
- Springfield CMG PARK (32)
- Andover BHF 016-1 (29)
- Shrewsbury BHO 1443 (49)
- Bristol BRF 021-1 (29)
- Stowe BRF 0235 (11)
- Fairfield BRO 1448 (38)
- Braintree ER STP 0187 (12)
- Fairfield BRO 1448 (41)
- Mount Holly GMRC CR 140
- Hardwick RREW 112 U
- Cabot-Danville FEGC 028-3 (26) C/1
- PS0732/Manchester STP BP (5)
- St. Johnsbury CMG PARK (30)
- Stowe BRF 0235 (15)
- Colchester STP 5600 (9)s
- Barton Village BO 1449 (32)
  Highgate STP SCRP (12)
- Highgale STP SCRP (12)
- Wardsboro BRF 013-1 (21)
   Waterbury FEGC F 103-4(13)
- South Burlington STP SCRP (8)

# **EDUCATION**

SUNY COLLEGE, SYRACUSE, NY B.S. ENVIRONMENTAL FOREST BIOLOGY

NORTH COUNTRY COMMUNITY COLLEGE AT SUNY, SARANAC LAKE, NY A.S. MATH/SCIENCE

### **CERTIFICATIONS & TRAINING**

- Certified Wetland Scientist
- ISA Certified Arborist
- · Certified Pesticide Applicator
- Natural Shoreland Erosion Control Cert.
- Mist Netting and Banding
- Tree, Plant & Bird Identification
- Amphibian/Reptile Identification
- Soil Sampling
- Aquatic Insect Sampling
- Plant Species Sampling



# **Michael Ingram**

**Technician III / Environmental Scientist** 6 Years with EIV 9 Years of Experience



# **EXPERIENCE**

#### **TECHNICIAN III**

#### EIV TECHNICAL SERVICES, WINOOSKI, VT

Mr. Ingram is a scientist and technician who employs a diverse set of skills working as a construction inspector, EPSC Specialist/Environmental Monitor, and GIS specialist.

# **PROJECT EXPERIENCE**

#### **Construction Inspection project experience includes:**

• Burlington Bike Path Rehabilitation – Mr. Ingram was the construction inspector and environmental specialist for this \$2.6M, 3.31-mile project. He inspected construction activities for conformance with the plans and contract documents. He also served as the EPSC specialist. This was an urban project utilizing green stormwater design. Mr. Ingram recommended and facilitated stormwater design changes that resulted in a net reduction of tree clearing while maintaining compliance with the Operational Stormwater Permit. He also provided recommendations for profile and alignment changes, coordinated culvert design changes with River Management, and tracked costs to provide budget updates to the client.

• Milton I-89 DB & Windsor I-91 DB Projects – This was a \$23M interstate bridge replacement project in Milton, VT. Mr. Ingram was a Lead Construction Inspector on two interstate bridge replacement projects where he inspected all aspects of construction for conformance with the plans and specifications. His duties included pile driving inspection, elevation and location surveys, including subgrades, forms, drainage structures, bearing seats, and beam camber profiles. He also performed material quantity calculations, material tracking, sample scheduling, and material certifications verification. He reviewed and inspected access roads, including road grade survey, erosion control procedures and bank stabilization. He also inspected cofferdam installation, dewatering and water filtration systems. Mr. Ingram reviewed and performed inspection of erosion prevention and sediment control (EPSC) measures as well as installation of a dry swale with permeable soil.

# **EDUCATION**

UNIVERSITY OF VERMONT, BURLINGTON, VT B.S. GEOLOGY M.S. GEOLOGY

### **CERTIFICATIONS & TRAINING**

- ESRI ArcGIS
- 40hr OSHA Training
- 10hr OSHA Training



### SURVEYORS and CIVIL ENGINEERS

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### Stephen Fraser, LS – Principal/Project Manager AOT Manager IV

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

Number of years with firm: 13

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



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## Andrew McQueeney – Principal/Project Manager AOT Manager IV

Number of years with firm: 28

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 CADD Manager, he is responsible for developing AutoCAD, MicroStation and InRoads deliverables as well as overseeing CADD 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:

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)



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# Jason Riley, LS – CADD Operator/ROW Agent AOT Technician VI

### VT LS #59686

Number of years with firm: 15

Mr. Riley has been involved in the surveying field for the past 14 years. During this time his duties have ranged from Rodman to Party Chief to CADD draftsman. He has experience in highway construction layout, 3-dimensional topographic surveying, boundary survey, and as-built surveys. Mr. Riley's responsibilities have also included deed research and plat preparation, construction quantity calculation, and oversight/training of other draftsmen. A Vermont Licensed Land Surveyor since 2012, Mr. Riley's capabilities and responsibilities continue to grow at VSE.

Mr. Riley 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**



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### Matthew Yefchak – Survey Party Chief AOT Technician VI

Number of years with firm: 18

Mr. Yefchak began his career at VSE as a Rodman 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**



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## Anthony Scarzello – Survey Party Chief/ROW Agent AOT Technician VI

Number of years with firm: 15

Mr. Scarzello began his career at VSE after graduating from Paul Smith's College. He is proficient with conventional and robotic total stations, conventional and digital levels, and survey grade GPS. He is responsible for leading survey crews performing highway construction layout, 3-dimensional topographic surveys, boundary surveys, and as-built surveys. He has also served as a CADD Technician utilizing MicroStation and InRoads software.

Mr. Scarzello 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**



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# Matthew Backman – CADD Operator/ROW Agent/Survey Party Chief/Instrument Operator AOT Technician VI

Number of years with firm: 19

Mr. Backman began his career at VSE as a Rodman on a survey crew. He has steadily progressed through the years and has been an Instrument Operator and Party Chief since 2006. He has experience in highway construction layout, 3-dimensional topographic surveys, boundary surveys, and as-built surveys. As an experienced CADD 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**



### SURVEYORS and CIVIL ENGINEERS

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### **Thomas Yefchak - Instrument Operator/Rodman** *AOT Technician V*

Number of years with firm: 11

Mr. Yefchak began his career at VSE in 2007 as a Rodman on a survey crew. Tom's professional development has been steady in the short time that he has been with VSE, but he will no doubt be leading a field crew sometime in the near future. He has experience in highway construction layout, 3-dimensional topographic surveys, boundary surveys, and asbuilt surveys.

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**

ELISE MANNING-STERLING, M.A., RPA Principal Investigator



HARTGE	
EDUCATION:	The College of William and Mary Masters of Arts, Historical Archeology, 1994
	State University of New York at Binghamton Bachelor of Arts, Anthropology, 1983
HEALTH/SAFETY:	40-hour HAZWOPER Training (OSHA 29 CFR Part 1910.120), July 1, 2014
<b>R</b> elevant VTrans Exp	PERIENCE:
2019	Six VTrans Airports (Caledonia, Franklin, Knapp, Middlebury, Morrisville-Stowe and Northeast Kingdom) Principal Investigator for Archeological Resource Assessments for proposed developments at each of six airports. Contracted with: VTrans
2019	Ripton Salt and Sand Shed, Town of Ripton, Addison County, VT Principal Investigator for Archeological Resource Assessment for proposed salt and sand shed replacement. Contracted with: Lamoureux & Dickinson
2019	Middlebury OSA Tunnel Project, Town of Middlebury, Addison County, VT Principal Investigator for Phase IB survey of proposed staging areas. Contracted with: VHB
2018	Shared-Use Path and Bridge at Exit 14 on I-89, City of South Burlington, Chittenden County, VT Principal Investigator for archeological resource assessment for a bike/pedestrian path at Exit 14 of I-89. Contracted with: Stantec
2018	Improvements to Exit 17 on Interstate 89, Town of Colchester, Chittenden County, VT Principal Investigator for Phase I archeological reconnaissance survey for proposed improvements of Exit 17 on I-89. Contracted with: Chittenden County Regional Planning Commission
2018	<ul> <li>William Morse State Airport Tree Clearing, Town of Bennington, Bennington</li> <li>County, VT</li> <li>Principal Investigator for Phase I archeological reconnaissance survey for</li> <li>proposed tree clearing to improve airport approaches. Completed under the</li> <li>Statewide Archeological Consultant term agreement</li> <li>Contracted with:: Vermont Agency of Transportation</li> </ul>
2018	Enosburg Salt and Sand Shed, TAP TA 17 (7), Town of Enosburg, Franklin County, VT Principal Investigator for archeological resource assessment for proposed salt/sand shed at existing town garage. Contracted with: DuBois & King



archeologic	al associates inc
EDUCATION:	Rensselaer Polytechnic Institute Bachelor of Architecture May 1987 Bachelor of Science, Building Science, May 1986
<b>QUALIFICATIONS:</b>	36 CFR Part 61 Qualified Architectural Historian
Special Training:	Vermont Community Development Program Qualified Professionals Training VDHP, Montpelier, VT, September 2016.
	Architectural History Consultant Training VDHP, Montpelier, VT, May 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:**

HARTGEN

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 19 May 1984—November 19	99 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.
RELEVANT VTRANS PRO	JECTS:
2019	Church Street Bicycle and Pedestrian Scoping Study, Town of Chester, Windham County, VT Completed Historic Resources Identification for proposed multi-use path along Church Street, Dalrymple, and North Streets Contracted by: Dufresne Group

- 2019 Quechee Main Street Culvert Replacement, Culvert No. 24, Town of Hartford, Windsor County, VT
- www.hartgen.com 43

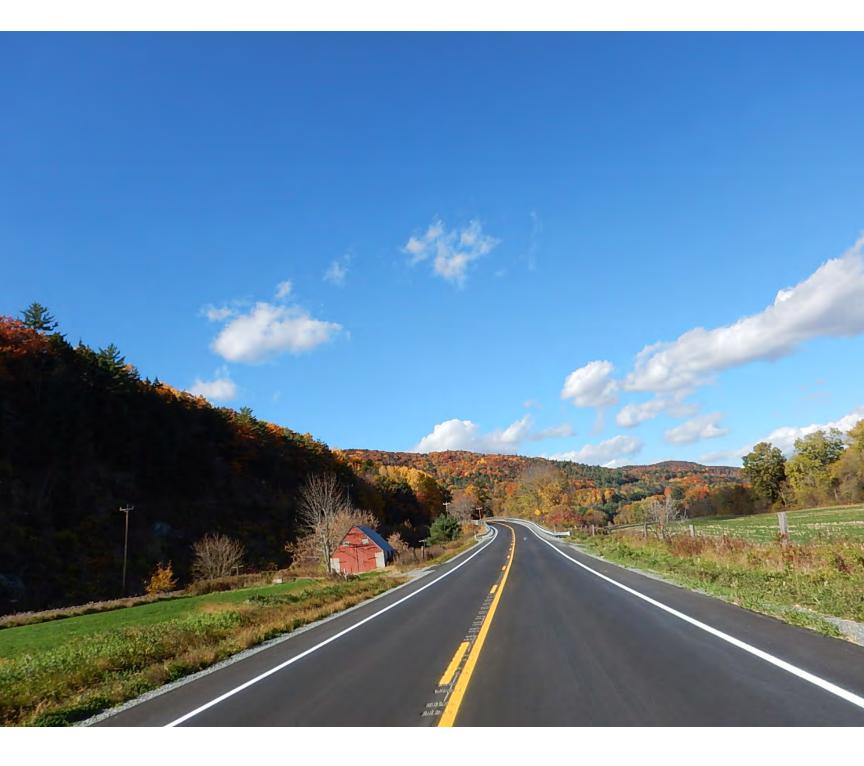


archeological associates inc .....

HARTGEN

College FArts, Anthropology, 1980 Qualified Archeologist
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Consultant Training, VT Division for Historic Preservation Iay 2015
erican Graves Protection and Repatriation Act (NAGPRA), 1998; jects and Historic Preservation Law sponsored by the Advisory Historic Preservation and the University of Nevada, Reno, 1997; Workshop, Vermont Division of Historic Preservation (VDHP), loping a Vermont Archaeological Predictive Model workshop, gency of Transportation (VTrans) and VDHP 1999; evaluating of Historic and Archaeological Resources Workshop, Vermont ontpelier, VT, May, 2001; and Best Practices in Working with ndian Tribes presented by the FHWA and sponsored by the VAOT,

- 2019 Smuggler's Notch Parking and Stormwater Improvements Project, Stowe STP 0235(14) and NBRC 18GVT11, Town of Cambridge, Lamoille County, VT Principal Investigator for an Archeological Resource Assessment for proposed parking and drainage upgrades along Route 108 in the notch. Contracted with DuBois & King, Inc.
- 2019 Tigertown Road Culverts #25 and #29 (STP MM19(7)), Town of Norwich, Windsor County, VT
   Principal Investigator for an Archeological Resource Assessment for a culvert replacement project. Contracted with Stantec
- 2018/2019 Muddy Brook Culvert Replacement, STP MM 18(3), City of South Burlington and Town of Williston, Chittenden County, VT Principal investigator for a Phase I archeological reconnaissance survey for a culvert replacement project on Muddy Brook at Kimball and Marshall Avenues Contracted by: Hoyle Tanner & Associates
  - 2018 Sydney Drive Storm Water Retention, Essex TAP TA 16(5), Town of Essex, Chittenden County, VT
    Principal investigator for a Phase I archeological reconnaissance survey for an upgrade to a storm water retention system. Contracted by: DuBois & King, Inc.





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